Arroyo de la Laguna Bridge Project

ALAMEDA COUNTY, CALIFORNIA
04-ALA-84 – PM 17.2
EA 04-0J550 / Project ID 0414000012

Volume II. Final Environmental Impact Report/Environmental Assessment with Finding of No Significant Impact - Appendices A–O

Prepared by the
State of California, Department of Transportation

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

Caltrans

December 2021

List of Appendices

Appendix A Section 4(f) De Minimis Determination

Section 4(f) De Minimis Determination

1 Section 4(f) De Minimis Determination

1.1 Introduction

This section of the document discusses *de minimis* impact determinations under Section 4(f). Section 6009(a) of SAFETEA-LU amended Section 4(f) legislation at 23 United States Code (USC) 138 and 49 USC 303 to simplify the processing and approval of projects that have only *de minimis* impacts on lands protected by Section 4(f). This amendment provides that once the U.S. Department of Transportation (USDOT) determines that a transportation use of a Section 4(f) property, after consideration of any impact avoidance, minimization, and mitigation or enhancement measures, results in a *de minimis* impact on that property, an analysis of avoidance alternatives is not required and the Section 4(f) evaluation process is complete. FHWA's final rule on Section 4(f) *de minimis* findings is codified in 23 Code of Federal Regulations (CFR) 774.3 and CFR 774.17.

Responsibility for compliance with Section 4(f) has been assigned to the Department pursuant to 23 USC 326 and 327, including *de minimis* impact determinations, as well as coordination with those agencies that have jurisdiction over a Section 4(f) resource that may be affected by a project action.

2.1 Project Description

The proposed action would take place on State Route (SR) 84 at Post Mile (PM) 17.2 in the town of Sunol. One potential Build Alternative has been designed for the project, involving complete replacement of the existing Arroyo de la Laguna Bridge with a new, wider bridge.

The Build Alternative would replace the existing 38-foot-wide and 310-foot-long Arroyo de la Laguna Bridge with a new 320-foot-long and 64-foot-wide bridge consisting of two through lanes. The new bridge would either be flat (as the existing structure) and box-shaped, or it would contain an arch. The bridge profile would be raised 1 to 3 feet to improve the existing non-standard stopping sight distance. At completion, the finished structure would provide 12-foot-wide lanes, a 14-foot-wide shared east-west pedestrian path on the south side of the bridge, standard 42-inch-high barriers, 9-foot-wide shoulders to accommodate 6-foot-wide bicycle lanes, and a 2 foot-wide painted median rumble strip. The shared sidewalk would be protected from the roadway by concrete railing. The Build Alternative would also add sidewalks to the eastern side of the SR 84 and Main Street intersection and at the SR 84 and Pleasanton Sunol Road intersection. Construction would take three seasons.

3.1 Description of the Section 4(f) Properties

An Area of Potential Effects (APE) was established as part of the Section 106 compliance process for the proposed project. The archaeological and architectural APE both include the entire project footprint to encompass temporary construction easements (TCEs) and partial acquisitions for staging, access, and road-widening activities. The Sunol Water Temple and Associated Structures, which is eligible for listing on the National Register of Historic Properties (NRHP), and one prehistoric archaeological site have been identified within the APE, as determined by Caltrans under the January 1, 2014, *First Amended Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation*

Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California (Section 106 PA).

The NRHP-eligible Sunol Water Temple and Associated Structures qualifies for protection under Section 4(f) and is described in Section 1.3.1. However, Section 4(f) does not apply to the archaeological site as described in Section 2.2.

Arroyo de la Laguna Bridge was listed as ineligible for the NRHP in the Caltrans Historic Highway Bridge Inventory.

1.2.1 Sunol Water Temple and Associated Structures

The Sunol Water Temple and Associated Structures at 505 Paloma Way in Sunol was built in 1910 by the Spring Valley Water Company. It was designed by architect Willis Polk and was modeled after the Temple of Vesta in Tivoli, Italy. The associated structures included in the historic property are the Water Temple; the carrefour (crossroads) and gates at the entrance of the site; and a small fountain located approximately 100 feet south of the Water Temple. The Sunol Water Temple and Associated Structures appears to meet the criteria for listing in the NRHP under Criterion C for its architecture and as a work of master architect Willis Polk.[1] The character defining features of the resource are the Water Temple, with its 12 Corinthian columns; red tile roof; copper roof finial; ceiling murals; publicly accessible open-air interior gallery (Figure A1); the half-circle wrought-iron entrance gates with their reinforced concrete pillars and inlaid reliefs (Figure A2); the fountain; and the bucolic setting of a roadway lined by grass and a row of trees on either side.

The entrance gates are at the intersection of Paloma Way and SR 84/Niles Canyon Road within Caltrans right-of-way. The gates mark the entrance to the long straight paved drive that leads to the Water Temple. They are constructed of reinforced concrete curved pylons with metal gates. The pylons are concave with a tripartite design and sit on a simple pedestal, topped with simple capitals. The pylons are also adorned with polychrome relief. The State Historic Preservation Officer (SHPO) is the official with jurisdiction over this historic property.

[1] NRHP Criterion C: Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

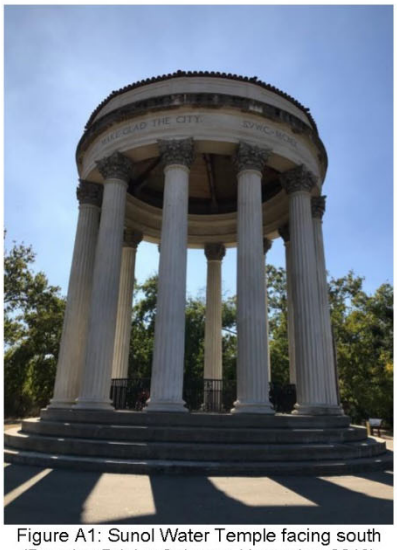

Figure A1: Sunol Water Temple facing south
(Douglas Bright, Caltrans, November 2019)

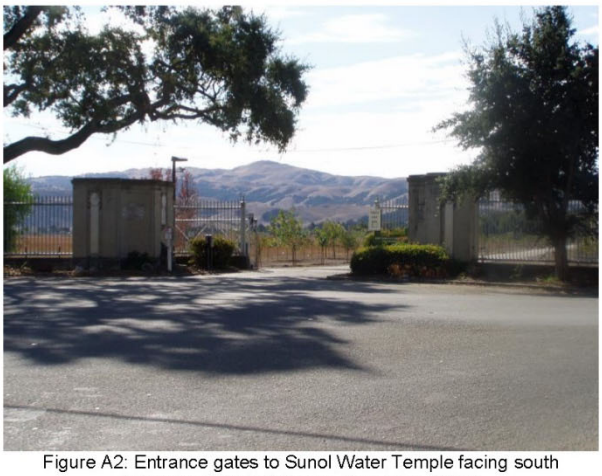

Figure A2: Entrance gates to Sunol Water Temple facing south
(Douglas Bright, Caltrans, November 2019)

4.1 Potential Use of the Section 4(f) Resource

Construction activities would occur within the historic boundary of the Sunol Water Temple and Associated Structures in proximity to the entry gates. Activates potentially occurring within the historic boundary include:

- upgrade of existing roadway shoulders
- utility relocation

- demolition of the existing bridge and staged construction of the new bridge
- construction of new sidewalks and bicycle lanes
- limited shoulder widening
- replacement of existing guardrails
- drainage system improvements

However, the Build Alternative would not result in the physical alteration or destruction of any of the character-defining features of the resource.

5.1 Avoidance, Minimization, and Mitigation Measures

An Environmentally Sensitive Area (ESA) will be designated on the project construction plans and in construction specifications to protect the Sunol Water Temple and Associated Structures (including the entry gates) where there is the potential for indirect construction impacts. ESA fencing (which will consist of Temporary High Visibility Fencing made of metal posts and high visibility plastic material or other markings) will be placed, where needed, around the Sunol Water Temple and Associated Structures, protecting the resource from inadvertent project-related effects. No project-related activities (e.g., grubbing, staging, equipment parking, etc.) shall occur within the ESA. The ESA would be maintained throughout construction. Specifics on the ESA could change in later phases of the project.

6.1 Determination

For the purposes of Section 4(f), a *de minimis* impact is a minimal impact to a Section 4(f) resource that is not considered to be adverse. For historic sites, a *de minimis* impact means that no historic property is affected or that there is a "no adverse effect" finding under 36 CFR Part 800.

The preliminary finding under Section 106 is that construction and operation of the Build Alternative would result in no adverse effects on the activities, features, and attributes of the Sunol Water Temple and Associated Structures within Caltrans right-of-way that are subject to protection under Section 4(f). Based on the information presented above (including the avoidance, minimization, and mitigation measures), the effects of the proposed project on the Sunol Water Temple and Associated Structures subject to the provisions of Section 4(f) of the U.S. Department of Transportation Act constitute a *de minimis* impact, and the requirements of 23 USC 138 and 149 USC 303 have been satisfied.

These findings are considered valid unless new information is obtained or the potential effects change to the extent that a new analysis is needed.

7.1 Consultation and Coordination

Prior to making a final *de minimis* impact determination, under CFR 774.5(b) coordination with the SHPO will continue. Caltrans is continuing to consult with the SHPO and other stakeholders regarding the Finding of Effect and to develop avoidance, minimization, and mitigation measures for impacted historic properties, pursuant to Stipulation XI of the 2014 Section 106 PA and 36 CFR Part 800.6. Due to the project's potential adverse effect to archaeology site CA-

ALA-677/H, a Memorandum of Agreement (MOA) will be executed in consultation with the SHPO and other stakeholders.

2 Resources Evaluated Relative to the Requirements of Section 4(f): No-Use Determination

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

This section of the document discusses parks, recreational facilities, wildlife refuges, and historic properties found within or next to the project area that do not trigger Section 4(f) protection because: 1) they are not publicly owned, 2) they are not open to the public, 3) they are not eligible historic properties, or 4) the project does not permanently use the property and does not hinder the preservation of the property.

8.1 Sunol Glen School

Per the FHWA Section 4(f) Policy Paper, when a public school playground is open to the public and serves either organized or substantial walk-on recreational purposes that are determined to be significant, such playgrounds are subject to the requirements of Section 4(f). As further described below, Sunol Glen School provides recreational opportunities to the general public outside of regular school hours, and thus, qualifies for protection under Section 4(f).

Sunol Glen School is a public school at 11601 Main Street in Sunol. It is the only school in the Sunol Glen Unified School District and serves students from kindergarten through the eighth grade. Sunol Glen School includes an approximately 3-acre sports field that also serves as a local community park. General public recreation is allowed after school hours on weekdays, and all day on Saturdays, Sundays, and holidays. Recreational facilities at the sports field include a running track and soccer field. The Sunol Glen Unified School District is the official with jurisdiction over these facilities.

The permanent or temporary acquisition of property from the Sunol Glen School would not be required during construction or operation of the Build Alternative. Therefore, direct use of the recreational facilities at the school would not occur.

Construction of the Build Alternative would require the construction of a retaining wall at the northwest corner of the bridge within Caltrans right-of-way in the immediate vicinity of the school. The retaining wall would prevent fill impacts to the school property. The wall would be about 120 feet in length, 10 feet in height at the abutment, and would taper down to 3 feet in height at the end of the wall near Main Street. The wall is expected to have an aesthetic treatment.

The retaining wall would be constructed on the SR 84 roadway side, 8 feet away from the elementary school's right-of-way line. A chain-link fence and 8-foot privacy screen would be placed on the SR 84 roadway at the elementary school's right-of-way line for the entire duration of construction. Construction of the retaining wall would be scheduled to occur only during the school's summer break. Construction and completion of the wall would take three to five weeks. A special provision enforcing this timeline restriction would be added to the project contract.

Construction of the Build Alternative would result in temporary increases in noise. The recreational facilities at the school are approximately 50 feet from the existing bridge. During construction, allowable work hours would be adhered to and construction noise would be kept within applicable state and county ordinances to minimize disruptions. To further minimize general noise impacts during the construction phases, a noise control and monitoring plan may be implemented. This would allow Caltrans to enforce noise limits and construction time restrictions. Specific measures that could be employed to limit construction noise include:

- locating stationary equipment away from receiving properties
- erecting temporary portable noise barriers
- limiting construction hours to the appropriate county ordinance
- turning off idling construction equipment
- requiring contractors to rigorously maintain all equipment
- training construction crews to avoid unnecessarily loud actions near noise-sensitive areas

In addition, a noise control and monitoring plan would be implemented specifically for the school. All construction noise impacts would be temporary and would cease after construction is complete.

The Build Alternative would not add new traffic lanes to SR 84 or substantially alter the existing alignment of the roadway. Therefore, operational noise would not increase with implementation of the Build Alternative. In addition, the recreational activities at the sports field are not noise sensitive. Based on the above, construction and operational noise associated with the Build Alternative would not affect the recreational activities that qualify the Sunol Glen School for protection under Section 4(f).

Construction of the Build Alternative would result in a moderate visual change for viewers at the sports field due to the removal of mature trees adjacent to the school site within Caltrans right-of-way. However, implementation of avoidance and minimization measures (including the replacement of trees to be removed) would help reduce this visual change over time. In addition, the recreational activities at the school would not be affected by the change in visual quality as these activities are not dependent on views from or to the facilities. Removal of trees behind the Sunol Glen School right-of-way line would not occur.

To preclude unauthorized entry, vandalism, and potential safety risks, contractors, as part of their routine construction procedures, would install temporary chain-link fences around all construction sites and laydown/mobilization areas. The chain-link fences would have gawk screening. The contractor would also provide traffic controls during school hours, with the specifics to be worked out with the local jurisdiction.

Caltrans would coordinate with the town of Sunol in the formulation of construction plans to minimize construction-related impacts on the school and sports field. Specific measures to mitigate construction impacts include a public information program to alert residents and meeting with the Sunol Glen Unified School District to address concerns. Caltrans would

implement a Construction Management Plan (CMP) for the duration of construction of the Build Alternative. The CMP is intended to anticipate and reduce the potential impacts from construction activities and minimize impacts of construction activities to both Sunol Glen School and neighbors. Impacts that would be addressed in the CMP relate to construction, erosion control, air quality, noise, and traffic. Caltrans would meet with the school district early in the construction planning process to identify specific procedures for minimizing disruption of student activities.

A key component of the CMP is the implementation of regular communications with the community and the school district regarding concerns, process, and schedule. Caltrans would designate an individual to fill the position of "Construction Contact" to the local community to address comments regarding ongoing operations and schedule. Additionally, Caltrans would designate an individual to fill the position of "Community Liaison" to the local community.

Based on the above, the activities, features, and attributes of the recreational facilities at Sunol Glen School that qualify it for protection under Section 4(f) would not be impacted by the Build Alternative and no use or constructive use result.

9.1 Archaeological Site CA-ALA-677/H

There is one archaeological property within the Archaeological APE that may be affected by the Build Alternative. The archaeological site was determined eligible for the NRHP under Criterion D for its potential to yield information important for the understanding of the past. Caltrans will consult with the SHPO on an Adverse Effect determination and develop an MOA for the treatment of the archaeological site. Caltrans is also consulting with Native American tribes in the area regarding the treatment of the archaeological site. However, Section 4(f) does not apply to the archaeological site because the site is important for what can be learned by data recovery and has minimal value for preservation in place (per 23 CFR 774.13(b)(2)).

Appendix B Title VI Policy Statement

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY Gavin Newsom, Governor

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August 2020

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Original signed by
Toks Omishakin
Director

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Appendix C Avoidance, Minimization and/or Mitigation Summary

Biological Environment

AMM BIO-1. Worker Environmental Awareness Training. All construction personnel will attend a mandatory environmental education program delivered by an agency-approved biologist prior to working on the project.

AMM BIO-2. Work Window for Nesting Birds. To the extent practicable, clearing and grubbing activities will be conducted during the non-nesting season, from October 1 to January 31.

AMM BIO-3. Preconstruction Surveys for Nesting Birds. Preconstruction surveys for nesting birds will be conducted by a qualified biologist no more than 72 hours prior to the start of construction for activities occurring during the breeding season (February 1 to September 30).

AMM BIO-4. Non-Disturbance Buffer for Nesting Birds. If work is to occur within 300 feet of active raptor nests or 50 feet of active passerine nests, a non-disturbance buffer will be established at a distance sufficient to minimize disturbance based on the nest location, topography, cover, the species' sensitivity to disturbance, and the intensity/type of potential disturbance.

AMM BIO-5. Bat Night Roost Avoidance. Specific night bat roost AMMs will be developed through technical assistance with CDFW and bat specialists.

AMM BIO-6. Incorporation of Bat Roosting Habitat into New Bridge. Bridge elements and configurations that support bat roosting should be installed in the new Arroyo de la Laguna Bridge. Bridge replacements should consider use of a similar bridge design when the roost is large, unique, or supports a rare species. Critical issues include access, ventilation, and protection. Crevice roosts should be replaced with crevices of similar area and cavities should be replaced with cavities of similar parameters. If this is not possible due to engineering requirements, e.g., safety, replacement habitat may be considered. Supplemental habitat may also be considered when exclusion would occur for more than one season.

AMM BIO-7. Exclusion of Bats from Existing Bridge. Prior to deconstruction of the existing Arroyo de la Laguna Bridge, a roosting bat exclusion plan will be developed and implemented. At a minimum, this plan should address how one-way exclusion devices would be used to allow bats to safely exit the current bridge prior to its removal. The plan would be implemented between March 1 to April 15 and August 31 to October 15 to avoid sensitive periods for bat species.

AMM BIO-8. Dusky-footed Woodrat Midden Relocation. Caltrans will request a Memorandum of Understanding (MOU) with CDFW to develop and implement a relocation plan for woodrat middens that will be affected by the proposed project.

AMM BIO-9. Biological Monitor Approval. Caltrans will submit the names and qualifications of the biological monitor(s) for CDFW and USFWS approval prior to initiating construction activities for the proposed project.

AMM BIO-10. Biological Monitoring. The agency-approved biologist(s) will be on-site during initial ground-disturbing activities, the installation and removal of the creek diversion, and thereafter as needed to fulfill the role of the approved biologist as specified in project permits. The biologist(s) will keep copies of applicable permits in their possession when on-site. Through the Resident Engineer or their designee, the agency-approved biologist(s) will be given the authority to communicate either verbally, by telephone, email or hard copy 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 agency-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 agency-approved biologist(s) exercises this authority, the agencies must be notified by telephone and email within 48 hours.

AMM BIO-11. Preconstruction Surveys. Prior to any ground disturbance, preconstruction surveys will be conducted by an agency-approved biologist for listed species. These surveys 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 biologist(s) will investigate all potential cover sites. 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 would be documented and relocated to an adequate cover site in the vicinity.

AMM BIO-12. Prevention of Wildlife Entrapment. To prevent inadvertent entrapment of listed species during construction, excavated holes or trenches more than one foot deep with walls steeper than 30 degrees will be covered at the close of each working day by plywood or similar materials. Alternatively, an additional four-foot-high vertical barrier, independent of exclusionary fences, will be used to further prevent the inadvertent entrapment of listed species. If it is not feasible to cover an excavation or provide an additional four-foot-high vertical barrier, independent of exclusionary fences, one or more escape ramps constructed of earth fill or wooden planks would be installed. Before such holes or trenches are filled, they will be thoroughly inspected for trapped animals. If at any time a trapped listed animal is discovered, the on-site biologist will immediately place escape ramps or other appropriate structures to allow the animal to escape or CDFW or USFWS will be contacted by telephone for guidance. CDFW or USFWS will be notified of the incident by telephone and electronic mail within 48 hours.

AMM BIO-13. Wildlife Exclusion Fencing. The limits of construction zones within suitable habitat for listed species will be delineated with high visibility wildlife exclusion fencing at least four feet in height to prevent wildlife from accessing the construction footprint. The fencing will be removed only when all construction equipment is removed from the site. No project activities will occur outside the delineated project construction area. Wildlife exclusion fencing is not required for construction activities occurring outside of suitable habitat for listed species.

AMM BIO-14. Listed Species On-site. The Resident Engineer will immediately contact the agency-approved project biologist(s) if a listed species is observed within a construction zone. The Resident Engineer will suspend construction activities within a 50-foot radius of the animal until the animal leaves the site voluntarily or an agency-approved protocol for removal has been established.

AMM BIO-15. Work Window. All work within suitable aquatic habitat for steelhead and California red-legged frog will occur between June 1 and October 15, when there is less potential for an individual to enter the work area. All work within suitable upland habitat for California red-legged frog will occur between April 15 and October 15. During this time, California red-legged frog would have a lower potential for movements across upland habitat.

AMM BIO-16. Monofilament Erosion Control. Plastic mono-filament netting (erosion control matting) or similar material will not be used for the project because California red-legged frog and Alameda whipsnake may become entangled or trapped in it.

Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.

AMM BIO-17. Concrete Waste and Stockpiles. 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.

AMM BIO-18. Worker Environmental Awareness Training. All construction personnel will attend an environmental education program delivered by the agency-approved biologist prior to working on the project.

AMM BIO-19. Materials Storage. All construction pipes, culverts, or similar structures and construction debris will be covered in a way that they are not accessible to wildlife or inspected by the agency-approved biologist prior to being moved.

AMM BIO-20. Water Diversion Structures. Cofferdam and/or water diversion will be constructed to exclude construction activities from adversely impacting the water quality of Arroyo de la Laguna while maintaining flow through the proposed project area.

AMM BIO-21. Night Work and Lighting. To the extent practicable, nighttime construction will be minimized. Artificial lighting of the proposed project area during nighttime hours will be minimized to the maximum extent practicable and will be pointed away from sensitive resources.

AMM BIO-22. Trash Control. All food-related trash items such as wrappers, cans, bottles, and food scraps will be disposed of in closed containers and removed at least once a day from the work area

MM BIO-1. On-site restoration of temporarily impacted California red-legged frog habitat at a 1:1 ratio, and off-site compensatory mitigation for prolonged temporarily impacted and permanently impacted California red-legged frog habitat at a 1.5:1 and 3:1 ratio, respectively.

MM BIO-2. Off-site compensatory mitigation for prolonged temporarily impacted and permanently impacted Alameda whipsnake habitat at a 1.5:1 and 3:1 ratio, respectively.

Cultural Resources

AMM CULTURAL-1. Report any unintended discoveries of human remains or artifacts within SFPUC jurisdiction to SFPUC.

AMM CULTURAL-2. Worker Environmental Awareness Training. All construction personnel will attend a mandatory cultural environmental education program delivered by Tribal representative and an agency-approved archaeologist prior to working on the project.

AMM CULTURAL-3. Establishment of an Environmentally Sensitive Area around the Sunol Water Temple and associated features. No project-related activities (e.g., grubbing, staging, equipment parking, etc.) shall occur within the ESA. Reference Caltrans Standard Specification 14-1.02.

MM CULTURAL-1. If archaeological resources cannot be avoided, a preconstruction Historic Property Treatment Plan/Data Recovery Proposal will be implemented by a qualified archaeologist for the significant archaeological site that is directly affected. Data Recovery will only occur in the portion of the site being directly affected.

MM CULTURAL-2. Caltrans is preparing an Archaeological Monitoring Plan to be implemented during construction. This would include establishing an Archaeological Monitoring Area (AMA) and having an archaeologist and Tribal representative monitor job site activities within the archaeological monitoring area to reduce the project's impacts to the resource within the project limits. No construction activities can be conducted within the AMA unless the archeological and tribal monitor is present. Reference Caltrans Standard Specification 14-2.03.

Invasive Species

AMM INVASIVE-1. Construction equipment would arrive at the project clean and free of soil, seed, and plant parts to reduce the likelihood of introducing new weed species. Any imported fill material soil amendments, gravel, or other materials required for construction and/or restoration activities that will be placed within the upper 12 inches of the ground surface shall be free of vegetation and plant material.

AMM INVASIVE-2. To reduce the movement of invasive weeds into uninfested areas, the contractor shall stockpile topsoil removed during excavation (e.g., during grading of staging areas or excavation to accommodate installation of the temporary stair system and work platform) and shall subsequently reuse the stockpiled soil for reestablishment of disturbed project areas.

AMM INVASIVE-3. Borrow material would be certified to be non-toxic and weed free to the maximum extent possible.

Natural Communities

AMM NATURAL COMMUNITIES-1. Revegetation Following Construction. All areas that are temporarily affected during construction will be revegetated with an assemblage of native grasses, shrubs, and trees as appropriate. Invasive, exotic plants will be controlled within the construction area to the maximum extent practicable, pursuant to EO 13112.

MM NATURAL COMMUNITIES-1. Upland Trees. During the design phase of the project, Caltrans District 4's Office of Biological Sciences and Permits will work with the Caltrans Design and Caltrans Landscape Architecture teams to avoid and minimize project impacts to upland trees. Efforts to preserve trees in place (by designating trees on plan sheets and marking trees with ESA fencing) will be made to avoid or minimize project impacts to trees located in temporary impact areas. For upland trees that are removed, Caltrans will provide tree replacement on-site. In the event that off-site planting is determined to be necessary, potential planting locations would be identified by working with local stakeholders, private landholders, and public agencies including, but not limited to, East Bay Regional Parks District, Alameda County, and the SFPUC.

MM NATURAL COMMUNITIES-2. Riparian Trees. During the design phase of the project, Caltrans Office of Biological Sciences and Permits will work with the Caltrans Design team to avoid and minimize project impacts to riparian trees. Efforts to preserve trees in place, by designating trees on plan sheets and marking trees with ESA fencing, will be made to avoid or minimize project impacts to trees located in temporary impact areas. Trees removed from the riparian zone will be replaced on-site, to the maximum extent possible given the space available. Potential planting locations within the Alameda Creek watershed will be identified by working with local stakeholders, private and public landholders, and public agencies including, but not limited to, East Bay Regional Parks District, Alameda County, and SFPUC. Details for off-site planting and riparian tree planting success criteria will be determined during the design and permitting phase of the project with CDFW (1602 Streambed Alteration Agreement) and the RWQCB (401 Certification).

Noise

AMM NOISE-1: Temporary noise control, including but not limited to the following are needed:

1. The Contract Specifications should include a Special Provision requiring a noise control and monitoring plan. Measures may include a temporary noise barrier and other methods, i.e., scheduling and the measures below.
2. Provide public outreach or communication plan for residents and the school to get accurate project information.
3. Locate staging and storage areas away from the school and residential areas.
4. Consider reducing impact of detours.
5. Use quieter alternative methods of equipment.
6. Prevent idling of equipment near sensitive receptors.
7. Equip an internal combustion engine with the manufacturer-recommended muffler. Do not operate an internal combustion engine on the project site without the appropriate muffler.
8. If feasible, use solar or electricity as power source instead of diesel generators.

Visual Resources

AMM VIS-1. Vegetation Removal Measures

- Avoid or minimize vegetation removal (groundcover, shrubs, and mature trees) due to construction and staging operations:
  - Minimize the removal of groundcover, shrubs, and mature trees to the greatest extent possible, utilizing open areas first.
  - Protect existing vegetation outside the clearing and grubbing limits from the contractor's operations, equipment, and materials storage.
  - Place high visibility temporary fencing around vegetation to be protected before roadway work begins.
  - Provide replacement screen tree plantings between the Sunol Glen Elementary School and SR 84/Arroyo de la Laguna Bridge. Shrubs will be planted in lieu of trees where insufficient setback requirements exist. An Arborist will analyze possible impacts to trees within the Sunol Glen Elementary School right-of-way where branches and root zones fall within state right-of-way, resulting in possible harm to these trees. Negotiations between the school and state should be conducted to plant trees outside state right-of-way where school trees are harmed.

AMM VIS-2. Concrete Safety Barrier/Railing Aesthetics

- New concrete safety barriers and/or railing should closely match the aesthetics of the existing structures. See-through barriers and/or railings should be

considered where feasible at locations where outward views exist to reduce screening of views.

- Midwest Guardrail Systems and/or metallic safety crash cushions before and after the bridge barriers should receive an aesthetic treatment of Natina coating (or similar rustic coating) to reduce possible glare and blend in with the natural environment.

AMM VIS-3. Aesthetic Treatments

- The design, color, and aesthetic treatment for the new bridge, support columns, and support walls shall be similar in design to the existing structure so to be visually compatible and consistent with the historic conditions along the corridor.
- The proposed retaining walls shall be aesthetically treated with color, texture, and/or patterning to blend in with the natural environment and reduce the incidence of glare or graffiti.

AMM VIS-4. Construction Impact Measures

- Place unsightly materials, equipment storage, and staging so that they are not visible within the foreground of the highway corridor to the maximum extent feasible. Where such siting is unavoidable, material and equipment shall be visually screened to minimize visibility from the roadway and nearby sensitive off-road receptors.
- Revegetate all areas disturbed by construction, staging, and storage per highway replacement and revegetation standard measures.
- Limit all construction lighting to within the area of work and avoid light trespass using directional lighting and shielding as needed.

Appendix D List of Acronyms and Abbreviations

AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACE	Altamont Commuter Express
ACHP	Advisory Council on Historic Preservation
ACPWA	Alameda County Public Works Agency
ACS	American Community Survey
ACTC	Alameda County Transportation Commission
ACWD	Alameda County Water District
ADA	Americans with Disabilities Act
ADL	aerially deposited lead
AMA	archaeological monitoring area
AMM	avoidance and minimization measure
APE	Area of Potential Effects
BAAQMD	Bay Area Air Quality Management District
BC	black carbon
BMP	Best Management Practice
BPMP	Bicycle and Pedestrian Master Plan
BSA	Biological Study Area
Cal Fire	California Department of Forestry and Fire Protection
Cal-IPC	California Invasive Plant Council

Cal/OSHA	California Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CHP	California Highway Patrol
CIDH	cast-in-drilled-hole
CMP	construction mitigation plan
CNDDB	California Natural Diversity Database
CO_2	carbon dioxide
CRHR	California Register of Historic Resources
CTP	Countywide Transportation Plan
CWA	Clean Water Act
dBA	decibels
DPS	Distinct Population Segment
DSA	Disturbed Soil Area
EBRPD	East Bay Regional Park District
EIS	Environmental Impact Statement
EO	Executive Order
ESA	environmentally sensitive area

FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FPPA	Farmland Protection Policy Act
FONSI	Finding of No Significant Impact
GHG	greenhouse gas
HCP	Habitat Conservation Plan
HFC	hydrofluorocarbons
KVP	key viewpoint
LEDPA	least environmentally damaging practicable alternative
L_{eg}	Equivalent Noise Level
MGS	Midwest guardrail system
MM	mitigation measure
$MMTCO_2e$	million metric tons of carbon dioxide equivalent
mph	miles per hour
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MS4	Municipal Separate Storm Sewer System
MTC	Metropolitan Transportation Commission
N_2O	nitrous oxide
NAC	Noise Abatement Criteria

NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plans
NES	Natural Environment Study
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NOD	Notice of Determination
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
OCRS	Office of Cultural Resources Studies (Caltrans)
OHWM	ordinary high water mark
PA	Programmatic Agreement
PG&E	Pacific Gas and Electric
PM	post mile
PQS	Professionally Qualified Staff
PRC	Public Resources Code
RAP	Relocation Assistance Program
RCNM	Roadway Construction Noise Model
RSA	resource study area
RWQCB	Regional Water Quality Control Board
SB	Senate Bill

SFPUC	San Francisco Public Utilities Commission
SLR	sea level rise
SR	State Route
SWMP	Statewide Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	state water resources control board
TCE	temporary construction easement
TMDL	Total Maximum Daily Load
TMP	Traffic Management Plan
U.S.	United States
USACE	United States Army Corps of Engineers
USC	United States Code
USDOT	United States Department of Transportation
USFWS	United States Fish and Wildlife Service
VAU	visual assessment unit
VIA	Visual Impact Assessment
WDR	Waste Discharge Requirement
WPCP	Water Pollution Control Program

Appendix E Notice of Preparation

EDMUND G. BROWN JR.
GOVERNOR

STATE OF CALIFORNIA
GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

KEN ALEX
DIRECTOR

Notice of Preparation

August 20, 2018

To: Reviewing Agencies

Re: Arroyo de la Laguna Bridge Project
SCH# 2018082045

Attached for your review and comment is the Notice of Preparation (NOP) for the Arroyo de la Laguna Bridge Project draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Brian Gassner
California Department of Transportation, District 4
111 Grand Avenue, MS 8B
Oakland, CA 94612

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Attachments
cc: Lead Agency

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
1-916-322-2318 FAX 1-916-558-3184 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH#	**2018082045**
Project Title	Arroyo de la Laguna Bridge Project
Lead Agency	Caltrans #4
Type	**NOP** Notice of Preparation
Description	Caltrans proposes to replace the existing bridge over Arroyo de la Laguna with a new bridge structure. Recent structure maintenance inspections (completed in Oct of 2013) identified that drift at Piers 4 and 5 of the Arroyo de la Laguna Bridge is causing scour, which will potentially undermine the footing at Pier 5 of this bridge site. Furthermore, the existing 1939 railing of the Arroyo de la Laguna Bridge does not meet current safety standards and needs to be updated to meet current standards. Modern bridge railing is better able to redirect errant vehicles back into the existing roadway. The purpose of the project is to mitigate bridge scour, protect the bridge's structural integrity and improve safety by directing potentially errant vehicles back into the roadway.

Lead Agency Contact

Name	Brian Gassner		
Agency	California Department of Transportation, District 4		
Phone	(510) 286-6025	***Fax***	
email			
Address	111 Grand Avenue, MS 8B		
City	Oakland	***State*** CA	***Zip*** 94612

Project Location

County	Alameda			
City				
Region				
Cross Streets	Niles Canyon Rd			
Lat / Long				
Parcel No.				
Township		***Range***	***Section***	***Base***

Proximity to:

Highways	SR 84
Airports	
Railways	Niles Canyon RR
Waterways	Arroyo de la Laguna
Schools	Sunol Glen ES
Land Use	

Project Issues	Aesthetic/Visual; Archaeologic-Historic; Biological Resources; Flood Plain/Flooding; Geologic/Seismic; Public Services; Soil Erosion/Compaction/Grading; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Wetland/Riparian; Landuse; Cumulative Effects
Reviewing Agencies	Resources Agency; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Department of Fish and Wildlife, Region 3; Native American Heritage Commission; Public Utilities Commission; State Lands Commission; California Highway Patrol; Air Resources Board, Transportation Projects; Regional Water Quality Control Board, Region 2; Department of Toxic Substances Control

Date Received 08/17/2018 ***Start of Review*** 08/20/2018 ***End of Review*** 09/18/2018

Note: Blanks in data fields result from insufficient information provided by lead agency.

Print Form

Appendix C

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH # 2018082045

Project Title: Arroyo de la Laguna Bridge Project

Lead Agency: California Department of Transportation, District 4 | Contact Person: Brian Gassner
Mailing Address: 111 Grand Avenue MS 8B | Phone: 510-286-6025
City: Oakland | Zip: 94612 | County: Alameda

Project Location: County: Alameda | City/Nearest Community: Sunol
Cross Streets: Niles Canyon Road | Zip Code: 94586
Longitude/Latitude (degrees, minutes and seconds): ____° ____′ ____″ N / ____° ____′ ____″ W Total Acres: ____
Assessor's Parcel No.: ____ Section: ____ Twp.: ____ Range: ____ Base: ____
Within 2 Miles: State Hwy #: State Route 84 | Waterways: Arroyo de la Laguna
Airports: N/A | Railways: Niles Canyon Railway | Schools: Sunol Glen Elementary

Document Type:

CEQA: ☒ NOP ☐ Draft EIR ☐ Early Cons ☐ Supplement/Subsequent EIR ☐ Neg Dec (Prior SCH No.) ____ ☐ Mit Neg Dec Other: ____
NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI
Other: ☐ Joint Document ☐ Final Document ☐ Other: ____

Local Action Type:

Governor's Office of Planning & Research
AUG 17 2018
STATE CLEARINGHOUSE

☐ General Plan Update ☐ General Plan Amendment ☐ General Plan Element ☐ Community Plan
☐ Specific Plan ☐ Master Plan ☐ Planned Unit Development ☐ Site Plan
☐ Rezone ☐ Prezone ☐ Use Permit ☐ Land Division (Subdivision, etc.)
☐ Annexation ☐ Redevelopment ☐ Coastal Permit ☐ Other: ____

Development Type:

☐ Residential: Units ____ Acres ____
☐ Office: Sq.ft. ____ Acres ____ Employees ____
☐ Commercial: Sq.ft. ____ Acres ____ Employees ____
☐ Industrial: Sq.ft. ____ Acres ____ Employees ____
☐ Educational: ____
☐ Recreational: ____
☐ Water Facilities: Type ____ MGD ____
☒ Transportation: Type Bridge Replacement
☐ Mining: Mineral ____
☐ Power: Type ____ MW ____
☐ Waste Treatment: Type ____ MGD ____
☐ Hazardous Waste: Type ____
☐ Other: ____

Project Issues Discussed in Document:

☒ Aesthetic/Visual
☐ Agricultural Land
☐ Air Quality
☒ Archeological/Historical
☒ Biological Resources
☐ Coastal Zone
☐ Drainage/Absorption
☐ Economic/Jobs
☐ Fiscal
☒ Flood Plain/Flooding
☐ Forest Land/Fire Hazard
☒ Geologic/Seismic
☐ Minerals
☐ Noise
☐ Population/Housing Balance
☒ Public Services/Facilities
☐ Recreation/Parks
☐ Schools/Universities
☐ Septic Systems
☐ Sewer Capacity
☒ Soil Erosion/Compaction/Grading
☐ Solid Waste
☒ Toxic/Hazardous
☒ Traffic/Circulation
☒ Vegetation
☒ Water Quality
☐ Water Supply/Groundwater
☒ Wetland/Riparian
☐ Growth Inducement
☒ Land Use
☒ Cumulative Effects
☐ Other: ____

Present Land Use/Zoning/General Plan Designation:

Project Description: *(please use a separate page if necessary)*

The California Department of Transportation (Caltrans) proposes to replace the existing bridge over Arroyo de la Laguna with a new bridge structure. Recent structure maintenance inspections (completed in October of 2013) identified that drift at Piers 4 and 5 of the Arroyo de La Laguna Bridge is causing scour, which will potentially undermine the footing at Pier 5 of this bridge site. Furthermore, the existing 1939 railing of the Arroyo de la Laguna Bridge does not meet current safety standards and needs to be updated to meet current standards. Modern bridge railing is better able to redirect errant vehicles back into the existing roadway. The purpose of the project is to mitigate bridge scour, protect the bridge's structural integrity and improve safety by directing potentially errant vehicles back into the roadway.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Revised 2010

NOP Distribution List

County: Alameda SZ

SCH# 2018082045

Resources Agency

- Resources Agency — Nadell Gayou
- Dept. of Boating & Waterways — Denise Peterson
- California Coastal Commission — Allyson Hitt
- Colorado River Board — Elsa Contreras
- Dept. of Conservation — Crina Chan
- Cal Fire — Dan Fosler
- Central Valley Flood Protection Board — James Herota
- Office of Historic Preservation — Ron Parsons
- Dept of Parks & Recreation — Environmental Stewardship Section
- S.F. Bay Conservation & Dev't. Comm. — Steve Goldbeck
- Dept. of Water Resources — Resources Agency, Nadell Gayou

Fish and Game

- Depart. of Fish & Wildlife — Scott Flint, Environmental Services Division
- Fish & Wildlife Region 1 — Curt Babcock
- Fish & Wildlife Region 1E — Laurie Harnsberger
- Fish & Wildlife Region 2 — Jeff Drongesen
- Fish & Wildlife Region 3 — Craig Weightman
- Fish & Wildlife Region 4 — Julie Vance
- Fish & Wildlife Region 5 — Leslie Newton-Reed, Habitat Conservation Program
- Fish & Wildlife Region 6 — Tiffany Ellis, Habitat Conservation Program
- Fish & Wildlife Region 6 I/M — Heidi Calvert, Inyo/Mono, Habitat Conservation Program
- Dept. of Fish & Wildlife M — William Paznokas, Marine Region

Other Departments

- California Department of Education — Lesley Taylor
- OES (Office of Emergency Services) — Monique Wilber
- Food & Agriculture — Sandra Schubert, Dept. of Food and Agriculture
- Dept. of General Services — Cathy Buck, Environmental Services Section
- Housing & Comm. Dev. — CEQA Coordinator, Housing Policy Division

Independent Commissions,Boards

- Delta Protection Commission — Erik Vink
- Delta Stewardship Council — Anthony Navasero
- California Energy Commission — Eric Knight
- Native American Heritage Comm. — Debbie Treadway
- Public Utilities Commission — Supervisor
- Santa Monica Bay Restoration — Guangyu Wang
- State Lands Commission — Jennifer Deleong
- Tahoe Regional Planning Agency (TRPA) — Cherry Jacques

Cal State Transportation Agency CalSTA

- Caltrans - Division of Aeronautics — Philip Crimmins
- Caltrans – Planning HQ LD-IGR — Christian Bushong
- California Highway Patrol — Suzann Ikeuchi, Office of Special Projects

Dept. of Transportation

- Caltrans, District 1 — Rex Jackman
- Caltrans, District 2 — Marcelino Gonzalez
- Caltrans, District 3 — Susan Zanchi - North
- Caltrans, District 4 — Patricia Maurice
- Caltrans, District 5 — Larry Newland
- Caltrans, District 6 — Michael Navarro
- Caltrans, District 7 — Dianna Watson
- Caltrans, Disirict 8 — Mark Roberts
- Caltrans, District 9 — Gayle Rosander
- Caltrans, District 10 — Tom Dumas
- Caltrans, District 11 — Jacob Armstrong
- Caltrans, District 12 — Maureen El Harake

Cal EPA

Air Resources Board

- Airport & Freight — Jack Wursten
- Transportation Projects — Nesamani Kalandiyur
- Industrial/Energy Projects — Mike Tollstrup
- California Department of Resources, Recycling & Recovery — Kevin Taylor/Jeff Esquivel
- State Water Resources Control Board — Regional Programs Unit, Division of Financial Assistance
- State Water Resources Control Board — Cindy Forbes – Asst Deputy, Division of Drinking Water
- State Water Resources Control Board — Div. Drinking Water #_____
- State Water Resources Control Board — Student Intern, 401 Water Quality Certification Unit, Division of Water Quality
- State Water Resouces Control Board — Phil Crader, Division of Water Rights
- Dept. of Toxic Substances Control Reg. #_____ — CEQA Tracking Center
- Department of Pesticide Regulation — CEQA Coordinator

Regional Water Quality Control Board (RWQCB)

- RWQCB 1 — Cathleen Hudson, North Coast Region (1)
- RWQCB 2 — Environmental Document Coordinator, San Francisco Bay Region (2)
- RWQCB 3 — Central Coast Region (3)
- RWQCB 4 — Teresa Rodgers, Los Angeles Region (4)
- RWQCB 5S — Central Valley Region (5)
- RWQCB 5F — Central Valley Region (5), Fresno Branch Office
- RWQCB 5R — Central Valley Region (5), Redding Branch Office
- RWQCB 6 — Lahontan Region (6)
- RWQCB 6V — Lahontan Region (6), Victorville Branch Office
- RWQCB 7 — Colorado River Basin Region (7)
- RWQCB 8 — Santa Ana Region (8)
- RWQCB 9 — San Diego Region (9)
- Other _____
- _____
- _____
- _____
- _____ — Conservancy

Last Updated 5/22/18

Appendix F U.S. Fish and Wildlife Service and National Marine Fisheries Service Species Lists

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To:
Consultation Code: 08ESMF00-2021-SLI-2133
Event Code: 08ESMF00-2022-E-01512
Project Name: 0J550_Arroyo de la Laguna Bridge Project

December 06, 2021

Subject: Updated list of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

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

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

http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html

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

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to

utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

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

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

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

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

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

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

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

Project Summary

Consultation Code: 08ESMF00-2021-SLI-2133
Event Code: Some(08ESMF00-2022-E-01512)
Project Name: 0J550_Arroyo de la Laguna Bridge Project
Project Type: TRANSPORTATION
Project Description: Caltrans plans to replace the Arroyo de la Laguna Bridge in Sunol, Alameda County

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@37.5927292,-121.88336728143395,14z

Counties: Alameda County, California

Endangered Species Act Species

There is a total of 12 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Salt Marsh Harvest Mouse *Reithrodontomys raviventris* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/613	Endangered
San Joaquin Kit Fox *Vulpes macrotis mutica* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2873	Endangered

Birds

NAME	STATUS
California Least Tern *Sterna antillarum browni* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8104	Endangered

Reptiles

NAME	STATUS
Alameda Whipsnake (=striped Racer) *Masticophis lateralis euryxanthus* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5524	Threatened

Amphibians

NAME	STATUS
California Red-legged Frog *Rana draytonii* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander *Ambystoma californiense* Population: U.S.A. (Central CA DPS) There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/2076	Threatened

Fishes

NAME	STATUS
Delta Smelt *Hypomesus transpacificus* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/321	Threatened

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Crustaceans

NAME	STATUS
Conservancy Fairy Shrimp *Branchinecta conservatio* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/8246	Endangered
Vernal Pool Fairy Shrimp *Branchinecta lynchi* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp *Lepidurus packardi* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/2246	Endangered

Flowering Plants

NAME	STATUS
Contra Costa Goldfields *Lasthenia conjugens* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/7058	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Project Name: Arroyo de la Laguna Bridge Project

Project EA: 04-0J550

Agency: California Department of Transportation

111 Grand Avenue Oakland, California 94612

Contact: Nicole Christie 805-704-4272

Email: Nicole.Christie@dot.ca.gov

Date: 12/3/2021

Quad Name **Niles**

Quad Number **37121-E8**

ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) -
CC Chinook Salmon ESU (T) -
CVSR Chinook Salmon ESU (T) -
SRWR Chinook Salmon ESU (E) -
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) - **X**
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) -
CCV Steelhead DPS (T) -
Eulachon (T) -
sDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -

CCV Steelhead Critical Habitat -
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -
Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -
Olive Ridley Sea Turtle (T/E) -
Leatherback Sea Turtle (E) -
North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -
Fin Whale (E) -
Humpback Whale (E) -
Southern Resident Killer Whale (E) -
North Pacific Right Whale (E) -
Sei Whale (E) -
Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -
Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH - X
Chinook Salmon EFH - X
Groundfish EFH -

Coastal Pelagics EFH -
Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds
See list at left and consult the NMFS Long Beach office
562-980-4000

MMPA Cetaceans -
MMPA Pinnipeds -

Appendix G List of Technical Studies

Air Quality Conformity Memorandum. District 4, Office of Environmental Engineering, Oakland, CA. May 11, 2021.

Natural Environment Study: Arroyo de la Laguna Bridge Project. District 4, Office of Biological Sciences and Permits. Oakland, CA. November 2020.

Caltrans Technical Noise Supplement to the Traffic Noise Analysis Protocol. URL: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf. September 2013.

Comments from Air/Noise/Energy Branch. District 4, Office of Environmental Engineering. Oakland, CA. June 18, 2019

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Appendix I Transportation Improvement Program (TIP) and Regional Transportation Plan (RTP) Project Listings

GL: Bridge Rehabilitation and Reconstruction – SHOPP Program

(TIP ID – VAR170010)

Last updated with TIP Revision 2019-32

FTIP BACK-UP LIST FOR SHOPP - BRIDGE PRESERVATION PROJECTS (VAR170010)
FOR 2017/2022 PROGRAM YEARS
All amounts in $1,000

Dist	Co	Rte	PM	Location/Description	PPNO	EA	Prog Code	Con FY	Prior	18/19	19/20	20/21	21/22	PAED	PSE	RW SUP	CON SUP	RW	CON	TOTAL
	SHOPP - Bridge Preservation																			
04	SF	80	3.8/5.0	In the City and County of San Francisco, on Route 80, at the Bayshore Viaduct No. 34-0088 from Route 101 to 4th Street. Paint superstructure steel members.□ (G13 Contingency)	1483S	2J802	201.110	19/20	$2,500	$9,500	$76	$0	$0	$2,500	$9,200	$300	$0	$76	$0	$12,076
04	SF	101	4.1/5.1	In the City and County of San Francisco, at the Central Viaduct No. 34-0077 from south of 17th Street to S. Van Ness Avenue. Paint superstructure steel members.□ (G13 Contingency)	1483T	2J801	201.110	19/20	$0	$0	$153	$0	$0	$0	$0	$0	$0	$153	$0	$153
04	SOL	84	12.0/12.4	Near Rio Vista, at Miner Slough Bridge No. 23-0035. Replace bridge.	0886	0G660	201.110	19/20	$8,500	$1,066	$30,884	$0	$0	$3,000	$3,500	$1,098	$3,500	$2,884	$24,500	$38,482
04	SOL	80		Near Fairfield, at Suisun Creek Bridge No. 23-0007. Scour mitigation.	0467R	4G872	201.111	19/20	$1,200	$620	$1,365	$0	$0	$1,200	$600	$20	$600	$5	$760	$3,185
04	SOL	80	1.1/34.5	In and near Vallejo, Dixon and Vacaville, at Route 80/29 Separation Bridge No. 23-0087, McCune Creek Bridge No. 23-0084L/R and Horse Creek Bridge No. 23-0077L. Bridge preventative maintenance.	0480N	0J600	201.119	19/20	$990	$846	$2,682	$0	$0	$990	$880	$66	$880	$423	$1,379	$4,618
04	SOL	80		In Vallejo, at Route 80/29 Separation Bridge No. 23-0087. Replace bridge.□ ACCELERATED BRIDGE	1462F	2K840	201.322	19/20	$2,057	$0	$17,561	$0	$0	$2,057	$2,624	$22	$2,600	$15	$12,300	$19,618
04	SON	12	25.8/33.3	In and near Sonoma, at Sonoma Creek Bridge No. 20-0027 and Hooker Creek Bridge No. 20-0030. Scour mitigation.	0269M	4H050	201.111	19/20	$4,669	$0	$20,620	$0	$0	$1,519	$2,650	$500	$3,000	$4,420	$13,200	$25,289
04	MRN	1		Near Point Reyes Station, at Lagunitas Creek Bridge No. 27-0023. Replace bridge.	0756K	0G642	201.113	20/21	$4,187	$3,600	$0	$20,552	$0	$4,187	$2,650	$750	$2,500	$6,500	$11,552	$28,339
04	NAP	128		Near Rutherford, at Conn Creek Bridge No. 21-0021. Plant establishment mitigation for bridge replacement project EA 1G430.	0587K	1G43A	201.111	20/21	$0	$0	$50	$450	$0	$0	$30	$20	$200	$30	$220	$500
04	SF	101	2.0/2.9	In the City and County of San Francisco, at Alemany Circle Undercrossing (UC) No. 34-0064K, Alemany Circle UC No. 34-0065S and Bayshore Boulevard UC No. 34-0047S; also in San Mateo County in Pacifica, at Paloma Avenue Overcrossing No. 35-0187 (PM R44.21). Upgrade bridge rails.	1460E	2K190	201.112	20/21	$0	$657	$1,916	$7,276	$0	$657	$1,751	$164	$1,826	$10	$5,461	$9,848
04	ALA	84	17.0/17.4	Near Sunol, at Arroyo De La Laguna Bridge No. 33-0043. Replace/rehabilitate bridge for scour mitigation, bridge rail upgrade, and seismic retrofit.	0481M	0J560	201.111	21/22	$1,863	$0	$3,650	$0	$17,100	$1,863	$3,600	$250	$3,600	$500	$13,000	$22,813
04	ALA	880	15.6/26.5	In Hayward, San Leandro, and Oakland, at Tennyson Road Overcrossing (OC) No. 33-0236 (PM 15.65), Washington Avenue OC No. 33-0166 (PM 20.82), and Damon Slough Southbound onramp No. 33-0142K (PM 26.53); also on Route 77 in Oakland, at San Leandro OC No. 33-0284 (PM 0.29). Upgrade bridge rails, replace joint seals.	1450C	2K170	201.112	21/22	$0	$800	$1,750	$0	$12,525	$800	$1,500	$250	$2,200	$25	$10,300	$15,075
04	ALA	880		In Oakland, at East Creek Slough Bridge No. 33-0143. Mitigate eroded channel side-slope tidal scour and replace bridge approach slabs.	1483D	2J760	201.119	21/22	$1,000	$0	$0	$1,010	$3,577	$1,000	$850	$160	$1,170	$100	$2,307	$5,587
04	CC	24		In Orinda, at St. Stephens Drive Overcrossing No. 28-0111. Seismic retrofit.	1493A	4J840	201.113	21/22	$0	$925	$1,350	$0	$2,480	$925	$1,175	$175	$375	$38	$2,067	$4,755
04	MRN	101		In San Rafael, at Irwin Creek Bridge No. 27-0097. Rehabilitate corrugated metal arch culvert bridge and adjoining deteriorated culvert structures.	1493K	0K510	201.119	21/22	$1,100	$0	$0	$1,095	$3,457	$1,100	$880	$215	$610	$944	$1,903	$5,652
04	NAP	128		Near Rutherford, at Hopper Slough Bridge No. 20-0019. Replace bridge.	1451C	4J830	201.110	21/22	$0	$2,074	$206	$1,988	$11,392	$2,074	$1,988	$206	$2,014	$1,514	$7,864	$15,660
04	NAP	128	20.1/20.4	Near Napa, at Capell Creek Bridge No. 21-0078. Environmental mitigation and plant establishment for rehabilitate bridge project EA 4G840.	0830C	4G84A	201.110	21/22	$0	$0	$0	$0	$1,536	$0	$0	$10	$250	$776	$500	$1,536
04	NAP	29	14.1/19.0	In and near the cities of Napa and Yountville, at Craig Creek Bridge No. 21-0048 (PM 14.11), Dry Creek Bridge No. 21-0014 (PM 16.48), Perfume Creek Bridge No. 21-0051 (PM 17.61), and California Drive Undercrossing No. 21-0047 (PM 19.04). Upgrade bridge rails and widen shoulders to make standard.	1494E	0K630	201.112	21/22	$0	$2,600	$0	$1,550	$8,906	$2,600	$1,200	$350	$1,500	$296	$7,111	$13,056
04	SM	1		Near Pescadero, at Pescadero Creek Bridge No. 35-0026. Upgrade bridge rails and repair approach slabs.	1494G	4J870	201.110	21/22	$0	$1,200	$0	$1,008	$5,894	$1,200	$1,000	$8	$1,200	$260	$4,434	$8,102
04	SM	101		In Redwood City, at Cordilleras Creek Bridge No. 35-0019. Replace bridge to restore structural integrity.	1483C	2J730	201.110	21/22	$0	$4,500	$0	$5,625	$36,355	$4,500	$4,500	$1,125	$7,500	$4,285	$26,570	$48,480
04	SM	101	0.1/23.4	In East Palo Alto, Redwood City, Belmont, Burlingame Millbrae, South San Francisco, and Brisbane, from University Avenue Overcrossing to Sierra Point offramp separation. Upgrade bridge rails at eight structures.	1485K	2J740	201.112	21/22	$0	$1,326	$1,716	$0	$8,268	$1,326	$1,586	$130	$1,456	$64	$7,748	$12,310

Attachment A - *Plan Bay Area 2040* Final Project List

County/ Operator	RTPID	Title	Total Project Cost (in $ millions)	Project Completed by 2020
Marin	17-03-0001	Bicycle and Pedestrian Program	$30	No
Marin	17-03-0002	Climate Program: TDM and Emission Reduction Technology	$1	No
Marin	17-03-0003	County Safety, Security and Other	$4	No
Marin	17-03-0004	Roadway Operations	$20	No
Marin	17-03-0005	Minor Transit Improvements	$42	No
Marin	17-03-0006	Implement Marin Sonoma Narrows HOV Lane and corridor improvements Phase 2 (Marin County)	$136	No
Marin	17-03-0007	US 101/580 Interchange Direct Connector - PAED	$15	No
Marin	17-03-0008	Tiburon East Blithedale Interchange - PAED	$12	No
Marin	17-03-0009	Access Improvements to Richmond San Rafael Bridge	$7	Yes
Marin	17-03-0010	Highway Improvement Studies	$5	No
Marin	17-03-0011	Widen Novato Boulevard between Diablo Avenue and Grant Avenue	$17	Yes
Marin	17-03-0012	Sir Francis Drake Boulevard/Red Hill Avenue/Center Boulevard (known as "The Hub") - project development	$6	No
Marin	17-03-0013	San Rafael Transit Center (SRTC) Relocation Project	$36	No
Marin	17-03-0014	Larkspur Ferry Terminal Parking Garage - Planning Study	$1	No
Marin	17-03-0015	SMART Downtown San Rafael to Larkspur Rail Extension	$42	Yes
Marin	17-03-0016	Multimodal Streetscape	$49	No
Multi-County	17-10-0011	Lifeline, Community Based Transportation Program, and Mobility Management	$890	No
Multi-County	17-10-0012	Means-Based Fare Study Implementation	$150	No
Multi-County	17-10-0013	Transportation Management Systems	$500	No
Multi-County	17-10-0014	Bay Trail - non toll bridge segments	$220	No
Multi-County	17-10-0015	Climate Program: TDM and Emission Reduction Technology	$535	No
Multi-County	17-10-0016	Cost Contingency and Financing	$1,000	No
Multi-County	17-10-0017	Capital Projects Debt Service	$4,350	No
Multi-County	17-10-0018	Goods Movement Clean Fuels and Impact Reduction Program	$350	No
Multi-County	17-10-0019	Goods Movement Technology Program	$300	No
Multi-County	17-10-0020	New/Small Starts Reserve	$640	No
Multi-County	17-10-0021	Priority Development Area (PDA) Planning Grants	$200	No
Multi-County	17-10-0022	Local and Streets and Roads - Existing Conditions	$20,698	No
Multi-County	17-10-0023	Local Streets and Roads - Operations	$12,850	No
Multi-County	17-10-0024	Regional and Local Bridges - Exisiting Conditions	$14,550	No
Multi-County	17-10-0025	Regional State Highways - Existing Conditions	$13,014	No
Multi-County	17-10-0026	Regional Transit Capital - Existing Conditions	$30,564	No
Multi-County	17-10-0027	Regional Transit Operations	$119,830	No
Multi-County	17-10-0028	Clipper	$1,735	No
Multi-County	17-10-0029	511 Traveler Information Program	$280	No
Multi-County	17-10-0030	SAFE Freeway Patrol	$150	No
Multi-County	17-10-0031	Regional Transportation Emergency Management Program	$25	No
Multi-County	17-10-0032	Regional Rail Station Modernization and Access Improvements	$360	No
Multi-County	17-10-0033	Bay Area Forward - Active Traffic Management, Arterial Operations , Connected Vehicles, Shared Mobility, Transbay Operations, Managed Lanes Implementation Plan Operations, Transit and Commuter Parking	$995	No

C:\Users\MVelu\Desktop\Funding Opportunities - Attachment A - Plan Bay Area 2040 Final Project List 4

Appendix J Notices of Completion and Availability

Appendix C

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH # 2018082045

Project Title: Arroyo de la Laguna Bridge Project

Lead Agency: California Department of Transportation, District 4 — Contact Person: Charles Winter
Mailing Address: 111 Grand Avenue MS 8B — Phone: 510-847-3752
City: Oakland — Zip: 94612 — County: Alameda

Project Location: County: Alameda — City/Nearest Community: Sunol
Cross Streets: Niles Canyon Road — Zip Code: 94586
Longitude/Latitude (degrees, minutes and seconds): ____° ____′ ____″ N / ____° ____′ ____″ W Total Acres: ____
Assessor's Parcel No.: ____ Section: ____ Twp.: ____ Range: ____ Base: ____
Within 2 Miles: State Hwy #: State Route 84 — Waterways: Arroyo de la Laguna
Airports: N/A — Railways: Niles Canyon Railway — Schools: Sunol Glen Elementary

Document Type:

CEQA: ☐ NOP ☐ Early Cons ☐ Neg Dec ☐ Mit Neg Dec ☒ Draft EIR ☐ Supplement/Subsequent EIR (Prior SCH No.) ____ Other: ____
NEPA: ☐ NOI ☒ EA ☐ Draft EIS ☐ FONSI
Other: ☒ Joint Document ☐ Final Document ☐ Other: ____

Local Action Type:

☐ General Plan Update ☐ General Plan Amendment ☐ General Plan Element ☐ Community Plan
☐ Specific Plan ☐ Master Plan ☐ Planned Unit Development ☐ Site Plan
☐ Rezone ☐ Prezone ☐ Use Permit ☐ Land Division (Subdivision, etc.)
☐ Annexation ☐ Redevelopment ☐ Coastal Permit ☒ Other: Transportation

Development Type:

☐ Residential: Units ____ Acres ____
☐ Office: Sq.ft. ____ Acres ____ Employees____
☐ Commercial: Sq.ft. ____ Acres ____ Employees____
☐ Industrial: Sq.ft. ____ Acres ____ Employees____
☐ Educational: ____
☐ Recreational: ____
☐ Water Facilities: Type ____ MGD ____
☒ Transportation: Type Bridge Replacement
☐ Mining: Mineral ____
☐ Power: Type ____ MW ____
☐ Waste Treatment: Type ____ MGD ____
☐ Hazardous Waste: Type ____
☐ Other: ____

Project Issues Discussed in Document:

☒ Aesthetic/Visual
☒ Agricultural Land
☐ Air Quality
☒ Archeological/Historical
☒ Biological Resources
☐ Coastal Zone
☐ Drainage/Absorption
☐ Economic/Jobs
☐ Fiscal
☒ Flood Plain/Flooding
☐ Forest Land/Fire Hazard
☒ Geologic/Seismic
☐ Minerals
☐ Noise
☐ Population/Housing Balance
☐ Public Services/Facilities
☐ Recreation/Parks
☐ Schools/Universities
☐ Septic Systems
☐ Sewer Capacity
☒ Soil Erosion/Compaction/Grading
☐ Solid Waste
☒ Toxic/Hazardous
☒ Traffic/Circulation
☒ Vegetation
☒ Water Quality
☐ Water Supply/Groundwater
☒ Wetland/Riparian
☐ Growth Inducement
☒ Land Use
☒ Cumulative Effects
☐ Other: ____

Present Land Use/Zoning/General Plan Designation:

Project Description: *(please use a separate page if necessary)*

Caltrans proposes to replace the Arroyo de la Laguna Bridge (Bridge No. 33-0043) to address scour and seismic concerns and meet current design standards for safety. Structural maintenance inspections completed in October 2013 identified scour at piers 4 and 5 of the bridge. Scour is undermining the footing at Pier 5. The bridge is currently classified as "scour critical," which means it has pier foundations that are rated unstable due to scour. Additionally, in 2016, the Office of Earthquake Engineering Analysis and Research identified the bridge to be seismically vulnerable and a candidate for seismic retrofit. The purpose of this project is to maintain reliable connectivity and provide an improved highway facility for the traveling public along SR 84 by replacing the existing bridge over Arroyo de la Laguna.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Revised 2010

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "**X**".
If you have already sent your document to the agency please denote that with an "**S**".

X	Air Resources Board	X	Office of Historic Preservation
	Boating & Waterways, Department of		Office of Public School Construction
X	California Emergency Management Agency		Parks & Recreation, Department of
X	California Highway Patrol		Pesticide Regulation, Department of
	Caltrans District #	X	Public Utilities Commission
	Caltrans Division of Aeronautics	X	Regional WQCB # 2
	Caltrans Planning	X	Resources Agency
	Central Valley Flood Protection Board	X	Resources Recycling and Recovery, Department of
	Coachella Valley Mtns. Conservancy		S.F. Bay Conservation & Development Comm.
	Coastal Commission		San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
	Colorado River Board		San Joaquin River Conservancy
X	Conservation, Department of		Santa Monica Mtns. Conservancy
	Corrections, Department of	X	State Lands Commission
	Delta Protection Commission		SWRCB: Clean Water Grants
	Education, Department of	X	SWRCB: Water Quality
	Energy Commission		SWRCB: Water Rights
X	Fish & Game Region # 3		Tahoe Regional Planning Agency
X	Food & Agriculture, Department of	X	Toxic Substances Control, Department of
X	Forestry and Fire Protection, Department of	X	Water Resources, Department of
	General Services, Department of		
	Health Services, Department of	X	Other: San Francisco Public Utilities Commission
	Housing & Community Development		Other:
X	Native American Heritage Commission		

Local Public Review Period (to be filled in by lead agency)

Starting Date August 5, 2021 Ending Date September 20, 2021

Lead Agency (Complete if applicable):

Consulting Firm: _____ Applicant: _____
Address: _____ Address: _____
City/State/Zip: _____ City/State/Zip: _____
Contact: _____ Phone: _____
Phone: _____

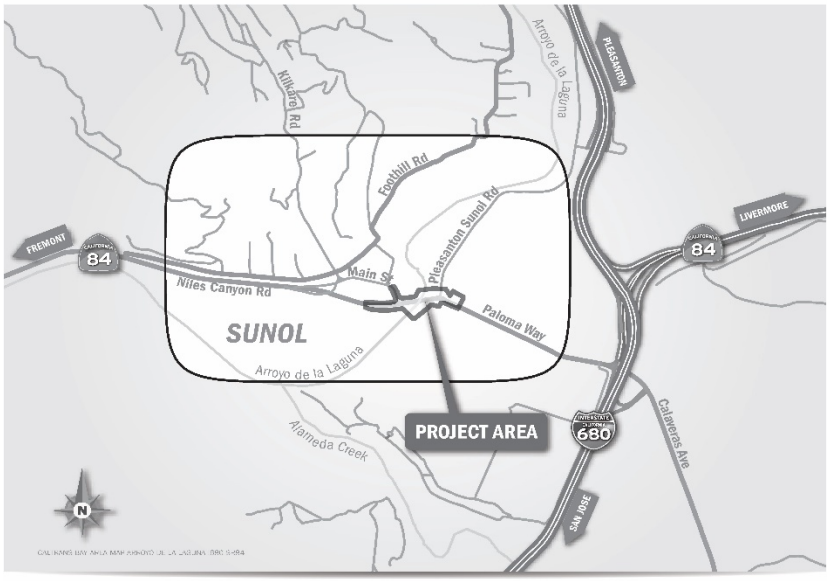
Signature of Lead Agency Representative: Brian Gassner Digitally signed by Brian Gassner Date: 2021.08.02 09:02:33 -07'00' **Date:** 8/2/2021

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

Revised 2010

Caltrans PUBLIC NOTICE

DRAFT ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL ASSESSMENT AVAILABLE FOR THE STATE ROUTE 84 ARROYO DE LA LAGUNA BRIDGE PROJECT



WHAT IS BEING PLANNED?

The California Department of Transportation (Caltrans) proposes to replace the Arroyo de la Laguna Bridge to address scour and seismic concerns and meet current design standards for safety. The proposed project would take place on State Route (SR) 84 between Pleasanton-Sunol Road and Main Street, in the town of Sunol in Alameda County.

WHY THIS ADVERTISEMENT?

This notice is to tell you of availability of the Draft Environmental Impact Report/Environmental Assessment (EIR/EA) for you to read. A copy of the environmental document can be obtained from the project website: https://dot.ca.gov/caltrans-near-me/district-4/d4-projects/d4-alameda-84-arroyo-de-la-laguna-bridge-project.

WHERE YOU COME IN:

Caltrans is offering individuals and organizations the opportunity to comment on the Draft EIR/EA. The most beneficial comments include specifi¬c alternatives or mitigation measures that would provide better ways to avoid or mitigate any potential environmental effects of the project, concerns that are not addressed in the Draft EIR/EA, inaccuracies or missing information, and/or statistical data or facts to support your concern. Please submit written comments on the Draft EIR/EA by September 20, 2021. Comments can be sent by email to ArroyodelaLagunaBridgeProject@dot.ca.gov or by mail to:

Caltrans, District 4-Office of Environmental Analysis
ATTN: Charles Winter, Associate Environmental Planner
P.O. Box 23660 MS-8B
Oakland, CA 94623-0660

WHEN AND WHERE:

Your input on the scope and content for the Draft EIR/EA is requested.

A virtual Public Meeting will be held on: Tuesday, August 24, 2021 6:00 pm to 7:30 pm

This meeting will be held by video and teleconference only. To access the meeting link, call information, and directions for participating, please visit the project webpage at **https://dot.ca.gov/caltrans-near-me/district-4/d4-projects/d4-alameda-84-arroyo-de-la-laguna-bridge-project**.

For more information regarding the proposed project, please contact California Department of Transportation, District 4-Office of Environmental Analysis, **Attn: Charles Winter, Associate Environmental Planner, P.O. Box 23660, MS-8B, Oakland, CA 94623-0660**; phone **(510) 847-3752**, email **Charles.Winter@dot.ca.gov.**

Appendix K Public Comments and Responses

Caltrans filed a Notice of Completion for the Draft EIR/EA with the State Clearinghouse on August 5, 2021. The filing of the Notice of Completion began a public review and comment period that extended from August 5, 2021 through September 20, 2021. State and local agencies, organizations, and members of the public submitted comments. Each comment letter or email that was received was reviewed, and substantive comments were identified. This Appendix presents the comments that were received and the response to the comments.

Comment 1. Andy Sass

Sent: Monday, August 23, 2021 10:51 AM

To: Arroyo de la Laguna Bridge Project@DOT <ArroyodelaLagunaBridgeProject@dot.ca.gov>

Subject: Comments on Arroyo de la Laguna Bridge Project

I do not believe that CalTrans has adequately analyzed and costed build alternatives to a whole new bridge that would destroy many old trees and visually impact Sunol Valley School and the highway itself. 1.1

First, as to the safety aspect, the analysis of accidents within the project site should be limited to the bridge itself. The intersection of Main Street and Highway 84 are considered within the project boundaries, as is Scott's Corner (Water Temple) intersection. Most likely, all the accidents happen there, and not on the bridge. Looking at the concrete guard rails, it is doubtful if they have ever been hit by a car. The road and bridge is dead straight and the need for more modern guard rails is unnecessary. The EIR is not complete without this analysis. 1.2

As an aside, at a fraction of the cost, a traffic light at Main and 84 would be the best use of money to improve safety 1.3

Second, CalTrans did not cost the cost to repair the scouring and do seismic retrofits. This is a major oversight, and should be included then brought back for public comments. Again, the EIR is not complete. 1.4

It is a lovely spot of road and should not be altered. The number of old and magnificent trees the be destroyed should stop this waste of money in itself. The view and noise from Sunol Valley school would be terrible. The scenic nature of that stretch of road would be lost. 1.5

Additionally, the bicycle path proposed is stupid. Without a signal, one could not easily cross to the bicycle path. I have been over that bridge hundreds of times on a bicycle, and it is not an issue. Cars are not going fast as they are slowing for the intersection, or we just at a stop. Line of site is also good. 1.6

I strongly urge CalTrans to preserve the scenic highway and save money by mitigating the scouring, performing seismic retrofits, and using some of those savings to put a signal in at Main Street and Highway 84. 1.7

Yours truly,

S, Andrew Sass, P.E.
Fremont, CA

Response to Comment 1.1

As part of the project's environmental phase, Caltrans analyzed several bridge replacement alternatives for the proposed project, including addressing scour within the channel, as described in Section 1.8 of the draft environmental document (DED). The analysis included estimating costs for each alternative. The Build Alternative presented in this document is the alternative that was determined to address the project's purpose and need and to result in the least impacts to the surrounding area, including trees adjacent to the bridge.

Response to Comment 1.2

In addition to a bridge replacement, the project proposes roadway improvements along SR 84 starting from the Main Street intersection to the Pleasanton Sunol Road intersection. Thus, the Main Street and Pleasanton Sunol Road intersections are considered part of the project area. As reported in Section 2.2.8.2 and Table 2.2.8-1, the accident rate in the project area is lower than the statewide average for similar facilities. The project is needed to address the structural and other design deficiencies of the bridge and adjacent roadway sections rather than collisions in the project area. The bridge pier foundations have been undermined by creek scour, and the bridge itself is seismically vulnerable. In addition to the bridge rails, the curvature, lane alignment, shoulders, and slope of the bridge and adjacent approaches no longer meet Caltrans design standards for safety of the traveling public (Section 1.2.2). Given these structural and design deficiencies, additional accident data are not required to demonstrate the need for the project.

Response to Comment 1.3

The Niles Canyon Safety Improvements Project, which is currently under construction, will install signals at the Pleasanton Sunol Road and Main Street intersections along SR 84. Design of the Arroyo de la Laguna Bridge Project took the signal improvements into consideration.

Response to Comment 1.4

The project development team considered the cost of scour repair and bridge rehabilitation as discussed in the DED Section 1.8 under Alternative 1: Bridge Rehabilitation. This alternative was rejected because a bridge replacement alternative

represented the best engineering and cost-effective alternative when the age of the existing bridge was considered.

Response to Comment 1.5

The commenter's concerns about the scenic nature of the project area and visual and noise impacts at Sunol Glen Elementary School have been acknowledged. The purpose of the proposed project is to address scouring and seismic concerns on the existing Arroyo de la Laguna Bridge. The project's potential impacts on visual resources and noise, including at the school, are described in detail in Sections 2.2.9 and 2.3.4, respectively. The measures detailed in Section 2.2.9.4 would help to preserve and restore the scenic quality of SR 84 and the project area.

Response to Comment 1.6

Caltrans projects are planned to provide safe mobility for all users, including bicyclists, pedestrians, transit vehicles, truckers, and motorists, appropriate to the function and context of the facility. The Niles Canyon Safety Improvements Project, which is currently under construction, will install signals and new painted stop lines at the Main Street and Pleasanton Sunol Road intersections along SR 84. As part of the signal system, pedestrian push buttons, countdown signs, and accessible signals will be installed. Additionally, to facilitate safe passage of pedestrians and bicyclists across SR 84, the Arroyo de la Laguna Bridge Project will delineate the pedestrian crossings at these intersections using parallel-line striping with high-visibility paint. The crossings will use guidance from the California Manual on Uniform Traffic Control Devices (CA MUTCD). The MUTCD is the standard for traffic signs, road surface markings, and traffic signals in the state of California.

Response to Comment 1.7

The Niles Canyon Safety Improvements Project, which is currently under construction, will install signals at the Main Street and Pleasanton Sunol Road intersections along SR 84. The project development team considered a bridge rehabilitation alternative, referred to as Alternative 1: Bridge Rehabilitation and discussed in Section 1.8 of the DED. This alternative was rejected because a bridge replacement alternative represented the best engineering and cost-effective alternative when the age of the existing bridge was considered.

Comment 2. Dave Campbell, East Bay Bike Coalition

Sent: Tuesday, August 24, 2021 7:33 PM
To: Arroyo de la Laguna Bridge Project@DOT <ArroyodelaLagunaBridgeProject@dot.ca.gov>; Tess Lengyel <tlengyel@alamedactc.org>; Gary Huisingh <ghuisingh@alamedactc.org>; Siauw, Jack@DOT <jack.siauw@dot.ca.gov>
Subject: Arroyo de La Laguna Bridge and SR 84/680 Interchange projects

Everyone

I joined Caltrans' webinar this evening on the Arroyo de La Laguna Bridge replacement project and learned that the new bridge will have both wide shoulders and a separate bike/ped bridge, which is great to hear. In fact, the bridge replacement project extends between Main Street in Sunol to the intersection of Niles Canyon Road and Pleasanton Sunol Road, which leaves a little over a mile gap in the bikeway to the Alameda CTC SR 84/680 Interchange project, which is building a nice bikeway from the east to Paloma Way. Can your two projects split the difference and complete this bikeway gap, by building shoulders on Paloma Way, or preferably bike lanes? This is the time to fill this gap, as it is all on a State Highway. What do say? 2

Complete Streets policies still fall short of completing bikeway projects to existing (or in this case "under construction" bikeways, and we need to fix this flaw in complete streets policies. What can we do to complete this gap? It should take took much as it looks like there is plenty of room along the shoulder to pave bike lanes.

Thanks for taking a look at this and getting back to me.

--

Logo

Dave Campbell | Advocacy Director
Pronouns: he/him
Mail: PO Box 1736 Oakland, CA 94604
Office: 466 Water Street Oakland, CA 94607
C: 510.701.5971 | E: Dave@BikeEastBay.org
Looking for more fun on every ride? Sign up for a free online class!

Response to Comment 2

Caltrans projects are planned to provide safe mobility for all users, including bicyclists, pedestrians, transit vehicles, truckers, and motorists, appropriate to the function and context of the facility. The proposed project is limited to the current scope of addressing scour and seismic vulnerabilities on the Arroyo de la Laguna Bridge. All elements of the Build Alternative, including the bike lane, are specific to the bridge. Including additional bike lanes would be outside of the scope; however, the project would not preclude the consideration of future bikeway projects in the area.

Comment 3. Jay Gilson

Submission Time	First Name	Last Name
2021-09-02T19:59:46Z	Jay	Gilson

Message

The current recommendation indicates the separated walking path/bike path would be on the south side of the new Bridge. I asked at the public session on 8/24 why there was a walking path - and it was stated the Sunol school said the children walk to the market at the intersection. My comment does not question this statement but rather why put the walkway on the south side? The school is on the north side. I suspect any pedestrians would come from the town of Sunol which is on the North side. Putting the walkway on the Northside of the bridge just makes common sense. This way the pedestrians DO NOT need to cross Hwy 84 to get to the walkway. FYI I have been driving through Niles Canyon for more than 40 years and the number of pedestrians (between Sunol and the intersection) I have observed during this time can be counted on one hand. Frankly as a taxpayer this seems to be a waste of money. 3

Response to Comment 3

Caltrans projects are planned to provide safe mobility for all users, including bicyclists, pedestrians, transit vehicles, truckers, and motorists, appropriate to the function and context of the facility. The Arroyo de la Laguna Project would provide a separated pedestrian and bicycle pathway on the south side of the bridge. The project development team determined that construction of a sidewalk on the north side of Arroyo de la Laguna Bridge would result in adverse impacts to the Sunol Water Temple entry gates, nearby elementary school, and Sunol Corners Little Market; substantial fill into Arroyo de la Laguna; and increased tree removal. The Niles Canyon Safety Improvements Project, which is currently under construction, will install signals and new painted stop lines at the Main Street and Pleasanton Sunol Road intersections along SR 84. As part of the signal system, pedestrian push buttons, countdown signs, and accessible signals will be installed. Additionally, to facilitate safe passage of pedestrians and bicyclists across SR 84, the Arroyo de la Laguna Bridge Project will delineate the pedestrian crossings at these intersections using parallel-line striping with high-visibility paint.

Comment 4. Kathleen Nava

Sent: Friday, September 3, 2021 8:00 AM
To: Arroyo de la Laguna Bridge Project@DOT <ArroyodelaLagunaBridgeProject@dot.ca.gov>
Subject: Arroyo de la Laguna

Dear Caltrans Representative,

I have reviewed this bridge plan and it is far too big for the Niles Canyon-Sunol area we know and love. This area is one of the few remaining areas in which a drive through nature can still be enjoyed. As I read through the plan, it became clear the scope of this bridge plan is to provide for a future state where 84 is transformed into a major freeway and such a large bridge would be required.

The real future is not more gas powered cars packed onto roadways; we see clearly where this has gotten us to date. It is time for the agency to look beyond today and plan for a future of, at the minimum, solar powered electric cars, trains or subways, and other forms of clean transportation. This current project is only more of the same work that has gotten us to the state we are in; packed freeways, tons of emissions as we sit and wait, destruction of trees so that the carbon cannot be offset, and the list goes on. 4

Caltrans needs a leader for today that sees tomorrow-this monstrosity of a bridge is a plan that represents thinking of the older generation where it was believed that land was endless and cars did not harm the air we breathe. I am imploring you to please consider a lower impact approach to the bridge replacement. I know it is so hard to accept change, to really listen and think about a different way of doing things, humans are just not good at it. But we know that we can, and if any of the recent weather related events have shown us anything, it is that now is the time to get creative! We need a new path forward for humanity to survive.

One example is to use small wooden bridges discretely through the wooded areas that could carry persons by foot or bike, across the creek. Keeping the bridge small and "old" appearing allows the current character of the area to remain. So much work has gone into the water temple and the stone entrances, let's keep up that theme by making this area one of interest and discovery as the regional parks and water temple provide. The bridge should fit the area, not make the area fit to a vision of more, and faster moving traffic flows-there are already corridors for this. Please, go back to the drawing board on this project and bring with it a vision of the gateway to regional parks and the historic water temple-help us preserve the beauty of this area.

Regards,
Kathleen Nava

Response to Comment 4.

The purpose of the proposed project is to address scouring and seismic concerns on the existing Arroyo de la Laguna Bridge and to bring the bridge to current standards. This will be achieved by replacing the existing bridge over Arroyo de la Laguna and implementing several roadway improvements to enhance safety and promote accessibility for pedestrian/bicycle users. The project would not add lanes to the bridge or substantially change the horizontal or vertical alignment of SR 84. To limit the visual impacts of project construction, the project would incorporate avoidance and minimization measures (AMMs), including revegetating any impacted vegetated areas and applying appropriate aesthetic treatments to the bridge and railing. The

commenter's preference for a lower-impact approach to the bridge replacement has been acknowledged.

Comment 5. Zone 7 Water Agency

ZONE 7 WATER AGENCY
Delivering Quality, Reliability and Safety

100 North Canyons Parkway
Livermore, CA 94551
(925) 454-5000

September 14, 2021

Caltrans, District 4-Office of Environmental Analysis
ATTN: Charles Winter, Associate Environmental Planner
P.O. Box 23660 MS-8B
Oakland, CA 94623-0660

Sent by e-mail to: ArroyodelaLagunaBridgeProject@dot.ca.gov

Re: Arroyo de la Laguna Bridge Project, Project ID 0414000012

Zone 7 Water Agency (Zone 7, or Zone 7 of the Alameda County Flood Control and Water Conservation District) has reviewed the referenced document in the context of Zone 7's mission to "Deliver safe, reliable, efficient, and sustainable water and flood protection services" within the Livermore-Amador Valley. Our notes are included on the following pages.

We appreciate the opportunity to comment on this project. If you have any questions on this letter, please feel free to contact me at (925) 454-5005 or via email at erank@zone7water.com.

Sincerely,

Elke Rank

Elke Rank
cc: Carol Mahoney, Amparo Flores, file

zone7water.com

ZONE 7 WATER AGENCY
Delivering Quality, Reliability and Safety

Comments:

Project Webpage

1. **On your webpage,** the Project Alternatives Simulated View Post-Construction description are mixed up and appear to show bridge view in wrong perspective, if pedestrian lane is on the south part of bridge.
   - "Simulated View Post-Construction 1 - Looking ~~northwest~~ southeast at State Route 84 on the bridge from the shoulder" 5.1
   - "Simulated View Post-Construction 2 - Looking ~~southeast~~ northwest at State Route 84 (Niles Canyon Road) from the Main Street/State Route 84 intersection"

Draft EIR/EA

2. **Under Summary, p.vi, Table S-1. Summary of Impacts, Consistency with State, Regional, and Local Plans and Programs –** The project will result in an impact to Zone 7's recently installed streamflow gauging station at the bridge. The Highway 84 Bridge is the site of current streamflow measuring devices installed per a Caltrans Encroachment Permit (0421-NSV-0218) to monitor the water surface elevation of Arroyo de la Laguna. Adjacent neighbors in the Sunol area had asked Zone 7, Caltrans, and SFPUC, to assist in addressing flood issues; Zone 7 had proposed to monitor stormwater flows down Arroyo de la Laguna to enable the public to be notified of high water levels. The streamflow gauging station was completed in July 2021. Zone 7 requests that arrangements be made to relocate the gauging station and its measuring devices onto the new bridge, to maintain data acquisition, under Summary of Impacts – Utilities/Emergency Services requirements to address impacts. 5.2
3. **Under Summary, p.ix, Table S-1. Summary of Impacts, Hydrology and Floodplain –** The project is noted to be within FEMA Base Floodplain; however, the accuracy of the Base Floodplain is unknown, since no FEMA floodplain study has been performed in the area since the 1980's or earlier. It is not known what sort of buildout condition was envisioned to determine the maximum streamflow at the project site. 5.3
4. **On p. 1-10, first bullet reads "Relocate utilities one year prior to start of construction" –** For reasons noted above, we ask that Caltrans work with Zone 7 on providing a plan to relocate existing equipment attached to the north side of the bridge, 5.4

ZONE 7 WATER AGENCY
Delivering Quality, Reliability and Safety

and assist in reinstalling as part of Stage 1 construction activities on the new north face of the bridge. 5.4

5. **On p. 1-13, Paragraph 1.5.7 Removal of Existing Arroyo de la Laguna Bridge –** Zone 7 asks that Caltrans work with Zone 7 on carefully removing existing equipment attached to the north side of the bridge. 5.5

6. **On p, 1-14, Paragraph 1.5.10 Utilities –** Add a sentence indicating that Zone 7's streamflow measuring devices, located in a 2-inch metal conduit attached to the bridge, will need to be relocated. 5.6

7. **On p. 2-6, Paragraph 2.2.2.1 –** Add Zone 7 of Alameda County Flood Control and Water Conservation District's Early Flood/Storm Warning Project. The goal of the project is to provide the public with a flood/storm warning system based on data gathered from streamflow and rainfall gauging stations situated around Zone 7's Service Area. Zone 7 recently installed a new streamflow gauging station at Highway 84 in Sunol, with the cooperation of Caltrans, to enable Zone 7 to monitor streamflow out of Zone 7's service area along the Arroyo de la Laguna, and to monitor the water level at the Highway 84 Bridge, at the request of the town of Sunol. 5.7

8. **On p. 2-8 Table 2.2.2-1. Consistency with State, Regional, and Local Plans and Programs –** Please indicate, under Build Alternative, that mitigation would require relocating aforementioned streamflow gauging equipment onto new bridge. Under the No Build Alternative, there would be no impact. 5.8

9. **On p. 2-32, Paragraph 2.2.7.2 Environmental Consequences, Build Alternative –** revise 2nd sentence to read: "In addition, construction would require the relocation of the water line crossing the east end of the bridge, <u>as well as streamflow measuring equipment attached to the north face of the bridge</u>." 5.9

10. **On p. 2-72, Paragraph 2.3.1.2 Affected Environment** – EIR references FEMA FIRM, dated 2009. While the FIRM may have been dated 2009, no known Flood Study has been performed in the area since the 1980's, thus data based on the FEMA FIRM, may not be accurate or account for General Plan changes that have occurred over the years. 5.10

Response to Comment 5.1

The website has been updated to include corrections to the descriptions of the simulated views.

Response to Comment 5.2

Prior to project construction, Caltrans will work with Zone 7 Water Agency to relocate the streamflow measuring devices installed at the bridge and to minimize interruption to data acquisition during relocation.

Response to Comment 5.3

The Caltrans Highway Design Manual, Section 804.5 states that “Where National Flood Insurance Program (NFIP) Maps and study reports are available, their use is mandatory in determining whether a highway location alternative will include an encroachment on the base floodplain.” This is consistent with Title 23, CFR, Part 650, Subpart A, 650.111. The FEMA Base Floodplain used for hydraulics analysis in this project is one such map. As such, Caltrans analyzes the impacts of the project with regard to the most recent effective floodplain map.

To determine floodplain impacts in the project site, Caltrans Hydraulics used this FEMA Base Floodplain map and the proposed new bridge design.

Response to Comment 5.4

As noted in response to Comment 5.2, Caltrans will work with Zone 7 Water Agency prior to project construction to relocate the streamflow measuring devices. Timing and details regarding relocation of the streamflow gauging station will be determined in the design phase of the project.

Response to Comment 5.5

Please see the response to Comment 5.2 regarding relocation of existing equipment.

Response to Comment 5.6

Section 1.5.10 has been revised to reference the necessary relocation of streamflow measuring devices, as requested in the comment.

Response to Comment 5.7

Section 2.2.2.1 discusses regional, local, and area plans and policies that apply to the project area. Discussion of specific projects are included in applicable topic sections. Zone 7 Water Agency's Early Flood/Storm Warning Project has been included in Section 2.3.1 Hydrology and Floodplain and Section 3.1.10 Hydrology and Water Quality.

Response to Comment 5.8

Please see the response to Comment 5.7.

Response to Comment 5.9

Section 2.2.7.2 has been revised as suggested.

Response to Comment 5.10

Caltrans study of the floodplain uses the most recent available data provided by FEMA. Please see the response to Comment 5.3.

Comment 6. Lisa Otsuki-Ball

Submission Time	First Name	Last Name
2021-09-16T17:32:09Z	Lisa	Otsuki-Ball

Message

I understand the necessity of replacing this bridge. My hope is that sufficient consideration is being made on two points:
- Potential flood mitigation
- Design consistent with maintaining Sunol's quaint aesthetic

6

Response to Comment 6

The design of the new bridge takes into consideration the existing base floodplain and would not significantly impact or encroach on the floodplain, as described in Section 2.3.1.3.

In addition, the project would incorporate AMMs to limit visual impacts of project construction, including revegetating any impacted vegetated areas and applying appropriate aesthetic treatments to the bridge and railing.

The new railing was chosen to best match the needs of the project while keeping the original aesthetic of the Arroyo de la Laguna Bridge. The new bridge would also look similar to existing conditions. Bridge construction would also require tree removal. Trees removed for construction would be replaced close to the areas of impact where proper safety and setback requirements are satisfied. It is anticipated that replacement trees and shrubs will fill in and restore the visual quality over a 10-to-15-year period.

More detail on visual measures the project would use can be found in Section 2.2.9.4 The final aesthetic treatment would be context sensitive.

Comment 7. Molleen Barnes

Submission Time	First Name	Last Name
2021-09-16T18:54:44Z	Molleen	Barnes

Message

To Whom it May Concern,
While we are very excited about this project and the improvements it will thus make, we also want to note our concern about the loss of trees. The natural beauty of Sunol is a huge part of what makes Sunol so cherished and the school's location is impacted by this project. We respectfully request that trees be planted in as near a location as possible to replace any trees that are needing removed for the project. Thank you. 7

Response to Comment 7

Caltrans' goal is to minimize tree impacts during project construction. MM Natural Communities-1 and MM Natural Communities-2 (Section 2.4.1.3) provide for Caltrans to avoid and minimize upland and riparian tree removal during the design phase and to provide tree replacement on-site following construction. Currently, 251 trees are located within the estimated temporary and permanent impact areas. At this stage, Caltrans is estimating that all trees located within the impact areas would be removed or trimmed. The final number of trees impacted will be determined during the design phase. Caltrans will work with the design and construction teams prior to the start of construction to try and protect old, landmark trees to the maximum extent possible.

After construction of the new bridge, Caltrans will restore and enhance the site for visual quality and habitat value. Trees will be replanted at ratios indicated in the project permits. Tree planting will be maximized on-site, and details for off-site planting will be determined during the design and permitting phase of the project. The location of trees and species planted on-site will be chosen based on the current vegetation and where highway safety regulations allow.

Comment 8. Sunol Citizens' Advisory Council

SUNOL CITIZENS ADVISORY COUNCIL

SENT VIA EMAIL

September 16, 2021

Caltrans, District 4 Office of Environmental Analyses
ATTN: Charles Winter, Associate Environmental Planner
P.O. Box 23660 MS-8B
Oakland, CA 94623-0660

Dear Mr. Winter,

On September 15, 2021, the Sunol Citizens' Advisory Council approved submittal of the following comments on the State of California, Department of Transportation Draft Environmental Impact Report/ Environmental Assessment for the Arroyo de la Laguna Bridge Project.

Page	Comment	
xxi	Thank you for responding to some of our comments submitted during the scoping phase of the environmental review. We are glad to see that Caltrans has added safe bicycle and pedestrian access across the bridge, as we requested. (1)	8.1
	We are glad to see that Caltrans is now planning to align the bridge away from the Water Temple Gate and now plans to protect the one remaining Water Temple Gate, as we requested. (2)	8.2
Viii Xviii 3-48 2-148 2-105 2-107	Visual Impacts, Natural Communities, Cultural Resources Caltrans states the project will require the removal of 251 trees, many of which are majestic heritage oaks and sycamores. The EIR/ER analysis states that it will have moderate to high levels of impact after mitigation. The DEIR/EA lists five other Caltrans projects in the Sunol area. These five projects have already removed 900-1000 trees and will remove at least another 250 trees in Sunol this year. The other projects do not adequately mitigate the impact of removing these trees. These projects have already had a significant impact on Sunol and will continue to have a significant impact for many years. Caltrans states the bridge replacement project will not result in a contribution to cumulative impacts on animals, cultural resources or natural community. This conclusion is erroneous. A	8.3

	25% increase in the number of trees to be removed and trimmed is a significant cumulative effect on the town of Sunol, and its visual, cultural and natural resources. The DEIR/EA lists mitigations that may be implemented, if feasible, and, if implemented, it will be at distant locations. These are not mitigations. A mitigation would mitigate the impacts to the town of Sunol and to the people who visit Sunol. To address these significant cumulative impacts, the project needs to include mitigations implemented in Sunol. The project mitigation must include replacement trees (mature trees, not saplings, and not acorns) planted in Sunol. The project needs to include a process for working with the citizens of Sunol to identify locations in Sunol. We are ready to work with Caltrans to achieve this mitigation. (3) These majestic trees scheduled for removal should not be sliced and shredded into wood mulch. The project needs to include working with Urban Forestry specialists to preserve the wood from downed trees for use in Urban Forestry projects. (4)	8.3 8.4
2-43 2-56 2-57	Visual Impacts, Cultural Resources, Parks and Recreational Facilities Figure 2.2.9-11 shows that all but two trees on the southeast side of the school field will be removed. Caltrans states that the trees that currently screen the school from the bridge and roadway are on Caltrans property. Caltrans states that trees cannot be replanted in all areas along the right-of-way fence within state property due to insufficient setback/safety requirements so 100% rescreening is not possible. The school has expressed a desire to maintain trees surrounding the field and screening the bridge and roadway, even if planted on school property. The project needs to include the replanting of large trees on school property to screen the bridge and roadway and restore the rural feeling to the school field. (5)	8.5
2-95	Noise The DEIR/EA states that noise levels are expected to be high during all aspects of the project: bridge demolition, pile driving, excavating/grading, and paving. The DEIR/EA states that noise will impact the school and residents in the downtown area; therefore, the work will be done at night. It will also be done during the summer when school is not expected to be in session. Based on experience with the construction of the intersection at Paloma and Pleasanton Sunol Boulevard, the noise will also impact residents in the surrounding hillsides. Many Sunol homes don't have air conditioning and residents open their windows to cool their houses during night. The nightly construction in 2021 at the intersection has kept residents awake with the constant beeping sound of back-up vehicle beepers and what sounds like asphalt rubble-izing. Residents have just experienced one summer without sleep and are anticipating three more summers of this project without sleep.	8.6

	The eight listed avoidance/abatement, minimization measures (AMM) are not adequate. For example, "AMM 4 Consider reducing the impact of detours," or "AMM8 If feasible, use solar or electricity as a power source rather than diesel generators." These AMMs will not reduce the noise and are not realistic. The project needs include constant (weekly), direct communication about the phase of the work and the type of noise to be expected. This communication should be done prior to the start of the work so that residents can purchase and install air conditioners and then Caltrans should continue to communicate weekly, so that residents can anticipate when to run their air conditioners and to use electricity when they wouldn't under normal circumstances. (6) The project should include scheduling the work during daylight hours as much as possible and ensuring that vehicle traffic doesn't detour through Foothill Road and Main Street. (7) The project should include prohibition of night-time work when PG&E institutes Public Safety Power Shutoffs (PSPS) or flex-power shutoffs. (8)	8.6 8.7 8.8
1-10 2-26 2-30 2-50	Community character and cohesion The document describes the pedestrian and bicycle pathways on the bridge, it does not describe the connections at each end. It appears that it has not been adequately planned or considered. These connections have been historically problematic and have discouraged pedestrians and bicycle riders. This route is important to people currently living in Sunol and it is important for the future Niles Canyon trail and Sunol's efforts to be more pedestrian friendly. The pedestrian crossing from Main Street across Niles Canyon Road to the bridge should be under the bridge to reduce contact with vehicles traveling at expressway speeds. (9)	8.9
Xiii 2-97	Natural Communities The DEIR/EA states that trees would be removed from an area of 3.8 acres for construction, staging, and creek diversion. The new bridge will require the removal of trees on more than .4 acres. One acre of wetlands would be destroyed. It appears that a large portion of the land to be scraped is downstream from the bridge. If this area is to be used for staging, it is not appropriate. Staging should be done outside of the Arroyo streambed. (10)	8.10
	Cultural Resources	

	Decades ago, Caltrans removed the historic pillars at the intersection of Paloma, Pleasanton-Sunol Boulevard, Niles Canyon and Water Temple roads. The pillars were part of the entranceway to the historic Water Temple and to Sunol. As mitigation for the removal of our magnificent trees and the loss of Cultural Resources, Caltrans needs to replace the historic pillars at the intersection. (11)

8.11

Thank you for the opportunity to comment on the DEIR/EA. Feel free to contact me if you have any questions or need clarification about our comments.

Sincerely,

Connie De Grange

Connie De Grange, Chair
Sunol Citizens' Advisory Council

Copies:
David Haubert, Supervisor District 1
Richard Valle, Supervisor District 2
Each Member, Sunol Citizens' Advisory Council
Superintendent, Sunol Glen Unified School District

Response to Comment 8.1

The comment has been acknowledged.

Response to Comment 8.2

The comment has been acknowledged.

Response to Comment 8.3

The comment states that the project would have moderate to high levels of impact after mitigation and notes the analysis provided in the cumulative impact section fails to acknowledge the extent of tree removal impacts from this project and other Caltrans projects in the area. This comment also states that the proposed mitigation measures would not mitigate the project's significant cumulative effects on the town of Sunol and its visual, cultural, and natural resources; mature trees should be used for mitigation; and the project should include a process to work with Sunol citizens to identify locations for replacement trees as mitigation.

The following sections discuss these comments by subject area.

Visual/Aesthetic and Natural Resources. Additional information about tree removal from other recent and upcoming Caltrans projects has been included in Section 2.5.4.1. This information does not constitute significant new information and does not change the results of the analysis. As described in Section 2.5.4.1, trees removed as part of these projects will be replaced at a minimum of a 1:1 ratio and typically at a higher ratio, depending on tree type and regulatory agency requirements. Replacement trees are also subject to success criteria for tree survival during an establishment and monitoring period that is typically 10 years, in accordance with regulatory agency requirements. Caltrans and regulatory agencies prioritize on-site tree replacement for each project, given available space, safe distance from the traveled way, and property rights/access. Over time, the replacement trees will reach a height and mass that will help to restore visual quality to pre-project conditions. These measures serve to reduce impacts. Due to the time needed for replacement trees to reach maturity and space constraints that may limit tree replanting, incremental impacts could remain with each successive project in the Niles Canyon area.

The proposed project is subject to the same Caltrans revegetation and regulatory agency requirements, which prioritize on-site tree replacement. The project area

revegetation measures in Section 1.5.13.11, which include minimizing tree and vegetation removal, protecting trees and vegetation outside of clearing and grubbing limits, and replanting with native vegetation and trees, would minimize the project's incremental contribution to cumulative impacts to visual/aesthetic resources. MM Natural Communities-1 and MM Natural Communities-2 (Section 2.4.1.3) provide for Caltrans to avoid and minimize upland and riparian tree removal during the design phase and to provide tree replacement on-site following construction. These measures also provide for Caltrans to work with local stakeholders, private landholders, and public agencies including, but not limited to, the East Bay Regional Parks District, Alameda County, and SFPUC to identify potential off-site planting locations. These mitigation measures for natural communities would also reduce visual impacts from the proposed project. The additional measures in Section 2.2.9.4 would further reduce the project's contribution to cumulative impacts to visual/aesthetic resources.

Implementation of these measures would reduce visual impacts to highway users and highway neighbors of the Arroyo de la Laguna Bridge Project to moderate-low to moderate-high levels (Section 2.2.9.3). Although the project would incrementally contribute to cumulative impacts to visual/aesthetic resources, the measures listed above would avoid the potential for significant cumulative impacts and render the residual impact less than cumulatively considerable. No additional measures are required to address the contributions of the proposed project to adverse cumulative impacts.

Effects on the Town of Sunol. Section 2.2.5.3, Community Character and Cohesion, has also been revised to acknowledge the project's potential effects of tree removal on the look and feel of SR 84 in the project limits and the town of Sunol. The responses of community members to tree removal would vary depending on several personal factors, and a moderate, temporary change to community character could occur. Replacement tree planting and other measures listed in Sections 1.5.13.11 and 2.2.9.4 would help to address the physical impacts of tree removal.

Effects on Cultural Resources. As discussed in Section 2.2.10, Cultural Resources, the Sunol Water Temple and entry gates are in the project's Area of Potential Effects (APE) and are eligible for the National Register of Historic Places (NRHP). The project will not affect the trees lining the road between the entry gates and Water Temple. The trees adjacent to the Sunol Water Temple gates will be protected from construction activity and construction staging, as noted in Section 2.2.9.3.

Animals and Natural Communities. Section 2.5.4.3, Biological Environment: Natural Communities (Trees) and Animals (Roosting Bats), has been revised to include additional information about the relationship between cumulative impacts and regulatory agency permit requirements. The measures listed in Sections 2.4.4.4 and 2.4.5.4 would avoid, minimize, and mitigate impacts to other animals, including threatened and endangered species, that could occur within the project area. No additional measures are required to address cumulative impacts, and no cumulatively considerable impacts would occur.

Use of Mature Trees for Mitigation and Process to Identify Locations for Replacement Trees. The comment states that mature trees rather than saplings or acorns should be planted. Small trees are used for mitigation because they better adapt to site conditions and have better survival rates than mature trees. Caltrans recognizes that planting mature replacement trees would help to restore pre-project visual conditions, but higher tree mortality would ultimately hinder replacement tree establishment.

Removed trees will be replaced according to replacement ratios required by permits, and Caltrans will replace trees on-site, in Caltrans' right-of-way, to the maximum extent possible given the space available. Caltrans will explore the feasibility of tree replanting outside of the right-of-way with the community. As noted above, MM Natural Communities-1 and MM Natural Communities-2 (Section 2.4.1.3) provide for Caltrans to provide tree replacement on-site following construction and to work with local stakeholders, private landholders, and public agencies including, but not limited to, the East Bay Regional Parks District, Alameda County, and SFPUC to identify potential off-site planting locations.

Response to Comment 8.4

Caltrans will coordinate with CDFW and USFWS to develop a creek restoration and revegetation plan to mitigate for construction impacts in the project site. Caltrans will consider placement of downed trees and their root wads in the creek channel during restoration activities.

Response to Comment 8.5

Caltrans' goal is to minimize tree impacts. At this stage, Caltrans is estimating that all trees located within the impact areas would be removed or trimmed. The final number of

trees impacted will be determined during the design phase, and Caltrans will work with the design and construction teams prior to the start of construction to minimize tree removals.

After construction of the new bridge, Caltrans will restore and enhance the site for visual quality and habitat value. Trees will be replanted at ratios indicated in the project permits. Tree planting will be maximized on-site, and details for off-site planting will be determined during the design and permitting phase of the project. Caltrans will coordinate with Sunol Glen Elementary School to have screening trees planted on the school's property.

Response to Comment 8.6

Caltrans will implement a Construction Mitigation Plan (CMP) for the duration of project construction (FEATURE-3 in DED Section 1.5.13.3). The CMP is intended to anticipate and reduce potential impacts, including noise impacts, from construction activities to both Sunol Glen Elementary School and other project neighbors. A key component of the CMP is the implementation of regular communications with the community and the School District regarding concerns, process, and schedule. Communication will include notice of upcoming project activities that may be noisy. Measures that Caltrans will use to limit noise during construction will include, but not be limited to, those listed in AMM NOISE-1. Reducing the impact of detours would include choosing detours away from the school and residences, consequently reducing potential new noise. Limiting the use of diesel generators, which can produce around 85 dBA of sound, or a noise level similar to city traffic, would also reduce noise impacts during construction. Caltrans will also implement Standard Specification Section 14-8.02, which specifies that between 9 PM and 6 AM, construction activities are not to exceed 86 dBA at a distance 50 feet from job site (FEATURE-4 in Section 1.5.13.4).

Response to Comment 8.7

The project will implement a CMP as described in the response to Comment 8.6 to address traffic and other potential impacts during construction. In addition to the CMP, the project will implement a Traffic Management Plan (TMP) in accordance with Caltrans requirements and guidelines to minimize the construction-related delays and inconvenience for travelers, residents, and businesses within the project limits (FEATURE-1 in Section 1.5.13.1).

Response to Comment 8.8

Project construction work will proceed in cooperation with utility agencies as appropriate to limit disruption to businesses and residents.

Response to Comment 8.9

Caltrans plans, designs, operates, and maintains transportation facilities to provide safe mobility for all users, including bicyclists, pedestrians, transit vehicles, truckers, and motorists, appropriate to the function and context of the facility.

The project limits are between Main Street and Pleasanton Sunol Road. Where these two roads intersect with SR 84, the Niles Canyon Safety Improvements Project, which is currently under construction, will install signals and new painted stop lines. As part of the signal system, pedestrian push buttons, countdown signs, and accessible signals will be installed. Additionally, to facilitate safe passage of pedestrians and bicyclists across SR 84, the Arroyo de la Laguna Bridge Project would delineate the crossings at these intersections using parallel-line striping with high-visibility paint. These signals and crossings will also facilitate pedestrians and bicyclists connecting to SR 84 from east of Main Street and west of Pleasanton Sunol Road.

Commenter's preference for a pedestrian crossing under the bridge has been acknowledged. Constructing an underpass crossing is outside of the project scope and would increase the project's impacts to Arroyo de la Laguna Creek and listed species habitat in the project area.

Response to Comment 8.10

Impacts to wetlands as a result of tree removal during construction is estimated to total 0.286 acre. Trees removed in wetland areas would be replaced on-site to the maximum extent possible given the space available. Permanent impacts to wetlands as a result of installation of new bridge structures would total 0.001 acre. During construction, staging of equipment and materials will be located outside of the creek in the staging area northeast of the SR 84/Pleasanton Sunol Road intersection. The downstream limits of the project was set to provide room for construction access and the creek diversion. To provide stability, the upstream and downstream cofferdams associated with the creek diversion are required to be perpendicular to the flow of the creek. This requirement

resulted in slightly larger impacts to the creek than would be needed just for construction access.

Response to Comment 8.11

Caltrans will mitigate for tree removal in accordance with the requirements of the CDFW 1602 Streambed Alteration Agreement and RWQCB Section 401 certification. Mitigation for tree removal will include on-site and off-site tree replacement (MM Natural Communities-1 and MM Natural Communities-2 in Section 2.4.1.3). Potential planting locations would be identified by working with local stakeholders, private landholders, and public agencies including, but not limited to, East Bay Regional Parks District, Alameda County, and the SFPUC.

The Sunol Water Temple Gates will be protected with ESA fences during project construction. Reconstructing the Sunol Water Temple Gates is not commensurate mitigation for the loss of prehistoric archaeological resources under Section 106 of the National Historic Preservation Act.

Comment 9. Anna Wang

Submission Time	First Name	Last Name
2021-09-17T01:22:14Z	Anna	Wang

Message

Dear Mr. Winter,

I write to affirm the comments that the Sunol Citizens Advisory Council has identified in its letter, which will be submitted directly to you as well. When I attended the meeting last night, the Council raised some excellent points about this project. 9.1

I am a Sunol homeowner and both my daughters attended/attend Sunol Glen School. My family and I are pleased to see that the proposed new Arroyo de la Laguna Bridge Project will include pedestrian access, bicycle access, and sidewalks.

I also feel strongly that the trees being removed to make way for this project should be replanted in Sunol (ideally near the Sunol Glen School as a privacy shield). 9.2

Thank you.

Sincerely,
Anna

Response to Comment 9.1

The commenter's affirmation of the Sunol Citizens' Advisory Council's letter, support of the project's proposed pedestrian and bicycle improvements, and strong feelings regarding planting of replacement trees near Sunol Glen Elementary School have been acknowledged. Please see the responses to the Sunol Citizens' Advisory Council comment letter (Comments 8.1-8.11).

Response to Comment 9.2

As described in Section 2.2.9.4, MM Natural Communities-1 and MM Natural Communities-2 would provide for tree replacement on-site following construction. In addition, AMM VIS-1 includes replacement screen tree plantings between the Sunol Glen Elementary School and the Arroyo de la Laguna Bridge. In the event that off-site planting is also necessary due to space constraints, Caltrans would work with local

stakeholders, private landholders, and public agencies including, but not limited to, the East Bay Regional Parks District, Alameda County, and SFPUC to identify potential off-site planting locations.

Comment 10. Alameda County Water District

ALAMEDA COUNTY WATER DISTRICT

DIRECTORS

AZIZ AKBARI
JAMES G. GUNTHER
JUDY C. HUANG
PAUL SETHY
JOHN H. WEED

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Finance

September 17, 2021

VIA ELECTRONIC MAIL
Charles Winter (ArroyodelaLagunaBridgeProject@dot.ca.gov)
Associate Environmental Planner
Caltrans, District 4-Office of Environmental Analysis
P.O. Box 23660 MS-8B
Oakland, CA 94623-0660

Dear Mr. Winter:

Subject: ACWD Comments on the Draft Environmental Impact Report/Environmental Assessment for the Arroyo de la Laguna Bridge Project

Alameda County Water District (ACWD) has reviewed the Draft Environmental Impact Report/Environmental Assessment (EIR/EA) for the Arroyo de la Laguna Bridge Project (Project).

ACWD supplies water to a population of over 357,000 in the cities of Fremont, Newark, Union City, and a small area in south Hayward. ACWD was formed in 1914 by an act of the California Legislature for the purpose of protecting water in the Niles Cone Groundwater Basin and conserving the water of the Alameda Creek. Local runoff along with imported water from the State Water Project is percolated into the Niles Cone Groundwater Basin through recharge in Alameda Creek itself and through recharge ponds within and adjacent to the Quarry Lakes Regional Recreational Area. This water is subsequently recovered through groundwater production wells and provided as potable supply to ACWD's customers. As a result, ACWD has strong interests in protecting and preserving the water quality and supply in Alameda Creek and its tributaries, such as Arroyo de la Laguna, to ensure the protection of the groundwater basin and maintain reliable, safe drinking water to its customers. In addition, as a longstanding member of the Alameda Creek Fisheries Restoration Workgroup, ACWD has also been working with multiple local and regional stakeholders on a program to restore a steelhead fishery to the Alameda Creek watershed.

ACWD would appreciate your consideration of the following comments on the EIR/EA:

1. Arroyo de la Laguna and Alameda Creek Watershed Protection: As the Project area includes a critical portion of the Alameda Creek watershed, ACWD is particularly | 10.1

concerned with potential impacts that the Project may have on water quality, water supply, and fisheries restoration in the Alameda Creek watershed. ACWD has a need to maintain suitable quality of the water in this portion of Arroyo de la Laguna for groundwater recharge and its subsequent use as a drinking water supply. ACWD requests that the following potentially significant impacts to the protection of Arroyo de la Laguna be fully considered during the final Project design and planning efforts: 10.1

a. Pollution Prevention: ACWD would like to emphasize the importance of selecting best management practices (BMPs) which minimize adverse impacts to the quality of water in Arroyo de la Laguna. ACWD has a strong interest in ensuring the highest level of water quality possible in Arroyo de la Laguna during and after Project construction and encourages any permanent pollution prevention improvements accomplished by construction and long-term operation of the Project. 10.1a

b. Surface Water Protection from Runoff: The Project is located along Arroyo de la Laguna, an important segment of the Alameda Creek watershed which provides local water supplies and conveyance for ACWD's water supply operations to recharge the Niles Cone Groundwater Basin, a critical water supply for the cities of Fremont, Newark, Union City, and southern portion of Hayward. Project construction activities pose increased risks for the direct release of fuel or other contaminating chemicals into the adjacent and underlying waterway due to accidental spills. Appropriate safeguards and controls should be incorporated as mitigations into the EIR to help prevent the direct release of contaminated runoff to the environment. These design measures will help reduce the threat of contamination to the water used for recharging the groundwater basin which constitutes a significant portion of ACWD's drinking water supply. 10.1b

c. PFAS and Water Quality Protection: In June of 2020, ACWD began a voluntary sampling program for the presence of Per- and Polyfluoroalkyl Substances (PFAS) in its source waters, groundwater, and the treated water being provided to our customers. It's important to note that no ACWD customers are receiving water with concentrations of PFAS above the notification levels, and water provided to customers continues to meet or exceed all state and federal drinking water quality standards.

   During the most recent surface water sampling event in June 2021, low levels of PFAS – up to 30 nanograms per liter of per fluoro octane sulfonic acid (PFOS) and 14 nanograms per liter of per fluoro octanoic acid (PFOA) – were detected in Arroyo de la Laguna, which is a tributary to Alameda Creek. Given the use of Alameda Creek as a drinking water resource, it is imperative that the highest level of BMPs be employed at the construction site for stormwater management activities. Consideration should be given to the presence of PFAS in Arroyo de la Laguna in consultation with the SWRCB and/or RWQCB with respect to stormwater management activities. 10.1c

As a result of the above information and in order to protect water quality, ACWD recommends the EIR/EA include provisions that any water pumped during dewatering activities should be treated, analyzed for all the appropriate constituents (including PFAS), and released at a site downstream to prevent loss of water supply via flow to ACWD's groundwater recharge facilities. The analytical results from the treated groundwater should be shared with ACWD prior to release. In addition, ACWD requests that Caltrans provide the Stormwater Pollution Prevention Plan (SWPPP) and any BMPs to ACWD for review and comment prior to construction and during the review process. 10.1c

d. Notification: In the event of a hazardous material spill or other pollution event in the Alameda Creek watershed, ACWD requests that Project proponents set-up a 24-hour rapid notification system (e.g., phone numbers, contact names) to immediately alert ACWD of water quality incidents upstream of our facilities so actions can be taken to prevent pollution of potable groundwater supply. This plan can be coordinated with the Water Supply Supervisor, Leonard Ash, who can be reached at (510) 668-6539 and Leonard.Ash@acwd.com. 10.1d

2. Future Steelhead Migration in the Alameda Creek Watershed: ACWD, in a joint effort with the Alameda County Flood Control and Water Conservation District (ACFCD), is currently constructing a fish ladder to provide passage across the migratory barriers presented by ACWD's Rubber Dam No. 1 and the ACFCD drop structure in Lower Alameda Creek. When this fish passage project is completed and operational in 2022, the upper Alameda Creek watershed will be accessible to migrating *O. mykiss* and other anadromous fish such as salmon. While the Project's EIR/EA anticipates the occurrence of *O. mykiss* within the watershed, Project proponents should confirm the Project incorporates appropriate measures in the Project design, construction, and operation to prevent adverse impacts to this federally threatened species. 10.2

3. Water Conveyance Infrastructure: In order to supplement water flows for groundwater recharge, ACWD may require release of water from the State Water Project's South Bay Aqueduct into a tributary of Arroyo de la Laguna upstream of the proposed Project. This source water conveyance must remain in service to maintain ACWD's ability to provide adequate water supplies. These water releases can be made throughout the year, but typically are most frequent during the period from June 1 through October 1. These supplemental flows may be up to fifty cubic feet per second (cfs) above background watershed flows and are necessary to maintain adequate groundwater levels in the downstream drinking water aquifer. These supplemental flows are particularly important during and following droughts, such as the drought we are currently experiencing throughout California. Therefore, the Project's water management system, including the temporary creek diversion measures, must be designed to provide for the passage of any supplemental water through the Project area. As previously mentioned, the EIR/EA should include provisions that any water pumped during dewatering activities should be treated and released at a site downstream to prevent loss of water supply via flow to ACWD's groundwater recharge facilities. Additionally, ACWD requests that Caltrans provide a 10.3

storm flow event contingency plan for review and comment to better ensure the likelihood of a well-coordinated response. 10.3

4. ACWD Contacts: The following ACWD contacts are provided so that Caltrans can coordinate with ACWD as needed during the CEQA process:

   - Michelle Myers, Groundwater Resources Manager at (510) 668-4454, or by email at michelle.myers@acwd.com, for coordination regarding ACWD's groundwater resources. 10.4

   - Leonard Ash, Water Supply Supervisor, at (510) 668-6539, or by email at leonard.ash@acwd.com, for coordination regarding Alameda Creek watershed, future steelhead migration, and water supply.

Thank you for the opportunity to comment on the Arroyo de la Laguna Project at this time.

Sincerely,

Laura J. Hidas

Laura J. Hidas
Manager of Water Resources

la/cs
By Email

Response to Comment 10.1

Commenter's concern with potential impacts that the project may have on water quality, water supply, and fisheries restoration in the Alameda Creek watershed has been acknowledged. Responses to specific concerns identified in Comments 10.1a-10.1d are addressed below.

Response to Comment 10.1a

The project would implement water quality measures and BMPs to avoid and minimize project-related water quality impacts during construction, operation, and maintenance of the project. Specific water quality measures the project would use can be found in Section 1.5.13.7. Caltrans would comply with federal, state, and local requirements for potential short-term (during construction) and long-term (post-construction and maintenance) impacts. To avoid and minimize water quality or hydrologic issues from project construction, the project would comply with requirements from the Municipal Regional Storm Water NPDES Permit and the San Francisco RWQCB Section 401 permit.

Response to Comment 10.1b

During construction, Caltrans will implement measures as found in Caltrans Standard Specifications Section 13-4, Job Site Management and Section 14-11, Hazardous Waste and Contamination to reduce the threat of water contamination in the project site (FEATURE-6 Hazardous Materials in Section 1.5.13.6).

Response to Comment 10.1c

During the final project design phase, a Preliminary Site Investigation will be performed in accordance with current Caltrans guidance to investigate hazardous materials concerns related to soil, groundwater, and building materials within the project limits and will include required measures for managing hazardous materials encountered during project construction. Measures will include the following as outlined in Caltrans Standard Specifications Section 13-4, Job Site Management and Section 14-11, Hazardous Waste and Contamination (FEATURE-6 Hazardous Materials in Section 1.5.13.6):

- Groundwater from dewatering of excavations will be stored in Baker tanks during construction activities and characterized to determine the appropriate treatment

requirements for discharge and disposal. The extracted groundwater shall be collected and managed for disposal/treatment in compliance with local and state regulations.

Caltrans will coordinate with ACWD, as appropriate, through the design and construction phases of the project.

Response to Comment 10.1d

The project will implement provisions from 2018 Caltrans Standard Specifications Section 14-11, Hazardous Waste and Contamination. Per standard provisions, Caltrans reports release of hazardous wastes and substances to local, state and/or federal agencies, as appropriate.

Response to Comment 10.2

To avoid and minimize impacts to *O. mykiss* that may be present in the project area during construction, Caltrans would implement a series of measures, including biological monitoring and implementation of a work window within suitable aquatic habitat for the species. Caltrans proposes restoration of riparian woodland, forested wetland, and scrub-shrub wetland to offset permanent effects *to mykiss* habitat. In addition, Caltrans biologists and fish passage engineers are working with CDFW and NMFS to identify AMMs that will be implemented to prevent impacts to fish passage before and after project construction.

Response to Comment 10.3

The proposed project's temporary creek diversion will be designed to accommodate more than the typical summer flow rates for Arroyo de la Laguna, including water released by ACWD. Water pumped out during dewatering will be pumped to a settling tank and released downstream if permits allow. Prior to construction in Arroyo de la Laguna Creek, Caltrans will coordinate with ACWD for review of a Temporary Creek Diversion System Plan (TCDSP), including the contingency plan that would be used during a storm flow event.

Response to Comment 10.4

Caltrans has recorded the contact information provided for future coordination with ACWD on this project.

Comment 11. Stephanie Fong, Acting Regional Manager, California Department of Fish and Wildlife

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State of California
Department of Fish and Wildlife

Memorandum

Date: September 17, 2021

To: Mr. Charles Winter
California Department of Transportation
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DocuSigned by:
Stephanie Fong
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From: Ms. Stephanie Fong, Acting Regional Manager
California Department of Fish and Wildlife-Bay Delta Region, 2825 Cordelia Road, Suite 100, Fairfield, CA 94558

Subject: State Route 84 Arroyo De Laguna Bridge Replacement Project, Notice of Preparation of a Draft Environmental Impact Report, SCH No. 2018082045, Alameda County

The California Department of Fish and Wildlife (CDFW) has reviewed the Notice of Preparation (NOP) of a draft Environmental Impact Report (EIR) for the State Route 84 Arroyo De Laguna Bridge Replacement (Project), pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1] CDFW is submitting comments on the DEIR as a means to inform the California Department of Transportation (Caltrans) as the Lead Agency, of our concerns regarding potentially significant impacts to sensitive resources associated with the proposed Project.

CDFW is a Trustee Agency with responsibility under CEQA §15386 for commenting on projects that could impact fish, plant and wildlife resources. CDFW is also considered a Responsible Agency if a project would require discretionary approval, such as the California Endangered Species Act (CESA) Permit, the Native Plant Protection Act, the Lake and Streambed Alteration (LSA) Agreement and other provisions of the Fish and Game Code that afford protection to the State's fish and wildlife trust resources. Pursuant to our jurisdiction, CDFW has the following concerns, comments, and recommendations regarding the Project.

Project Location and Description

Caltrans, as the lead agency, proposes a replacement of the Arroyo De Laguna Bridge (Bridge No. 33-0043) on State Route – 84 (SR-84) from Post Mile (PM) 17.0 to 17.4 in Alameda County, California. The Project proposes to replace an existing 310-foot-long bridge with a new, three-span, 310-foot-long and 64-foot-wide bridge consisting of two through lanes, one in each direction. The bridge profile will be raised by one to three feet to improve the existing non-standard stopping sight distance. The finished structure

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

will provide 12-foot-wide lanes, a 14-foot-wide shared east-west pedestrian path on the south side of the bridge, standard 42-inch-high barriers, 9-foot-wide shoulders to accommodate 6-foot-wide bicycle lanes and a 2-foot-wide painted median rumble strip. The shared sidewalk will be protected from the roadway by concrete railing. The Build Alternative will also add sidewalks to the eastern side of the SR-84 and Main Street intersection and at the SR-84 and Pleasanton Sunol Road intersection. Construction will take three seasons over a total of three years.

LAKE AND STREAMBED ALTERATION AGREEMENT

The Project has the potential to impact stream resources including mainstems, tributaries and floodplains associated with Arroyo De Laguna and Alameda Creek. If work is proposed that will impact the bed, bank, channel or riparian habitat, including the trimming or removal of trees and riparian vegetation, please be advised that the proposed Project may be subject to LSA Notification. This includes impacts to drainage systems that connect to tributaries of main stem creeks and tributaries that occur within the Project Biological Study Area (BSA). CDFW requires an LSA Notification, pursuant to Fish and Game Code section 1600 et. seq., for or any activity that may substantially divert or obstruct the natural flow; change or use material from the bed, bank or channel or deposit or dispose of material where it may pass into a river, lake or stream. Work within ephemeral streams, washes, watercourses with a subsurface flow, and floodplains are generally subject to notification requirements. 11a

Fish and Game Code 5901

Except as otherwise provided in this code, it is unlawful to construct or maintain in any stream in Districts 1, $1\frac{3}{8}$, $1\frac{1}{2}$, $1\frac{7}{8}$, 2, $2\frac{1}{4}$, $2\frac{1}{2}$, $2\frac{3}{4}$, 3, $3\frac{1}{2}$, 4, $4\frac{1}{8}$, $4\frac{1}{2}$, $4\frac{3}{4}$, 11, 12, 13, 23, and 25, any device or contrivance that prevents, impedes, or tends to prevent or impede, the passing of fish up and down stream. Fish are defined as a wild fish, mollusk, crustacean, invertebrate, amphibian, or part, spawn, or ovum of any of those animals (Fish and Game Code section 45). 11b

California Endangered Species Act

Please be advised that a CESA Permit must be obtained if the Project has the potential to result in "take" of plants or animals listed under CESA, either during construction or over the life of the Project. Issuance of a CESA Permit is subject to CEQA documentation; the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the Project will impact CESA listed species, early consultation is encouraged, as significant modification to the Project and mitigation measures may be required in order to obtain a CESA Permit. CEQA requires a Mandatory Finding of Significance if a project is likely to substantially impact threatened or endangered species (CEQA section 21001(c), 21083, and CEQA Guidelines section 15380, 15064, 15065). Impacts must be avoided or mitigated to less-than-significant levels unless the CEQA Lead Agency makes and supports Findings of 11c

Overriding Consideration (FOC). The CEQA Lead Agency's FOC does not eliminate the Project proponent's obligation to comply with Fish and Game Code, section 2080. More information on the CESA permitting process can be found on the CDFW website at https://www.wildlife.ca.gov/Conservation/CESA. 11c

ENVIRONMENTAL SETTING

Sufficient information regarding the environmental setting is necessary to understand the Project, and its alternative's (if applicable), significant impacts on the environment (CEQA Guidelines, §§15125 and 15360). CDFW recommends that the CEQA document prepared for the Project provide baseline habitat assessments for special-status plant, fish, and wildlife species located and potentially located within the Project area and surrounding lands, including all rare, threatened, or endangered species (CEQA Guidelines, §15380). Threatened, endangered, and other special-status species that are known to occur, or have the potential to occur in or near the Project site, include, but are not limited to:

Common Name	Scientific Name	Status
California red-legged frog	*Rana draytonii*	FT, SSC
Foothill yellow-legged frog	*Rana boylii*	SE
Steelhead - Central California Coast – DPS	*Oncorhynchus mykiss*	FT
Western mastiff bat	*Eumops perotis*	
Pallid bat	*Antrozous pallidus*	
Brazilian free-tailed bat	*Tadarida brasiliensis*	
Alameda whipsnake	*Masticophis lateralis euryxanthus*	ST
Notes: FT = Federally Threatened; SE = State Endangered; ST = State Threatened; SSC = State Species of Special Concern; DPS = Distinct Population Segment		

11d

Habitat descriptions and species profiles should include information from multiple sources: aerial imagery, historical and recent survey data, field reconnaissance, scientific literature and reports, and findings from "positive occurrence" databases such as California Natural Diversity Database (CNDDB). Based on the data and information from the habitat assessment, the CEQA document can then adequately assess which special-status species are likely to occur in the Project vicinity. 11e

CDFW recommends that prior to Project implementation, surveys be conducted for special-status species noted in this comment letter with potential to occur, following recommended survey protocols if available. Survey and monitoring protocols and guidelines are available at: https://www.wildlife.ca.gov/Conservation/Survey-Protocols. 11e

COMMENTS AND RECOMMENDATIONS

CDFW acting as a Responsible Agency, has discretionary approval under CESA through issuance of a CESA Incidental Take Permit (ITP) and LSA Agreement, as well as other provisions of the Fish and Game Code that afford protection to the State's fish and wildlife resources. CDFW would like to thank you for preparing the NOP for the draft EIR and CDFW recommends the following updates, avoidance and minimization measures be imposed as conditions of Project approval by the lead agency, Caltrans, to ensure all Project-related impacts are reduced below a level of significance under CEQA:

COMMENT 1: Project Design Analysis and Coordination

Issue: The Project may cause potentially significant impacts to fish and wildlife resources if the bridge is not designed to allow natural stream flow and sediment transport processes to persist for long term dynamic channel stability (CDFW, 2009). CDFW recommends early coordination with CDFW and incorporation of the following information and design principles into the EIR.

Recommendation: CDFW recommends the following is incorporated into the EIR as conditions of approval:

Recommendation Mitigation Measure 1 – Design Coordination: CDFW recommends incorporation of a condition of approval to engage in early and continued coordination before design commences with CDFW. Early coordination with Habitat Conservation and the CDFW Conservation Engineering Branch is recommended to provide review and analysis of any proposed structures or Project elements with the potential to impact fish and wildlife resources. CDFW Conservation Engineering Branch should be provided engineered drawings and design specification planning sheets during the initial design process, prior to design selection and re-initiating design consultation at 30% design at minimum and through the permitting process for review and comment. 11.1

Recommendation Mitigation Measure 2 – Bridge Design References: CDFW recommends utilizing the design principles outlined in the California Salmonid Stream Habitat Restoration Manual, Part XII (CDFW, 2009) and NOAA Fisheries Service Guidelines for Salmonid Passage at Stream Crossings (NMFS, 2001) into the bridge design. CDFW strongly recommends incorporation of design concepts such as spans that are at minimum 1.5 times greater than the channel width to allow natural stream flow and sedimentation processes to continue for long term dynamic channel stability.

Recommendation Mitigation Measure 3 – Bridge Design and Stream Analysis: CDFW recommends incorporating further geomorphic assessment, fish passage performance assessment and longitudinal profile assessment, regarding the current bridge design. The EIR should include the following information:

- Geomorphic assessment of the two proposed piers (consisting of 6 piles each) specified in the current design of the bridge and the placement within the ordinary highwater mark (OHWM) to analyze how this structure may affect channel processes.
- Graphical representation of the location of the OHWM in cross-sectional and planform views in relation to the proposed piers. These graphics should also include the bankfull channel width and flood-prone channel width locations.
- Using nearby U.S. Geological Survey stream gages, provide analysis that develops the frequency of inundation of the OHWM and bankfull channel elevations and how often the proposed piers will interact with the channel and the OHWM/bankfull channel flows. 11.1
- A description of how the channel processes (scour/erosion, the movement of sediment and debris, etc.) would be affected by the placement of the piers within or just outside the OHWM and completely within the bankfull channel width.
- Additional assessment of the concrete, channel spanning, structure upstream of the existing bridge alignment. This assessment should focus on impacts to sediment transport and the ability of juvenile and adult steelhead to migrate upstream and downstream of this structure.
- A longitudinal profile survey to inform channel designs (channel re-grading, mimicking of channel bedform, etc.) with references to key channel geomorphic features including locations, depths, and widths. Reference of channel geomorphic features should include large woody debris structures that would hold grade and/or retain sediments; large rock outcroppings; grade breaks; locations of tributary junctions; and any other applicable geomorphic features such as heads of riffles, pools including their maximum depths, and the locations of natural steps including the top and base of the step. The longitudinal profile should also include locations of creek spanning structures (such as the existing bridge, upstream concrete structure, etc.) and provide the locations of measured cross sections.

COMMENT 2: Fish Passage Assessment

Issue: Senate Bill 857 (SB 857), which amended Fish and Game Code 5901 and added section 156 to the Streets and Highways Code states in section 156.3, "For any project using state or federal transportation funds programmed after January 1, 2006, [Caltrans] shall insure that, if the project affects a stream crossing on a stream where anadromous 11.2

fish are, or historically were, found, an assessment of potential barriers to fish passage is done prior to commencing project design. [Caltrans] shall submit the assessment to the [Department of Fish and Wildlife] and add it to the CALFISH database. If any structural barrier to passage exists, remediation of the problem shall be designed into the project by the implementing agency. New projects shall be constructed so that they do not present a barrier to fish passage. When barriers to fish passage are being addressed, plans and projects shall be developed in consultation with the [Department of Fish and Wildlife].

Evidence the impact would be significant: A potential barrier exists within the defined Project limits, as described in the recommendations section below (Fish Passage Assessment Database ID# 758613) in a system where anadromous fish are or were historically found such as steelhead. If the potential barrier noted within the Project limits identified below is found to be a barrier to fish passage, remediation of the problem should be designed into the Project by the implementing agency as a Project feature in consultation with the San Francisco Public Utilities Commission (SFPUC), CDFW and other natural resource agencies. 11.2

Recommendations: CDFW recommends discussing the following location as it pertains to fish passage. Location 1, Arroyo De Laguna (Latitude: 37.59307; Longitude: -121.88337; Alameda County), Fish Passage Assessment Database ID# 758613, fish barrier status: unassessed. The fish passage section should discuss the current status of the crossing location noted in the California Fish Passage Assessment Database, conduct first pass and or second pass fish assessments, as necessary, as well as provide images of the upstream and downstream ends of water conveyance structure. CDFW requests a fish passage discussion section is included to address this potentially significant impact through the following avoidance and minimization measure, which should be made a condition of approval by the lead agency:

Recommended Mitigation Measure 1: Fish Passage Assessment

To evaluate potential impacts to native fish species and fisheries resources, Caltrans shall submit the assessment to CDFW and add it to the CALFISH database. If any structural barrier to passage exists, remediation of the problem shall be designed into the project by the implementing agency in coordination with SFPUC. New projects shall be constructed so that they do not present a barrier to fish passage. When barriers to fish passage are being addressed, plans and projects shall be developed in consultation with CDFW. CDFW shall be engaged prior to design in early coordination and at 30% design at minimum.

COMMENT 3: Bat Assessment and Avoidance

Issue: The draft EIR addresses the potential for various species of bats to exist within the Project limits and does provide some conditions of approval to reduce impacts 11.3

below the level of significance. In order to further reduce that potential, CDFW recommends including the following.

Evidence the impact would be significant: Removal of structures and trees may have the potential to degrade the quality of the environment, substantially reduce available bat habitat and reduce a local bat population to below self-sustaining levels (Erickson, 2003). Modification of bridges or other structures may also potentially eliminate a bat community or reduce the number or restrict the range of a rare or endangered bat, this would also be considered a potentially significant impact. Therefore, CDFW supports the concept of including bat habitat into the design of the bridge as noted in the draft EIR and strongly recommends the designs are developed in consultation with CDFW.

Recommendation: To evaluate and avoid potentially significant impacts to bat species, CDFW recommends incorporating the following mitigation measures into the EIR and that these measures be made conditions of approval for the Project:

11.3

Recommended Mitigation Measure 1: Bat Habitat Assessment

A qualified biologist should conduct a habitat assessment within the Project limits for suitable bat roosting habitat. The habitat assessment shall include a visual inspection of features within 200 feet of the work area for potential roosting features including trees, crevices, portholes, expansion joints and hollow areas (bats need not be present). The EIR should also include a section that discusses the results of the suitable habitat assessment and if any bats or signs of bats (feces or staining at entry/exit points) are discovered. The surveys should occur at least two seasons in advance of Project initiation.

Recommended Mitigation Measure 2: Bat Habitat Monitoring

If potentially suitable bat roosting habitat is determined to be present a qualified biologist shall conduct focused surveys at the trees, bridge(s), causeways and interchanges utilizing night-exit survey methods, sound analyzation equipment survey methods and visual inspection within open expansion joints and portholes of the structures from March 1 to April 1 or August 31 to October 15 prior to construction activities. If the focused survey reveals the presence of roosting bats, then the appropriate exclusionary or avoidance measures will be implemented prior to construction during the period between March 1 to April 15 or August 31 to October 15. Potential avoidance methods may include temporary, exclusionary blocking, one way-doors or filling potential cavities with foam. Methods may also include visual monitoring and staging of work at different ends of the Project to avoid work during critical periods of the bat life cycle or to allow roosting habitat to persist undisturbed throughout the course of construction. Exclusion netting or adhesive roll material shall not be used as exclusion methods. If presence/absence surveys indicate bat occupancy, then construction should be limited from March 1 through April 15 and/or August 31 through October 15.

Recommended Mitigation Measure 3: Bat Project Avoidance

If active bat roosts are observed at the Project site, at any time, all Project activities should stop until the qualified biologist develops a bat avoidance plan to be implemented at the Project site. Once the plan is implemented, Project activities may recommence in coordination with the natural resource agencies. The bat avoidance plan should utilize seasonal avoidance, phased construction as well as temporary and permanent bat housing structures developed in coordination with CDFW.

Recommended Mitigation Measure 4: Permanent Bat Roost Design

11.3

CDFW recommends and supports the inclusion of designing permanent bat roost structures into the design of the new bridge as discussed on page 2-149 of the draft EIR to avoid the potentially significant impact of permanent habitat loss. The structures should be designed in coordination with CDFW and include the appropriate baffle spacing or features to accommodate multiple species of bats as specified in the Caltrans Bat Mitigation: A Guide to Developing Feasible and Effective Solutions Manual (H.T. Harvey, 2019). The new structure of bridge should be monitored after completion to determine successful use of the structure by bats for a period of at least five years.

COMMENT 4: Light Impact Analysis and Discussion

Issue: The proposed Project location is situated is situated in a rural part of Alameda County surrounded by grasslands, agriculture and the Pleasanton Ridge Regional Park on a bridge with no existing overhead lights within the Caltrans right of way. Due to the presence of natural habitat that supports fish and wildlife resources associated with Arroyo De Laguna within the vicinity of the Project CDFW strongly recommends that no artificial lighting is installed as a result of Project completion to avoid a potentially significant impact that could result in a finding of significance. Artificial light spillage beyond the prism of the roadway into natural areas may result in a potentially significant impacts through the substantial degradation of the quality of the environment. Artificial light pollution also has the potential to significantly and adversely affect biological resources and the habitat that supports them. Unlike the natural brightness created by the monthly cycle of the moon, the permanent and continuously powered lighting fixtures create an unnatural light regime that produces a constant light output. Continuous light output for 365 days a year can also have cumulatively significant impacts on fish and wildlife populations.

11.4

Evidence the impact would be significant: Artificial night lighting can disrupt the circadian rhythms of many wildlife species. Many species use photoperiod cues for communication (e.g., bird song; Miller 2006), determining when to begin foraging (Stone et al. 2009), behavior thermoregulation (Beiswenger 1977), and migration (Longcore and Rich 2004). Artificial night lighting has also been found to impact juvenile salmonid overwintering success by delaying the emergence of salmonids from benthic refugia

and reducing their ability to feed during the winter (Contor and Griffith 1995). For nocturnally migrating birds, direct mortality as a result of collisions with anthropogenic structures due to attraction to light (Gauthreux, 2006) is another direct effect of artificial light pollution. There are also more subtle effects, such as disrupted orientation (Poot et al. 2008) and changes in habitat selection (McLaren et al. 2018). There is also growing evidence that light pollution alters behavior at regional scales, with migrants occupying urban centers at higher-than-expected rates as a function of urban illumination (La Sorte et al. 2021). While artificial light pollution can act as an attractant at both regional (La Sorte et al. 2021) and local (Van Doren et al. 2017) scales, there is also evidence of migrating birds avoiding strongly lit areas when selecting critical resting sites needed to rebuild energy stores (McLaren et al. 2018). Due to the high potential for presence of songbirds and current lack of artificial lighting CDFW recommends no lighting is installed as a result of Project completion to avoid these potentially significant impacts:

Recommended Mitigation Measure 1: Light Output Limits

All LED's or bulbs installed as a result of the Project shall be rated to emit or produce light at or under 2700 kelvin that results in the output of a warm white color spectrum.

11.4

Recommended Mitigation Measure 2: Vehicle Light Barriers

Solid barriers at a minimum height of 3.5 feet should be installed in areas where they have the potential to reduce illumination from overhead lights and from vehicle lights into areas outside of the roadway. Barriers should only be utilized as a light pollution minimization measure if they do not create a significant barrier to wildlife movement. Additional barrier types should be employed when feasible, such as privacy slats into the spacing of cyclone fencing to create light barriers for areas outside the roadway.

Recommended Mitigation Measure 3: Reflective Signs and Road Striping

Retro-reflectivity of signs and road stripping should be implemented throughout the Project to increase visibility of roads to drivers and reduce the need for electrical lighting.

Recommended Mitigation Measure 4: Light Pole Modifications and Shielding

All light poles or sources of illumination that shall be new or replacement installations of existing light sources should be installed with the appropriate shielding to avoid excessive light pollution into natural landscapes or aquatic habitat with the Project corridor in coordination with CDFW. In addition, the light pole arm length and mast heights should be modified to site specific conditions to reduce excessive light spillage into natural landscapes or aquatic habitat within the Project corridor. In areas with sensitive natural landscapes or aquatic habitat the lead agency should also analyze and determine if placing the light poles at non-standard intervals has

the potential to further reduce the potential for excessive light pollution caused by decreasing the number of light output sources in sensitive areas. 11.4

COMMENT 5: Oak Woodlands and Riparian Habitat

Issue: The Project proposes to remove 251 trees from within the Project limits described as Oak evergreen woodland and riparian woodlands on page 2-44 of the draft EIR. CDFW is concerned the Project would result in a net-loss of sensitive oak woodland and riparian habitat with unique species such as the California Sycamore (*Platanus racemose*). Mitigation Measures noted in Page 2-149 of the draft EIR references a 1:1 replacement ratio for trees removed. This condition would not reduce potentially significant impacts to oak woodlands or riparian and sycamore habitat impacts to a level that is less-than-significant.

Evidence the impact would be significant: The rapid and extensive land conversions in oak woodlands, savannas, and riparian areas throughout California, coupled with an apparent lack of regeneration of several species has the potential to result in the long-term reduction of survival of native oaks and sycamores. Fragmentation of habitats reduces their ability to provide the full range of ecological benefits, including maintenance of species diversity, as well as soil and watershed protection. Coast live oak (*Quercus agrifolia*) and old-growth oak trees (e.g., native oak tree that is greater than 15 inches in diameter) are of particular importance due to increased biological values and increased temporal loss. At this time, it is unclear if mitigation measures are adequately proportionate to impacts. 11.5

Recommendation: To evaluate and avoid potentially significant impacts to tree species CDFW recommends incorporating the following measures into the EIR:

Recommended Mitigation Measure 1: Tree Removal Mapping and Inventory

The draft EIR along with Figure 2.2.9-12 provides an estimate of species and a landscape level mapping of the trees and shrubs proposed for removal but does not provide a key that indicates which species are to be removed from what location. The map provided in Figure 2.2.9-12 should be updated to include multiple maps with more precise imaging and labels that correspond back to a tree inventory report. The tree inventory report should indicate tree scientific name, common name, diameter at breast height, overall health and corresponding numbering system to track correlate back to the map figure.

Recommended Mitigation Measure 2: Tree Removal Mapping and Inventory

Potential mitigation includes setting aside adjacent habitat for retention in perpetuity. Off-site preservation should be determined in coordination with CDFW and fully disclosed in the draft EIR. CDFW is available to work with the applicant to develop a mitigation plan that reduces impacts to less-than-significant.

Recommended Mitigation Measure 3: Preserve and Protect In Place

CDFW strongly recommends that the Project Development Team (PDT) incorporates principles to significantly reduce the number of trees removed and maximize protecting trees in place. Methods to be employed should include environmentally sensitive areas, tree bumpers or padding utilizing coconut coir wraps or other material. 11.5

Recommended Mitigation Measure 4: Collection of Native, Local Propagation Material

To avoid the introduction of pathogens, such as phytophthora, CDFW recommends collecting native plant propagules for oaks, sycamores and other native species and growing them in a nursery setting or planting them on-site after construction as a form of restoration. All plantings should be monitored for a period of up to ten years with the achievement of a 75% survivorship or better.

CONCLUSION

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California's fish and wildlife resources. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

Questions regarding this letter or further coordination should be directed to Mr. Robert Stanley, Senior Environmental Scientist (Specialist), at (707) 339-6534 or Robert.Stanley@wildlife.ca.gov; or Mr. Wesley Stokes, Senior Environmental Scientist (Supervisory), at (707) 339-6066 or Wesley.Stokes@wildlife.ca.gov.

cc: State Clearinghouse #2018082045

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Response to Comment 11a

As noted in DED Table 1.9-1, Caltrans will apply for a CDFW 1602 permit prior to the start of project construction.

Response to Comment 11b

Caltrans has been in communication with CDFW regarding potential fish passage issues with the proposed project.

Response to Comment 11c

As noted in DED Table 1.9-1, Caltrans will apply for an Incidental Take Permit prior to the start of project construction.

Response to Comment 11d

The EIR/EA evaluates project impacts to state and federal special-status species with potential to occur in or near the project site, including all the species listed in the comment, except for the Brazilian free-tailed bat, which is neither state nor federally listed. Species evaluations can be found in Section 2.4.4 and Section 2.4.5, which reference the Natural Environment Study prepared by Caltrans Biology.

Response to Comment 11e

The EIR/EA summarizes information from the Natural Environment Study prepared by Caltrans Biology. The Natural Environment Study assessed species and species habitats based on field surveys, review of USFWS and CNDDB databases, previous habitat assessments and reconnaissance-level site visits, and review of aerial photographs.

No protocol levels surveys will be conducted prior to project implementation. The potential for listed wildlife species to occur in the project area was based on the evaluation of habitat suitability for target species during field surveys and the inference of presence. Preconstruction surveys will be conducted prior to the project and before the start of each day to minimize the potential for direct impacts to listed species.

Response to Comment 11.1

The Caltrans project development team recognizes the possible impacts to fish and wildlife resources that could result from construction and design of the replacement bridge. Caltrans is in consultation with USFWS, NMFS, and CDFW to address those concerns and to create a design that will minimize impacts to fish and wildlife resources.

Caltrans will consider the recommended measures, as appropriate. Responses to specific measures cited in Comment 11.1 can be found below:

Recommendation Mitigation Measure 1
Caltrans initiated communications with CDFW on the project in 2020. Caltrans will continue communication and coordination with CDFW through the project design and construction phases. Caltrans will provide CDFW with updated plan sheets and more information on the project design during the design phase of the project.

Recommendation Mitigation Measure 2
The Caltrans design team will look into incorporating, as feasible, bridge design concepts that would benefit natural stream flow and sedimentation processes in Arroyo de la Laguna.

Recommendation Mitigation Measure 3
Caltrans will continue communication and consultation with CDFW through the project design phase. During this time, Caltrans will share with CDFW new design concepts and studies, which may include additional geomorphic assessments and surveys of the project area.

Response to Comment 11.2

Caltrans Biology staff visited the project site with CDFW engineer, Rick Macala in March 2020. The upstream concrete pipe was not identified as a fish passage barrier during the site visit. Caltrans will continue to coordinate with CDFW and NMFS to assess necessary fish passage concerns in Arroyo de la Laguna and relevant AMMs that the project will implement.

Response to Comment 11.3

The EIR/EA discusses species expected to occur in the project area and measures to avoid and minimize project impacts to species. Caltrans recognizes that the proposed project may result in impacts to bat species. The measures listed in Sections 2.4.1.3

and 2.4.4.4, including AMM BIO-7 Exclusion of Bats from Existing Bridge, would minimize the project's impacts to trees and bats. Caltrans will work with CDFW to include the additional bat protection measures in project permits, as appropriate.

Response to Comment 11.4

No lighting replacements or new lighting will be installed as part of the project. As a result, recommended mitigation measures cited in Comment 11.4 1 and 4 will not be required. Caltrans will consider incorporating recommended mitigation measures 2 and 3 into the project.

Response to Comment 11.5

The comment conveys the concern that the project would result in a net loss of sensitive oak woodland and riparian habitat, and that a 1:1 replacement ratio for trees removed would not reduce impacts to oak woodland or riparian or sycamore habitat. The 1:1 ratio cited in the comment is a minimum replacement ratio described for other projects considered for cumulative impacts.

The proposed project includes several features and measures to reduce impacts to trees, including in oak woodland and riparian habitats. As described in Section 2.4.1.3, Caltrans would try to reduce project impacts to upland and riparian trees to the greatest extent possible. Additionally, Caltrans would provide compensation for impacts to trees through tree replacement on-site to the maximum extent possible, and an off-site planting strategy would be developed in coordination with CDFW and RWQCB during the permitting process to address the balance of the tree mitigation needed. Trees removed from the riparian zone would be included in the CDFW 1602 Lake and Streambed Alteration Agreement application.

Caltrans will consider the recommended measures, as appropriate. Responses to specific measures can be found below:

<u>Recommended Mitigation Measure 1</u>
The DED was drafted using preliminary designs developed in the environmental document phase of the project. During the design phase of the project, Caltrans will work with CDFW to send more detailed information and estimates of vegetation and tree species proposed for removal.

Recommended Mitigation Measure 2

Caltrans will coordinate with CDFW during the design phase of the project for off-site preservation that would mitigate for construction impacts to trees.

Recommended Mitigation Measure 3

As the project moves into the design phase, Caltrans will minimize tree removal to the maximum extent practicable. Figure 2.2.9-13 shows trees currently planned for protection in the project area. Trees would be protected through use of ESA fencing, which would appropriately distance construction equipment and storage from the protected trees.

Recommended Mitigation Measure 4

Caltrans will develop an On-site Restoration and Monitoring Plan for all on-site tree replacements required by project permits. This Plan will be finalized in the project's design phase. During Plan development, Caltrans will explore sourcing replacement trees from local nurseries. Caltrans will monitor tree plantings for 10 years or until the agencies deem the restoration successful.

Comment 12. Shirley Kaminsky

Sent: Saturday, September 18, 2021 11:40 AM
To: Arroyo de la Laguna Bridge Project@DOT <ArroyodelaLagunaBridgeProject@dot.ca.gov>
Subject: Comments

EXTERNAL EMAIL. Links/attachments may not be safe.

Hello,

We are Sunol Residents since 1979 and we support and agree with the comments sent to you from the SCAC (Sunol Citizens Advisory Council). Sent by Connie DeGrange, Chair of SCAC.
We are most hopeful that you will sincerely address our concerns and not just pay lip service to them. 12

Shirley and Barry Kaminsky

Response to Comment 12

The commenter's support and agreement with the Sunol Citizens' Advisory Council's comment letter has been acknowledged. Please see the responses to the Council's letter (Comments 8.1-8.11).

Comment 13. Aaron Chesterman

Submission Time	First Name	Last Name
2021-09-20T04:35:39Z	Aaron	Chesterman

Message

Please do not approve this awful project with impacts on the community, the watershed, and the local ecology that is already under strain due to climate change. There have been so many trees removed from the canyon already, and I find the EIR deficient in not considering the cumulative impact of all these projects on SR84 over many years. Aside from that, that school field would be exposed to a lot more noise and really a different atmosphere with all those trees gone - a real loss for an important community space for no significant gain. Surely the bridge can be replaced at similar scale or even just shored up with work around the footings. And the bike lane is absurd - that bridge is about the safest place along the canyon to cycle. Use these funds to create some stretches of low impact bike lanes in other areas of the canyon, if anything. This current proposal is an unacceptable waste of our state resources and detriment to a tight-knit community for very little benefit to anyone.

13.1

13.2

13.3

Response to Comment 13.1

The commenter's objection to the project has been acknowledged.

Response to Comment 13.2

The comment states that many trees have already been removed from Niles Canyon and the EIR is deficient in not considering the cumulative impact of previous projects on SR 84. The comment also notes that the tree removal would expose Sunol Glen Elementary School to more noise and change the atmosphere of the school yard, an important community space.

Please see the response to Comment 8-3 regarding the cumulative impacts of tree removal from previous projects on SR 84 in the Niles Canyon area, and the effects of tree removal on community character. The increased safety of the reconstructed bridge and improvements to pedestrian and bicycle facilities would provide long-term benefits to the community.

Research has shown that ordinary landscaping, with use of shrubbery and trees, along a highway does not provide a perceivable reduction in noise (less than 1 dBA) and does not effectively lower noise levels (Caltrans 2013). Therefore, while tree removal would

remove visual shielding between SR 84 and Sunol Glen Elementary School, it is not anticipated to increase noise levels at the school or its outdoor areas.

Response to Comment 13.3

Caltrans analyzed several bridge replacement alternatives for the project, as described in Section 1.8 of the DED. The analysis included estimating costs for each alternative. The Build Alternative presented in this document is the alternative that was determined to address the project's purpose and need and to result in the least impacts to resources in the surrounding area, including the Sunol Water Temple, Sunol Glen Elementary School, Sunol Corners Little Market, and trees adjacent to the bridge.

The commenter's objection to the proposed bike lanes has been acknowledged.

Comment 14. Jim O'Laughlin

Submission Time	First Name	Last Name
2021-09-20T22:24:54Z	Jim	O'Laughlin

Message

My name is Jim O'Laughlin a native Sunolian who was born a block from the Arroyo deal Laguna bridge and currently lives a half block from the bridge. I can speak for many Sunolians with the following comments.
HISTORICAL HERITAGE- This project is an opportunity for CALTRANS to establish a positive working relationship with the Citizens of Sunol by recognizing their concerns, there willingness to work with your agency, and the development of significant mitigations to counteract the negative impacts of the project. Recognizing the Historical Significance of the original Four Corners gates design and working to replicate that would be a major step in that direction. I know that it is your position that this is not part of the project, but it is if it does anything that prevents moving toward that goal, as requested by the SCAC. Please design this project so that you do not prevent this option in the future. 14.1

EFFECTIVE TRAFFIC MOVEMENT- I would ask the same related to our suggestion to use roundabouts to facilitate the traffic problems that we live with. Your own CALTRANS literature documents the effectiveness of this approach and there are numerous examples that we have pointed out. We ask that your design for this project does not eliminate that option in your next phase. 14.2
PPROPOSED NILES CANYON TRAIL-CALTRANS has said that they have been involved with the Niles Canyon Trail planners for several years and yet there are no plans that we are aware of to provide for crossing Hwy.84 except to have an at grade crossing with stop lights. A grade level crossing will be very dangerous. Why is there not an under pass crossing at least at one end of the bridge to allow for this. It can not be that more expensive or complex to do that. With the new SFPUC Watershed Center to be open soon the connection to and from the Sunol Water Temple will greatly increase. You can walk all the way from Mission Blvd in Fremont to the Bay and never have to cross a street at grade level. But think it is safe to cross Hwy. 84 just with a stop light? 14.3

MITIGATION FOR TREE CUTTING- Caltrans projects in the Sunol area have resulted in the loss of thousands of trees and there are still more to be cut. It is said that there is no place to replace them in Sunol. Not true. Sunolians have asked why CALTRANS will not plant a grove of sycamore trees in downtown Sunol. All on County property adjacent to our Sunol Depot Gardens (Community Park). This could be done incorporation with Sunol and the Alameda Creek Alliance. This would be on the banks of Sinbad Creek and serve as a Creek Bank Demonstration Site for the Sunol area and beyond. It would also be a major enhancement for Downtown Sunol. Another opportunity to work with the community and better understand each other. 14.4

SIGNAGE ELEMENTS- Another opportunity to work cooperatively with the community would be to form a joint Study Committee to complete a signage project the we have been working on for a few years to develop a unique signage design for roadway directional signage. We have worked with Alameda County and are currently working of artistic design and fabrication options. We have two local artists currently involved with and have had community input for several years.This could be not only for this project but for use in the Sunol Area. We are not talking about the freeways.This could provide for a sense of identity and pride for Sunol. A positive project that would be in all of our interests. 14.5

NOISE-Another major concern for those who live in the downtown area is noise during the period of construction. Our SCAC has addressed this and we hope that special attention will be given to this concern. It is real quiet in Sunol on most nights and sound travels very well. It could be a major annoyance for 3 years. 14.6

We would hope that you really do consider our concerns and suggestion. Thank you for your time.

Sincerely,
Jim O'Laughlin
Sunol Resident

Response to Comment 14.1

Caltrans welcomes community feedback and is committed to sharing project plans and goals with surrounding communities and stakeholders. Recreating the original Sunol Water Temple gates is outside of the project's purpose and need. The project as currently designed will not preclude the opportunity for the Sunol Water Temple gates to be fully reconstructed as originally designed.

Response to Comment 14.2

In consideration of the community's recent support for roundabouts, Caltrans studied the feasibility of roundabouts as part of the project. The studies found a single-lane roundabout would not provide enough capacity for current and projected traffic along SR 84. Roundabouts would also result in substantially more environmental impacts, including increased fill in the creek, impacts to historic resources and the school, and additional right-of-way acquisitions. Two-lane roundabouts would be needed to handle anticipated volumes; however, that design would result in even more environmental impacts and right-of-way acquisitions. Construction of the proposed Build Alternative will not preclude the opportunity to construct roundabouts in the future.

Response to Comment 14.3

Constructing an underpass crossing is outside of the project scope and would increase the environmental impacts of the project to the area.

As part of the Niles Canyon Safety Improvements Project, the signal system currently under construction will also include pedestrian push buttons, countdown signs, and accessible signals. Additionally, to facilitate safe passage of pedestrians and bicyclists across SR 84, the Arroyo de la Laguna Bridge Project would delineate the crossings at these intersections using parallel-line striping with high-visibility paint. The proposed pedestrian crossings will be delineated using guidance from the CA MUTCD. The MUTCD is the standard for traffic signs, road surface markings, and traffic signals in the state of California.

Response to Comment 14.4

Caltrans mitigates for tree removal in accordance with the requirements of the CDFW 1602 Streambed Alteration Agreement and RWQCB Section 401 permitting. Mitigation for tree removal in this project will include on-site and off-site tree replacement. Caltrans

will try to implement replacement planting/mitigation planting within the project limits first where space is available and then explore other planting opportunities with our local partners to plant along SR 84 corridor close to the areas impacted and in compliance with the regulatory requirements. Caltrans will explore options with the town of Sunol, CDFW, and other local partners to implement appropriate planting to restore and enhance the visual quality and biological value for the habitat areas within the project limits. Caltrans would also explore and identify potential planting locations by working with local stakeholders, private landholders, and public agencies including, but not limited to, East Bay Regional Parks District, Alameda County, and the SFPUC.

Response to Comment 14.5

Road signs are considered traffic control devices. Caltrans follows the California Manual on Uniform Traffic Control Devices (CA MUTCD), in conformance with the FHWA's Standard Highway Signs and Markings, for traffic sign design and manufacture. Caltrans can only place signs that meet CA MUTCD and FHWA standards within its right-of-way.

Response to Comment 14.6

Caltrans will implement a Construction Mitigation Plan (CMP) for the duration of project construction (FEATURE-3 in DED Section 1.5.13.3). The CMP is intended to anticipate and reduce potential impacts, including noise impacts, from construction activities to both Sunol Glen Elementary School and other project neighbors. A key component of the CMP is the implementation of regular communications with the community and the School District regarding concerns, process, and schedule. Communication will include notice of upcoming project activities that may be noisy. Measures that Caltrans will use to limit noise during construction will include, but not be limited to, those listed in AMM NOISE-1. Specific measures that the project will take to minimize noise include keeping the number of activities to a minimum, noise monitoring, and use of quieter activities when possible. Caltrans will also implement Standard Specification Section 14-8.02, which specifies that between 9 PM and 6 AM, construction activities are not to exceed 86 dBA at a distance 50 feet from job site (FEATURE-4 in Section 1.5.13.4).

Comment 15. Tim Ramirez, Division Manager, San Francisco Public Utilities Commission

San Francisco Water Power Sewer
Operator of the Hetch Hetchy Regional Water System

525 Golden Gate Avenue, 10th Floor
San Francisco, CA 94102
T 415.554.3265
F 415.554.3161
TTY 415.554.3488

Natural Resources and Lands Management

September 20, 2021

Sent via email to: ArroyodelaLagunaBridgeProject@dot.ca.gov

California Department of Transportation, District 4
ATTN: Charles Winter, Associate Environmental Planner
Office of Environmental Analysis
P.O. Box 23660, MS-8B
Oakland, CA 94623-0660

Re: Comments of the San Francisco Public Utilities Commission on the Caltrans Arroyo de la Laguna Bridge Project Draft Environmental Impact Report/Environmental Assessment, EA 04-0J550 / Project ID 0414000012

Dear Mr. Winter:

The San Francisco Public Utilities Commission (SFPUC) has been identified as a responsible agency under the California Environmental Quality Act (CEQA) in the Caltrans Arroyo de la Laguna Bridge Project Draft Environmental Impact Report/Environmental Assessment (Project) (EIR/EA). The SFPUC is hereby providing comments on the draft EIR/EA, which include general comments about the SFPUC and its Alameda Watershed lands, comments about the SFPUC Project Review Process; and comments specific to the EIR/EA that require a response from Caltrans.

GENERAL COMMENTS

The City and County of San Francisco, through the SFPUC, owns and manages more than 38,000 acres of land as part of its Alameda Watershed in unincorporated Alameda County. The Alameda Watershed is adjacent to various segments of State Route 84 (SR-84), including at the Arroyo De La Laguna bridge in Sunol. The Project is situated directly northeast of the entrance to the SFPUC's Sunol Yard, Sunol Water Temple, Alameda Creek Watershed Center and Ag Park. Given the close proximity to these facilities, the SFPUC has concerns related to traffic and access during construction. The use of SFPUC property, including mitigation, are also of concern to the SFPUC. These issues are

addressed further below, as is the SFPUC Project Review process, which is the preferred venue to resolve many of these issues. Any third party use of SFPUC lands must be vetted by the SFPUC's Project Review Committee for conformance with SFPUC policies and plans.

SFPUC PROJECT REVIEW PROCESS

In August 2016, Caltrans attended the SFPUC's Project Review process to conduct biological resources, cultural resources and floodplain/hydrology studies on State Route 84 in Sunol between Pleasanton-Sunol Road and Main Street for the Arroyo de La Laguna Bridge Project. We appreciate this early notice and proactive coordination with the SFPUC through the Project Review process. During scoping for this EIR/EA, the SFPUC requested Caltrans return to Project Review to discuss the Project further as it developed, and we renew this request so that the SFPUC staff can discuss areas of concern specific to our infrastructure and property. To arrange for a Project Review meeting, please go to the website below and complete an application. Please direct any questions to Casey Rando at crando@sfwater.org. 15a

https://sfpuc.org/construction-contracts/lands-rights-of-way/project-review-and-land-use-bay-area

Biological Resources

The SFPUC has a commitment to protect and restore native species and their habitats in the Alameda Watershed through our Water Enterprise Environmental Stewardship Policy. With significant construction and staging occurring on SFPUC property, the SFPUC has concerns about biological resources impacts. We encourage Caltrans to continue to work with the USFWS, NMFS, and CDFW to ensure that compliance with all applicable regulations regarding special status, threatened and endangered species are addressed throughout the duration of the Project.

It appears from the EIR/EA that Caltrans is proposing tree removal on SFPUC land. It is our policy to preserve healthy, native, mature trees as much as possible. We encourage Caltrans to do so with this Project. Tree removal and/or trimming on SFPUC property should be vetted through the Project Review process and should be done during the appropriate season for nesting birds. 15b

The SFPUC has concerns regarding the restoration efforts after project completion and requests the opportunity to review and comment on all restoration plans on SFPUC property. In the EIR/EA, Caltrans indicates that trees will be replaced with native trees. The SFPUC has indicated to Caltrans previously that container plants are not allowed as part of any mitigation or restoration effort on SFPUC lands. This is specifically related to Phytophthora, or generally speaking, plant pathogens. Caltrans has worked with the SFPUC to procure container plants

through our Sunol Native Plant Nursery for other similar projects, and we request Caltrans engage SFPUC staff to initiate similar efforts for this Project. We strongly encourage Caltrans to discuss this issue at Project Review as soon as possible to allow sufficient time to grow trees for this Project.

Similarly, the SFPUC restricts the type of seed mix that would be used or applied as any part of a restoration efforts on SFPUC property. The SFPUC only allows weed-free, native seeds that must be approved by SFPUC botanists. Following the application of the seed, the SFPUC assumes Caltrans will have multi-year commitment, to water, weed and generally tend the areas until the area is successfully restored. 15b

Cultural Resources

Previous archaeological surveys have revealed archaeological materials at the intersection of Pleasanton-Sunol Road and SR-84. There have been other significant archaeological resources encountered in the immediate area of the Project. The SFPUC understands that Caltrans has extensive procedures regarding the discovery and treatment of Native American remains and cultural artifacts; and that Caltrans regularly consults with the Native American Heritage Commission (NAHC) and relevant tribal representatives regarding highway projects. In the event of an unintended discovery of human remains or artifacts, the SFPUC requests that Caltrans not only comply with applicable procedures and consult with Native American designees, but also that Caltrans conveys that information regarding the discovery to the SFPUC. As a responsible resource agency, the SFPUC would need to document the location and protect the resources from any potential impacts related to future SFPUC operations or construction. 15c

Land Use

From the Project description and diagrams (e.g., 2-23), Caltrans will require the use and acquisition of SFPUC lands for staging, access and construction. The land would be used not only for temporary construction purposes, but also for permanent acquisition for new infrastructure. This includes an area of prime farmland. Caltrans has not engaged the SFPUC in any discussions to date about use or acquisition of the areas of SFPUC property identified in this Project. While there might be specific constraints regarding project footprint and construction that required Caltrans to identify these specific areas, the SFPUC has not yet agreed to the easements or staging areas identified in the EIR/EA. Of particular concern to the SFPUC is the Staging Area, which we believe may be better located elsewhere. Typically, these issues would be discussed at Project Review, which is discussed further below. 15d

This project may have economic effects on the SFPUC and its tenants as a result from the proposed property acquisitions. Any fee property or easements acquired by Caltrans from the SFPUC must be negotiated and purchased at fair market value; and any written agreements must be approved by the SFPUC Commission and/or the San Francisco Board of Supervisors.

Portions of the SFPUC lands where the project is proposed are subject to leases and other real estate agreements with third parties. The leases give the tenants exclusive possession of the leased property. Caltrans should be aware that any proposed Caltrans use of the SFPUC leased lands must be coordinated with the SFPUC tenants through SFPUC staff.

The SFPUC generally does not allow other agencies to mitigate project impacts on SFPUC property. Since mitigation opportunities may not be available within the SFPUC Alameda Watershed lands, the SFPUC requests specific information regarding mitigation that is required and coordination with Caltrans and the federal and state regulatory agencies to determine these locations. 15d

Transportation/Traffic

Numerous SFPUC staff members use the Arroyo de la Laguna Bridge (Bridge) on a daily basis, and members of the public access the Sunol Water Temple and Sunol AgPark during the week. The SFPUC understands that a Traffic Management Plan will be implemented by Caltrans during construction and invites Caltrans to discuss this further to ensure that employee commute time and access to the Sunol Water Temple and adjacent Sunol AgPark are not significantly impacted. When the Alameda Creek Watershed Center is completed next year there will be an increase in public access to this site which we request also be addressed in the traffic planning.

The SFPUC requested previously, as part of the Caltrans Niles Canyon Safety Improvement Project, that Caltrans include designated left-hand turn lanes and signaled arrows (i.e. protected turns) to facilitate left hand turns from all directions. As part of the Niles Canyon Safety Improvement Project Caltrans will signalize the intersection of SR-84, Pleasanton-Sunol Road and the SFPUC Sunol Yard, and agreed to include a left-turn signal, but not a dedicated left-turn lane, for vehicles headed west on SR-84 into the SFPUC Sunol Yard. There will be increased traffic coming into and out of the Sunol Yard due to the re-opening of the Sunol Water Temple and the completion of the Alameda Creek Watershed Center, currently under construction. We continue to believe that the ability to make safe left hand turns from all directions at this intersection is a priority safety issue that needs to be addressed. This increased traffic into the SFPUC facilities will include slow-moving large trucks and heavy equipment, as well as cyclists and pedestrians, particularly those living in the Sunol community. We respectfully request that Caltrans revisit these safety issues as part of this Project, and work with the SFPUC and the Sunol Citizens' Advisory Council. 15e

SPECIFIC COMMENTS AND QUESTIONS

Below are comments and questions related to specific parts of the EIR/EA. The comments come from multiple staff members throughout the SFPUC. The SFPUC asks for specific responses to each comment, and also invites Caltrans to discuss these comments at Project Review.

1. Section 1.5.5: a. If the utilities are going to be relocated a year in advanced, would it be done in 2023 or 2024? b. Are the utility agencies going to be responsible for moving their own utilities? c. First Bullet: Identify which specific utilities need to be relocated one year prior to start of construction. d. Stage 1, second bullet: Caltrans needs to coordinate with SFPUC to implement protection measures to work around and over existing SFPUC water lines. e. Stage 1 third bullet: The northeast corner of bridge has multiple water lines. The access road outside of Caltrans right of way will impact existing utilities.	15.1
2. Section 1.5: Figure 1.5-2 not included. Please correct reference to figure.	15.2
3. Section 1.5.4: Report states "Since the new bridge would be longer than the existing bridge." a. Report previously states old and new bridge are 310 feet long. This is conflicting information, please clarify.	15.3
4. Section 1.5.10: last sentence "Utility relocation is not expected to require work in the creek." a. Relocating existing water lines will most likely require work in the creek. b. As discussed previously, can the SFPUC put a 12" water line on the new bridge to supply water to the town of Sunol? Also, there is an existing Zone 7 flow meter on the current bridge and should also be accounted for in the new bridge construction.	15.4
5. Section 1.5.11: Drainage: New bridge stormwater should be directed to an area that will not cause erosion.	15.5
6. 1.5.13.3 Construction Mitigation Plan: The SFPUC should be included in all communications regarding this project.	15.6
7. It appears there is a discrepancy of the easements shown between table 2.2.6-1 and figure 2.2.6-1. The permanent easement shown on the figure appears larger than 0.02 acres.	15.7
8. Figure 2.2.9-12: tree and shrub removal map include Town of Sunol pipeline project. a. Coordination will be required between Caltrans and SFPUC projects regarding the tree removal due to the existing Town of Sunol Pipeline.	15.8
9. Page 2-59 (pdf 120 of 341): report states "Any trees removed outside of state right-of-way will be negotiated with the town of Sunol during the design phase." a. Caltrans must also negotiate with the SFPUC regarding tree removal on SFPUC lands, please confirm.	15.9

10. SFPUC is initiating environmental review of the Town of Sunol Pipeline Replacement Project. The SF Planning Department is the CEQA Lead Agency, and Tim Johnston (timothy.johnston@sfgov.org) is their coordinator for the project. Please include this project in your analysis, and contact Tim if you have any questions about its environmental review process.	15.10
11. Identify areas where Caltrans is impacting with the construction of the coffer dam and temporary construction easement on SFPUC land.	15.11
12. Section 1.5 Build alternative: In another section of the document, Caltrans discussed the line of site issue with the existing bridge. If the new bridge has an arch, would that defeat the purpose for line of site? Also, it says it will be raised 1-3 feet for line of site too, but is it not also for flood protection reason? Please clarify.	15.12
13. The pedestrian path is on the south side of 84 will not only require people to cross the street from Main street in Sunol but will also funnel all the pedestrian traffic to the Sunol Yard. Please consider keeping pedestrian traffic on both sides of the bridge as is currently.	15.13
14. Page 1-19 Permanent Water Treatment BMPs: These are addressed in section 402 of the Clean Water Act via the SWPPP as administered by the RWQCB, not the 401.	15.14
15. Page 1-21 Feature 10: Is it already known if nighttime work will be required because of traffic requirements on Highway 84?	15.15
16. Table 1.9-1: The Required Permits and Approvals need to include the 402 SWPPP General construction permit.	15.16
17. Page 2-19: It states that the Section 106 review of the built project would have no effect on the Sunol Water Temple, but it does not discuss the carrefour in this section which may be adversely affected by the construction.	15.17
18. Page 2-69: It is not clear how this is a valid statement if the bridge will be constructed within an archaeological site and there is an MOU with SHPO for treatment of human remains. "Section 4(f) does not apply to the archaeological site; the site is important for what can be learned by data recovery and has minimal value for preservation in place."	15.18
19. Table 2.4.2-2: It is not clear how this project could have such a small permanent impact to WOUS (0.001 acre).	15.19
20. Work window to avoid nesting birds: October 1 to January 31 seems very conservative. We usually use a nesting season in Sunol of Feb 15 to August 15 (Feb 15 is only for raptors). Please clarify.	15.20
21. AMM BIO-7: Please consider exclusion methods for nesting birds from the bridge.	15.21
22. Table S-2 SHPO: The EIR/EA mentions that SFPUC Sunol Water Temple's eligibility as historic landmark and this context is not understood. Why is this mentioned?	15.22
23. 3.1.20 Wildfire: Will spark-generating activities associated with the project cease during	15.23

Red Flag conditions (as designated by the National Weather Service)?	15.23
24. Table S-2: How will Caltrans mitigate for loss of farmland?	15.24
25. Page 2-15: Please correct/change "San Francisco Public Utility Commission (SFPUC)" to "San Francisco Public Utilities Commission (SFPUC)."	15.25
26. Page 2-19 in EIR text: "The partial property acquisition would be along the frontage of a parcel currently operated by the SFPUC." Please add: "Acquisition of SFPUC property may impact long-term SFPUC tenants."	15.26
27. Page 2-27 (2.2.6.2 AFFECTED ENVIRONMENT) in EIR text ".. SFPUC-owned agricultural parcels, which includes the Sunol Water Temple" Please change to "…SFPUC-owned parcels, which includes the SFPUC Sunol Yard, Sunol Water Temple, Alameda Creek Watershed Center, and SFPUC tenants."	15.27
28. Page 2-27 (2.2.6.3 ENVIRONMENTAL CONSEQUENCES) EIR text: "This partial property acquisition would not interfere with or affect the continued use of the parcel for its existing purpose. No economic or relocation effects are anticipated to result from the proposed property acquisitions." General Comment: As we understand the proposed Project, the SFPUC disagrees with this conclusion. This project may have economic effects on the SFPUC and its tenants as a result from the proposed Caltrans property acquisitions.	15.28
29. General comment, SFPUC would like to explore with Caltrans to include a potable water pipeline along the Arroyo de Laguna Bridge to serve the Town of Sunol, as referred to in 4b above.	15.29

Thank you for the opportunity to comment on the EIR/EA, and for the early coordination efforts with SFPUC staff. We look forward to continuing to work with Caltrans on this Project. If you have any questions or need further information, please contact Casey Rando, Senior Environmental Compliance Planner at crando@sfwater.org.

Sincerely,

Tim Ramirez
Division Manager

cc SFPUC: Casey Rando
Rosanna Russell
Neal Fujita
Ellen Natesan
Tony Bardo
Lindsay Revelli
Jonathan Mendoza
Carla Schultheis
Alisha Reinhardt
Bryan Dessaure
Jesus Almaguer
Angela Cheung
Annie Li
Stacie Feng
Debbie Craven-Green
Sue Chau
JT Mates-Muchin
Scott Simono
Mia Ingolia
Brian Sak

Response to Comment 15a

Caltrans recognizes SFPUC's role as a responsible agency. Caltrans is committed to maintaining a partnership with SFPUC and commits to continued coordination through the design and construction of project.

Response to Comment 15b

Caltrans will mitigate for tree removal in accordance with the requirements of the CDFW 1602 Streambed Alteration Agreement and RWQCB Section 401 permitting. Mitigation for tree removal in this project will include on-site and off-site tree replacement. Potential planting locations would be identified by working with local stakeholders, private landholders, and public agencies including, but not limited to, East Bay Regional Parks District, Alameda County, and the SFPUC.

Caltrans will develop an On-Site Restoration and Monitoring Plan for all on-site tree replacements required by project permits. This Plan will be finalized in the project's design phase. Caltrans is aware of the risk of plant pathogen introduction to the project area. During Plan development, Caltrans will explore sourcing replacement trees from local nurseries, including through the Sunol Native Plant Nursery. The Plan will also include a seed mix appropriate for the project area and that will not introduce new weed species. Caltrans will monitor tree plantings for 10 years or until the agencies deem the restoration successful.

Response to Comment 15c

Caltrans will inform SFPUC of any archaeological or cultural finds that occur within SFPUC property.

Response to Comment 15d

Caltrans will coordinate with SFPUC during the design and construction phases of the project to identify appropriate staging and access areas on SFPUC property. In addition, Caltrans will follow the guidelines set forth under the Federal Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act) for any property acquisitions that may be required by project construction.

Negotiations with property owners for property rights outside of the state right-of-way will begin during the design phase of the project.

The acquisition of portions of parcels (partial acquisitions) typically involves an appraised amount based on market or other valuation data plus damages paid to property owners. Any involvement of a tenant and subsequent adjustment of their lease terms is a matter settled between tenant and landlord. Tenant improvements will be addressed in the appraisals and relocation of personal property handled under relocation assistance. This is the anticipated extent of economic or relocation effects of this acquisition.

Response to Comment 15e

During the final design phase, a Traffic Management Plan (TMP) will be prepared in accordance with Caltrans requirements and guidelines to minimize the construction-related delays and inconvenience for travelers, residents, and businesses within the project limits. A key component of the TMP will be the implementation of regular communication with the community, SFPUC, and other stakeholders regarding concerns, process, schedule, and traffic planning. The opening of the Alameda Creek Watershed Center and other ongoing operations at the SFPUC property will be considered in the development of the TMP.

The project development team considered two bridge rehabilitation alternatives that included a left turn lane, referred to as Alternative 4: 71-foot-wide Bridge Replacement with Left-turn Lane and Alternative 5: 62.5-foot-wide Bridge Replacement with Left-turn Lane. Both alternatives are discussed in Section 1.8 of the DED. These alternatives were rejected because a road design including a left turn lane was determined to require either relocation of the Sunol Water Temple gates or a right-of-way acquisition from Sunol Glen Elementary School that would impact the recreational field. Both the Sunol Water Temple gates and Sunol Glen Elementary School recreational field are resources protected under Section 106 and Section 4(f).

Response to Comment 15.1

Construction of the project is expected to start in the summer of 2024. Utility relocations would begin in fall of 2023. Utility agencies would be responsible for relocating their own utilities. Utilities to be relocated one year prior to the start of construction will be identified during the project's design phase. Caltrans will coordinate with SFPUC to implement protection measures to work around and over existing SFPUC water lines. Caltrans will identify and verify locations of all utilities within the project limits during the project's design phase.

Response to Comment 15.2

The figure reference in Section 1.5 has been corrected.

Response to Comment 15.3

The proposed bridge would be 310 feet long, or the same length as the existing bridge. Section 1.5.4 has been updated to reflect this information.

Response to Comment 15.4

Section 1.5.10 has been revised to state that relocation of existing water lines may require work in the creek. Any in-water work would take place with protections, such as a temporary creek diversion.

The Caltrans Division of Engineering Services has established guidelines that define size limitations and special design requirements for utility installations on bridge. Caltrans determined that it would not be feasible to install any water line utility on the type of bridge proposed for this project.

Relocation of Zone 7 Water Agency's flow meter to the proposed bridge will be determined during the project's design phase.

Response to Comment 15.5

The project does not propose changes to existing drainage treatments in the project area. The design and construction of any new drainage treatments would implement erosion control BMPs.

Response to Comment 15.6

Caltrans will coordinate with SFPUC during preparation of the Construction Mitigation Plan.

Response to Comment 15.7

This discrepancy has been acknowledged, and Table 2.2.6-1 has been edited to include the correct acreage of permanent acquisition: 0.86 acre.

Response to Comment 15.8

Figure 2.2.9-12 shows the vegetation impacts from the proposed project only. Caltrans will coordinate with SFPUC regarding vegetation removal on Caltrans right-of-way from the Town of Sunol Pipeline Replacement Project.

Response to Comment 15.9

Caltrans will work with SFPUC to identify trees on SFPUC property that will require trimming or removal for project construction.

Response to Comment 15.10

Caltrans will comment on the Town of Sunol Pipeline Replacement Project when official notice of the project is received. Caltrans will continue coordination with SFPUC regarding SFPUC projects taking place in the same area as the Arroyo de la Laguna Bridge Project.

Response to Comment 15.11

Figure 1.5-1, Build Alternative Layout, has been updated to show all project elements, including the proposed berm and pipe for the creek diversion and the staging area. In addition, Figure 2.4.1-2, Build Alternative Impacts to Land Cover Types, shows the areas that the proposed project would temporarily and permanently impact. The cofferdam and temporary construction easements are considered temporary impacts.

Response to Comment 15.12

The specific type of bridge will not be selected until the project design phase. The type of bridge selected will determine if the new bridge will have arches and, if so, the type of arches. If the new bridge design contained an arch, the bridge would be constructed with two abutments curved as an arch on the underside of the bridge's road deck. The road deck would remain flat.

Raising the bridge 1-3 feet would correct the nonstandard vertical alignment and improve the line of sight on the roadway. Raising the bridge is not proposed for flood protection.

Response to Comment 15.13

The project development team determined that construction of a sidewalk on the north side of Arroyo de la Laguna Bridge would result in adverse impacts to the entry gates at the Sunol Water Temple, Sunol Glen Elementary School, and the corner market; substantial fill in Arroyo de la Laguna; and increased tree removal. The Niles Canyon Safety Improvements Project, which is currently under construction, will install signals and new painted stop lines at the Main Street and Pleasanton Sunol Road intersections along SR 84. As part of the signal system, pedestrian push buttons, countdown signs, and accessible signals will be installed. Additionally, to facilitate safe passage of pedestrians and bicyclists across SR 84, the Arroyo de la Laguna Bridge Project would delineate the crossings at these intersections using parallel-line striping with high-visibility paint.

Response to Comment 15.14

Permanent water treatment BMPs are addressed in both Section 401 of the Clean Water Act as well as through the SWPPP. Section 1.5.13.7 has been updated to reference the SWPPP in relation to permanent water treatment BMPs.

Response to Comment 15.15

Construction of the new bridge would require full closure of traffic for 21 days during each construction season. To minimize impacts to the traveling public, these closures would occur during the night.

Response to Comment 15.16

The SWPPP has been added to Table 1.9-1.

Response to Comment 15.17

The Sunol Water Temple gates at the intersection of Sunol Pleasanton Road and SR 84, also known as the Carrefour, will be protected by the establishment of an ESA.

Response to Comment 15.18

Section 4(f) does not apply to archaeological sites that are important chiefly for the information that can be learned through data recovery. The archaeological property in question was determined eligible for the National Register of Historic Places under

Criteria D for its ability to yield information important to history or prehistory. Data Recovery will be executed to recover this important information.

Response to Comment 15.19

The piles of the east pier of the new bridge will be constructed along the edge of the ordinary high water mark (OHWM) of Arroyo de la Laguna. The area that is expected to fall below the OHWM is 0.001 acre. After construction, the creek will be restored, and areas outside of the creek channel will be revegetated, as required by project permits.

Response to Comment 15.20

For each project that would affect nesting birds, Caltrans consults with CDFW to determine appropriate AMMs, including work windows. Recent projects in the surrounding area have been required to set the nesting bird work window as October 1 to January 31.

Response to Comment 15.21

If birds are nesting on the bridge, a bird exclusion plan will be submitted to CDFW for approval prior to demolition of each portion of the bridge.

Response to Comment 15.22

The Sunol Water Temple and Associated Structures was determined eligible for the National Register of Historic Places and received SHPO concurrence on December 17, 2019. As such, it is a historic property for the purposes of compliance with Section 106 of the National Historic Preservation Act, a historic resource under CEQA, and a State-owned historic property under Public Resource Code 5024.

Response to Comment 15.23

Fire prevention measures are detailed in Caltrans' Construction Safety Orders, Division 1, Chapter 4, Article 36. These measures would be followed during project construction. In cases where orders of local jurisdiction are more restrictive, those orders shall prevail.

Response to Comment 15.24

Caltrans is currently in communication with the U.S. Department of Agriculture regarding farmland in the project area. No mitigation requirements have been identified.

Response to Comment 15.25

This correction has been applied to Section 2.2.3.2 of the document.

Response to Comment 15.26

Caltrans will follow the guidelines set forth under the Federal Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act). Section 2.2.6.3 has been updated to include this information.

Caltrans will work with SFPUC and tenant(s) in possession to acquire the property required for the project pursuant to federal and state laws and statutes. The acquisition of portions of parcels (partial acquisitions) typically involves an appraised amount based on market or other valuation data plus damages paid to property owners. Any involvement of a tenant and subsequent adjustment of their lease terms is a matter settled between tenant and landlord. Tenant improvements will be addressed in the appraisals and relocation of personal property handled under relocation assistance. This is the anticipated extent of economic or relocation effects of this acquisition.

Response to Comment 15.27

The text in Section 2.2.6.2 has been updated as suggested.

Response to Comment 15.28

Please see response to Comment 15.26 regarding Caltrans' process for parcel acquisitions.

Response to Comment 15.29

Please see response to Comment 15.4 regarding the feasibility of installing a water pipeline on the bridge.

Appendix L U.S. Fish and Wildlife Service Biological Opinion

United States Department of the Interior
FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Suite W-2605
Sacramento, California 95825-1846
SFWO_mail@fws.gov

In Reply Refer to:
08ESMF00-2021-F-2913

November 12, 2021

Cristin Hallissy
California Department of Transportation
Environmental Division, MS-8E
111 Grand Avenue
Oakland, California 94612
Cristin.Hallissy@dot.ca.gov

Subject: Formal Consultation on the Arroyo de la Laguna Bridge Project, Alameda County, California (Caltrans EA 0J550)

Dear Cristin Hallissy:

This letter is in response to the California Department of Transportation's (Caltrans) July 27, 2021, request to initiate formal consultation with the U.S. Fish and Wildlife Service (Service) on the proposed Arroyo de la Laguna Project (proposed project) in Alameda County, California. Your request was received by the Service on July 27, 2021. At issue are the proposed project's effects on the federally listed as threatened California red-legged frog (*Rana draytonii*), threatened Central California Distinct Population Segment of the California tiger salamander (*Ambystoma californiense*, Central California tiger salamander), and threatened Alameda whipsnake (*Masticophis lateralis euryxanthus*). Critical habitat has been designated for the California red-legged frog, Central California tiger salamander, and Alameda whipsnake but does not occur within the proposed action area. This response is provided under the authority of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act), and in accordance with the implementing regulations pertaining to interagency cooperation (50 CFR 402).

Fixing America's Surface Transportation (FAST) Act was signed into law on December 4, 2015. Providing funding from 2016 to 2020, the FAST Act includes provisions to promote streamlined and accelerated project delivery. Caltrans is approved to participate in the FAST Act project delivery program through the National Environmental Policy Act (NEPA) Assignment Memorandum of Understanding (MOU). The MOU allows Caltrans to assume the Federal Highway Administration's (FHWA) responsibilities under NEPA as well as FHWA's consultation and coordination responsibilities under Federal environmental laws for most highway projects in California. Caltrans is exercising this authority as the Federal nexus for section 7 consultation under the Act on these projects.

The federal action on which we are consulting is the replacement of the Arroyo de la Laguna Bridge along SR-84 in Sunol to repair the Arroyo de la Laguna Bridge scour and improve the

bridge's structural integrity to meet current design standards for safety. Pursuant to 50 CFR 402.12(j), you submitted a biological assessment for our review and requested concurrence with the findings presented therein. These findings conclude that the proposed project may affect, and is likely to adversely affect California red-legged frog and Alameda whipsnake, and that the proposed project may affect, and is not likely to adversely affect Central California tiger salamander.

In considering your request, we based our evaluation on the following:

1) A July 2021 Biological Assessment;

2) Caltrans' August 27, 2021, response to the Service's August 13, 2021 request for additional information;

3) Other consultations along the Niles Canyon corridor;

5) Relevant life history information for the subject species; and

6) Other information available to the Service.

The Service concurs with Caltrans' determination that the proposed project is not likely to adversely affect Central California tiger salamander based on the following: (1) the action area does not provide suitable breeding habitat and only marginal upland habitat; (2) there are major barriers between suitable breeding habitat and the action area in the form of I-680, SR-84, and high velocity streams; (3) Caltrans will implement construction and erosion control Best Management Practices (BMPs); (4) all on-site personnel will attend environmental awareness training prior to beginning project activities; and (5) Service-approved biological monitors will conduct preconstruction surveys prior to ground disturbing activities and remain on-site to monitor construction activities adjacent to California tiger salamander habitat. Caltrans will reinitiate formal consultation if California tiger salamander individuals are observed in the project footprint.

The remainder of this document provides our biological opinion on the effects of the proposed project on California red-legged frog and Alameda whipsnake

Consultation History

July 27, 2021:	Caltrans initiated consultation and the Service received Caltrans' Biological Assessment via e-mail.
August 13, 2021:	The Service sent Caltrans an e-mail message regarding our review of the Biological Assessment. The message included a request for additional information that was the equivalent of a 30-day letter.
August 27, 2021:	Caltrans provided additional information to the Service.

BIOLOGICAL OPINION

Description of the Proposed Action

The proposed project will take place on SR 84 at PM 17.2 in the town of Sunol in Alameda County. The proposed project will replace the existing 310-foot-long and 38-foot-wide Arroyo de la Laguna Bridge with a new 310-foot-long and 64-foot-wide bridge consisting of two through lanes. The bridge height is expected to be raised between 1 to 3 feet to improve clearance below the structure. At completion, the structure will include two 12-foot-wide lanes, a 14-foot-wide east-west pedestrian path on the south side of the bridge, standard 42-inch-high railings, 9-foot-wide shoulders to accommodate 6-foot-wide bicycle lanes, and a 2-foot-wide painted median rumble strip. Construction is expected to take three seasons in Arroyo de la Laguna.

Temporary Creek Diversion

A temporary creek diversion is proposed to dewater the work area within the creek bed during each of the annual construction windows (June 1 to October 15). There will be a total of three construction seasons. The temporary creek diversion involves the installation of two temporary dams—one 200 feet upstream of the work area to prevent inflow, and one 300 feet downstream to prevent backflow—with a 4-foot diameter PVC pipe diverting the flow in the creek. No temporary stockpiling of material in the creek is proposed; if any material falls into the dewatered area of the creek during the demolition of the bridge, it will be removed daily. The diversion will be appropriately sized so that no construction debris will enter the flowing creek. Details for the creek diversion will be designed by the contractor and submitted to the Service prior to the start of construction. The creek diversion and all construction materials will be removed from the creek by the end of each construction season (June 1 – October 15). Upland areas will be restored and hydroseeded at the end of each construction season.

Utilities

Utility relocations include overhead electric and cable lines, an underground gas line, underground fiber optic cables along the north side of the existing bridge and roadway, and a water line crossing the east end of the bridge. Utilities will be relocated within the proposed project footprint during the first season of construction.

Staging and Access

The proposed project will have two staging areas. One will be northeast of the Pleasanton-Sunol Road and SR 84 intersection. Preparation of the area will include clearing and grubbing. Gravel will then be placed on top of a filter fabric on the unpaved portions of the construction staging area. The staging area will be restored to existing conditions upon completion of the proposed project. The second staging area will be in the disturbed pull-out northwest of the Pleasanton-Sunol Road and SR 84 intersection.

Temporary access roads will be provided for proposed project construction at the northeast corner of the existing bridge and near the southeast corner of the bridge. The access roads will be 10 to 12 feet wide and covered with 6 inches of clean gravel. The access roads will stay in place for three construction seasons. However, gravel and any additional fill will be removed from the

creek bed and bank prior to October 15 each year and replaced during subsequent construction seasons. During winter periods, appropriate erosion control measures will be implemented.

Removal of Existing Arroyo de la Laguna Bridge

The proposed project will require removal of the existing Arroyo de La Laguna Bridge. Segments of the existing superstructure will be saw-cut and removed by a crane situated on SR 84 or an access road. The creek bed will be protected by placing timber mats on top of temporary railing (K-rail) placed along the edge of the creek bed under the existing bridge and extending 10 feet past the sections being removed. All concrete and other materials associated with the existing bridge will be completely removed. Areas excavated to remove piers and abutments will be backfilled and graded to match surrounding conditions.

New Bridge Construction

The new three-span bridge will be supported by two abutment foundations and two piers. Abutments will consist of footings supported by 24-inch diameter cast-in-drilled-hole (CIDH) piles. The depth of excavation for new abutment foundations is expected to be 10 feet, and shoring will be placed as needed. The amount of soil displacement for the two abutment footings will be approximately 155 cubic yards. The piers will consist of six 36-inch-diameter above-ground piles, which will each be supported by 60-inch CIDH piles that will be installed to an expected depth of approximately 80 feet.

The western pier will be located outside the ordinary high water mark (OHWM). The eastern pier will be along the edge of the OHWM. The groundwater from dewatering during the construction of the CIDH piles will be placed into a settling tank before being released downstream of the site.

The new bridge will require the construction of a retaining wall at the northwest corner of the bridge, in the immediate vicinity of Sunol Glen Elementary School. The retaining wall will prevent fill impacts to the school property. The wall will be approximately 120 feet in length, 10 feet in height at the abutment, and will taper down to 3 feet in height at the end of the wall near Main Street.

A second retaining wall will be constructed at the southwest corner of the bridge. The wall will be approximately 255 feet in length and 11 feet in height at the abutment and will taper down to 3 feet in height at the end of the wall (past Main Street).

Construction of the bridge deck will involve the placement of falsework within the dewatered Arroyo de la Laguna channel. Temporary falsework will be installed for support and to create a work area for the construction of each new section of bridge. After each construction season, all materials associated with falsework will be removed, and pads will be graded to match surrounding conditions.

Limited roadway shoulder widening will be needed to conform to the new bridge north of the westbound travel way and south of the eastbound travel way. To construct the new pavement sections, the area to be widened will be cleared and grubbed, excavated, or filled as necessary with a bulldozer equipped with a scraper, and compacted.

Drainage

Drainage system improvements may be needed due to roadway widening, new sidewalks, construction of the new bridge and permanent BMPs. Water runoff currently drains into Arroyo de la Laguna through sheet-flow, as there are no drainage inlets present in the proposed project area. New drainage systems could consist of ditches, drainage inlets, and culverts. The inlets will be precast cement concrete boxes approximately 4 feet wide 6 feet long and 6 feet in depth. The average depth of excavation to place a drainage culvert will be about 4 feet.

Project Schedule

Construction is scheduled to begin in 2025 and be concluded in 2027 and take 500 working days to complete. All construction activities off-pavement will take place during the dry season work window in upland areas (April 15 – October 15) and aquatic areas (June 1 – October 15).

Conservation Measures

Caltrans proposes to reduce adverse effects to the California red-legged frog and Alameda whipsnake by implementing the following measures:

1. Compensation. Caltrans proposes to offset the adverse effects of the associated construction by implementing the following proposed actions:

    a. *On-site restoration*. Caltrans has proposed on-site restoration for all temporarily impacted habitat. Caltrans will restore all temporarily impacted areas to preconstruction conditions and hydroseed with a native, site appropriate, species mix. Caltrans will provide a restoration and revegetation plan for the proposed project. Detailed requirements of the restoration and revegetation plan are included in Measure 19 below.

    b. *Off-site compensation*. Caltrans has proposed off-site habitat preservation/bank credit purchase at a 3:1 ratio to compensate for the permanent loss of habitat values associated with ground disturbance and a 1.5:1 ratio for prolonged temporary impacts for all areas that will be impacted for more than one construction season but will be restored following completion of the proposed project. The proposed conservation will provide 6.11 acres of occupied habitat for the California red-legged frog and 5.12 acres of occupied habitat for the Alameda whipsnake at the Ohlone West Mitigation Bank. In the event that credits are not available, Caltrans will coordinate with the Service to establish an appropriate conservation easement, management plan, and endowment which will be finalized prior to the completion of the proposed project. Caltrans will demonstrate that adequate funds have been secured to complete the action prior to the start of construction of the proposed project. See Table 1 for proposed acres of off-site compensation.

Table 1: Proposed Compensatory Off-Site Mitigation for California Red-legged Frog and Alameda Whipsnake Habitat (Acres)

	California Red-Legged Frog (Acres)	Alameda Whipsnake (Acres)
1.5:1 Ratio for Prolonged Temporary Impacts	5.71	4.72
3:1 Ratio for Permanent Impacts	0.40	0.40
Total Off-Site Compensation	**6.11**	**5.12**

2. Service-Approved Biological Monitor. Caltrans will submit the names and qualifications of proposed biological monitor(s) for Service approval prior to the start of construction. Only Service-Approved Biological Monitors will implement the monitoring duties outlined in the Biological Opinion including delivery of the Worker Environmental Awareness Training Program. The Service-Approved Biological Monitor(s) will be on-site during initial ground-disturbing activities, the installation/removal of the creek diversion, and any other time when project activities could reasonably result in adverse effects to California red-legged frog or Alameda whipsnake. The Service-Approved Biological Monitor will keep copies of this Biological Opinion in their possession when on-site. Through the Resident Engineer or their designee, the Service-Approved Biological Monitor(s) will be given the authority to communicate with all project personnel to ensure that take of listed species is minimized and the Conservation Measures and Terms and Conditions of this Biological Opinion are fully implemented. The Service-Approved Biological Monitor(s) will have the authority to stop work that may result in adverse effects to federally listed species. If the Service-Approved Biological Monitor exercises this authority, the Service will be notified by telephone and e-mail message within one working day.

3. Preconstruction Surveys. Pre-construction surveys for listed species will be conducted by the Service-Approved Biological Monitor within 72 hours of the initiation of ground-disturbing activities. The surveys will consist of walking surveys of the project limits and, if possible, accessible adjacent areas within at least 50 feet of the action area. The Service-Approved Biological Monitor will investigate all potential cover sites. This includes thorough investigation of mammal burrows, rocky outcrops, appropriately sized soil cracks, and debris.

4. Worker Environmental Awareness Training. All construction personnel will attend an environmental education program delivered by the Service-Approved Biological Monitor prior to working on the proposed project. At a minimum, the program will include a description of the species, how they might be encountered within the action area, their status and protection, the *Conservation Measures* and *Terms and Conditions* that are relevant to employee's personal responsibility, and an explanation as how to best avoid take of the California red-legged frog and Alameda whipsnake. Distributed materials will include a pamphlet with distinguishing photographs of the California red-legged frog and Alameda whipsnake, their habitat requirements, compliance reminders, and relevant contact information. Documentation of the training, including sign-in sheets, will be kept on file and available upon request.

5. Prevention of Wildlife Entrapment. To prevent inadvertent entrapment of listed species during construction, excavated holes or trenches more than one foot deep with walls steeper than 30 degrees will be completely covered at the close of each working day by plywood or similar materials. Alternatively, an additional 4-foot high vertical barrier, independent of exclusionary fences, will be used to further prevent the inadvertent entrapment of listed species. If it is not feasible to cover an excavation or provide an additional 4-foot high vertical barrier, independent of exclusionary fences, one or more escape ramps constructed of earth fill or wooden planks will be installed. Before such holes or trenches are filled, they will be thoroughly inspected for trapped animals. If at any time a trapped California red-legged frog or Alameda whipsnake is discovered, the

Service-Approved Biological Monitor will immediately place escape ramps or other appropriate structures to allow the animal to escape and the Service will be contacted by telephone for guidance. If the Service-Approved Biological Monitor determines that capture and relocation is necessary, additional details on capture and relocation requirements are included in the Terms and Conditions of this biological opinion. The Service will be notified of the incident by telephone and e-mail within one working day of the initial observation.

6. Wildlife Exclusion Fencing. Prior to ground disturbance, the limits of construction zones within suitable habitat for listed species will be delineated with high visibility wildlife exclusion fencing at least four feet in height to prevent wildlife from accessing the construction footprint. The fencing will be removed when all construction equipment is removed from the site. No project activities will occur outside the delineated project construction area. The final project plans will show all locations where the fencing will be installed and will provide installation specifications.

7. Listed Species On-Site. The Resident Engineer will immediately contact the Service-Approved Biological Monitor in the event that a California red-legged frog or Alameda whipsnake is observed within a construction zone. The Resident Engineer will suspend construction activities within at least a 50-foot radius of the animal until the animal leaves the site voluntarily or is captured and relocated by a Service-Approved Biological Monitor. The Service will be notified by telephone and email within one working day if a listed species is discovered within the action area.

8. Work Windows. All work within suitable aquatic habitat for California red-legged frog will occur between June 1 and October 15, when there is less potential for an individual to enter the work area. All ground disturbance within suitable upland habitat for California red-legged frog and Alameda whipsnake will occur between April 15 and October 15.

9. Material Storage. All construction pipes, culverts, or similar structures and construction debris will be covered in a way that they are not accessible to wildlife or inspected by the Service-Approved Biological Monitor prior to being moved.

10. Water Diversion Structures. Cofferdam and/or water diversion will be constructed to exclude construction activities from adversely impacting the water quality of Arroyo de la Laguna while maintaining flow through the proposed project area.

11. Night Work and Lighting. To the extent practicable, nighttime construction will be minimized. Artificial lighting of the proposed project area during nighttime hours will be minimized to the maximum extent practicable and will be pointed away from sensitive resources.

12. Trash Control. All food-related trash items such as wrappers, cans, bottles, and food scraps will be disposed of in closed containers and removed at least once a day from the work area.

13. Caltrans Standard BMPs. The potential for adverse effects to water quality will be avoided by implementing temporary and permanent BMPs outlined in Section 13-4 of the Caltrans Standard Specifications. Caltrans erosion control BMPs will be used to

minimize any wind- or water-related erosion. BMPs to be implemented within the PCA will include, at a minimum:

a. No discharge of pollutants from vehicle and equipment cleaning will be allowed into storm drains or water courses.

b. Vehicle and equipment fueling and maintenance operations will be located at least 50 feet away from water courses.

c. Concrete wastes will be collected in washouts, and water from curing operations will be collected and disposed of and will not be allowed into water courses.

d. Dust control will be implemented, including use of water trucks and tackifiers to control dust in excavation and fill areas, rocking temporary access road entrances and exits, and covering temporary stockpiles when weather conditions require.

e. Coir rolls will be installed along or at the base of slopes during construction to capture sediment, and temporary organic hydro-mulching will be applied to all unfinished disturbed and graded areas.

f. Work areas where temporary disturbance has removed the pre-existing vegetation will be restored and re-seeded with a native seed mix appropriate for the area.

g. Graded areas will be protected from erosion using a combination of silt fences, fiber rolls along toe of slopes or along edges of designated staging areas, and erosion-control netting (such as jute or coir) as appropriate.

14. Prohibition of Monofilament Erosion Control. Plastic monofilament netting (erosion control matting) or similar material will be prohibited from use on the proposed project because the California red-legged frog or Alameda whipsnake may become entangled or trapped in it. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.

15. 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. Sandbags or other erosion control measures may be installed to prevent silt runoff to public roadways.

16. Construction discharges. No debris, soil, silt, sand, bark, slash, sawdust, cement, concrete, washings, petroleum products or other organic or earthen material will be allowed to enter into or be placed where it may be washed by rainfall or runoff into Arroyo de la Laguna. No discharges of excessively turbid water will be allowed, and all equipment will be well-maintained and free of leaks.

17. Concrete Waste and Stockpiles. 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.

18. Care of Injured or Dead Species. Listed species found injured will be cared for by a licensed veterinarian or a wildlife rehabilitation facility. After hours, interim care may be provided by another experienced person, including the Service-Approved Biological Monitor, until the animal can be delivered to a facility. Dead individuals of any listed species will be preserved by freezing and held in a secure location. The Service will be notified of the discovery of death or injury to a listed species occurring as a result of proposed project-related activities or if observed within the Action Area.

19. Restoration and Revegetation Plan. Caltrans will provide a restoration and revegetation plan for the proposed project to be reviewed and approved by the Service no later than sixty calendar days prior to the initial groundbreaking at the project site. The plan will include, but will not be limited to: schedule, methodology, a list of the seed mixes and container plants and trees, plant material source, irrigation, maintenance schedule, monitoring program, success criteria to ensure all temporarily impacted areas are restored to baseline condition or better within less than one year of construction initiation, control of invasive, noxious weeds, and remediation and adaptive management. The Plan will provide figures of all areas requiring restoration and specify the baseline vegetation conditions and proposed monitoring and reporting that will occur post-construction. All areas that are temporarily affected during construction will be revegetated with an assemblage of native grass, shrub, and trees. Invasive, exotic plants will be controlled within the action area, pursuant to Executive Order 13112.

Action Area

The action area is defined in 50 CFR § 402.02, as "all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action." For the proposed project, the action area is approximately 20.91 acres. The action area includes the entirety of the project footprint, and adjacent sensitive habitat along SR 84 between Main Street and the Pleasanton-Sunol Road/SR 84 intersection, as well as Arroyo de la Laguna approximately 330 feet upstream and 390 feet downstream of the existing bridge.

Analytical Framework for the Jeopardy Determination

Section 7(a)(2) of the Act requires that federal agencies ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of listed species. "Jeopardize the continued existence of" means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species (50 CFR § 402.02).

The jeopardy analysis in this biological opinion considers the effects of the proposed federal action, and any cumulative effects, on the rangewide survival and recovery of the listed species. It relies on four components: (1) the *Status of the Species*, which describes the current rangewide condition of the species, the factors responsible for that condition, and its survival and recovery needs; (2) the *Environmental Baseline*, which analyzes the current condition of the species in the action area without the consequences to the listed species caused by the proposed action, the factors responsible for that condition, and the relationship of the action area to the survival and recovery of the species; (3) the *Effects of the Action*, which determines all consequences to listed species that are caused by the proposed federal action; and (4) the *Cumulative Effects*, which evaluates the effects of future, non-federal activities in the action area on the species. The *Effects of the Action* and *Cumulative Effects* are added to the *Environmental Baseline* and in light of the

status of the species, the Service formulates its opinion as to whether the proposed action is likely to jeopardize the continued existence of the listed species.

Status of the Species

California Red-Legged Frog

Listing Status: The California red-legged frog was listed as a threatened species on May 23, 1996 (Service 1996). Critical habitat was designated for this species on April 13, 2006 (Service 2006), with revisions to the critical habitat designation published on March 17, 2010 (Service 2010). At that time, the Service recognized the taxonomic change from *Rana aurora draytonii* to *Rana draytonii* (Shaffer et al. 2010). A recovery plan was published for the California red-legged frog on September 12, 2002 (Service 2002).

Description: The California red-legged frog is the largest native frog in the western United States (Wright and Wright 1949), ranging from 1.5 to 5.1 inches in length (Stebbins 2003). The abdomen and hind legs of adults are largely red, while the back is characterized by small black flecks and larger irregular dark blotches with indistinct outlines on a brown, gray, olive, or reddish background color. Dorsal spots usually have light centers (Stebbins 2003); dorsolateral folds are prominent on the back. The California red-legged frog is sexually dimorphic; the females are larger than the males (Dodd 2013a, b). California red-legged frog tadpoles range from 0.6 inch to 3.1 inches in length and the background color of the body is dark brown and yellow with darker spots (Storer 1925).

Current Status and Distribution: The historical range of the California red-legged frog extended from central Mendocino County and western Tehama County south in the California Coast Range to northern Baja California, Mexico, and in the Sierra Nevada/Cascade Ranges from Shasta County south to Madera County (Jennings and Hayes 1994). The species historically occurred from sea level to elevations of about 5,200 feet in 46 counties; however, currently the taxon is extant in 238 streams or drainages within only 22 counties, representing a loss of 70 percent of its former range (Service 2002). Isolated populations persist in several Sierra Nevada foothill locales and in Riverside County (Barry and Fellers 2013; Backlin et al. 2017; CDFW 2019; Gordon, R. and J. Bennett, pers. comm., 2017). The species is no longer considered extant in California's Central Valley due to significant declines caused by habitat modifications and exotic species (Fisher and Shaffer 1996). Currently, the California red-legged frog is widespread in the San Francisco Bay nine-county area (CDFW 2019). They are still locally abundant within the California coastal counties from Mendocino County to Los Angeles County and presumed extirpated in Orange and San Diego counties (CDFW 2019; Yang, D. and J. Martin, pers. comm., 2017; Gordon, R. and J. Bennett, pers. comm., 2017). Baja California represents the southernmost edge of the species' current range (Peralta-García et al. 2016).

Barry and Fellers (2013) conducted a comprehensive study to determine the current range of the California red-legged frog in the Sierra Nevada, concluding that it differs little from its historical range; however, the current Sierra Nevada populations appear to be small and tend to fluctuate. Since 1991, eleven California red-legged frog populations have been discovered or confirmed, including eight probable breeding populations (Barry and Fellers 2013; Mabe, J., pers. comm., 2017). Microsatellite and mitochondrial DNA analysis by Richmond et al. (2014) confirmed the Sierra Nevada populations of the California red-legged frog are genetically distinct from each other, as well as from other populations throughout the range of this species. The research concluded that the Sierra Nevada populations are persisting at low levels of genetic diversity and

no contemporary gene flow across populations exist. On a larger geographic scale, range contraction has left a substantial gap between Sierra Nevada and Coast Range populations, similar to the gap separating the Southern California and Baja California populations (Richmond et al. 2014).

Habitat and Life History:

Habitat

The California red-legged frog generally breeds in still or slow-moving water associated with emergent vegetation, such as cattails, tules (hardstem bulrush), or overhanging willows (Storer 1925; Fellers 2005). Aquatic breeding habitat predominantly includes permanent water sources such as streams, marshes, and natural and manmade ponds in valley bottoms and foothills (Jennings and Hayes 1994; Bulger et al. 2003; Stebbins 2003). Since the 1850's, manmade ponds may actually supplement stream pool breeding habit and can be capable of supporting large populations of this species. Breeding sites may hold water only seasonally, but sufficient water must persist at the beginning of the breeding season and into late summer or early fall for tadpoles to successfully complete metamorphosis. Breeding habitat does not include deep lacustrine water habitat (e.g., deep lakes and reservoirs 50 acres or larger in size) (Service 2010). Within the coastal lagoon habitats, salinity is a significant factor on embryonic mortality or abnormalities (Jennings and Hayes 1990). Jennings and Hayes (1990) conducted laboratory studies and field observations concluding salinity levels above 4.5 parts per thousand detrimentally affected the California red-legged frog embryos. Aquatic breeding habitat does not need to be available every year, but it must be available at least once within the frog's lifespan for breeding to occur (Service 2010).

Non-breeding aquatic habitat consists of shallow (non-lacustrine) freshwater features not suitable as breeding habitat, such as seasonal streams, small seeps, springs, and ponds that dry too quickly to support breeding. Non-breeding aquatic and riparian habitat is essential for providing the space, food, and cover necessary to sustain the California red-legged frog. Riparian habitat consists of vegetation growing nearby, but not typically in, a body of water on which it depends, and usually extends from the bank of a pond or stream to the margins of the associated floodplain (Service 2010). Adult California red-legged frogs may avoid coastal habitat with salinity levels greater than 6.5 parts per thousand (Jennings and Hayes 1990).

Cover and refugia are important habitat characteristic preferences for the species (Halstead and Kleeman 2017). Refugia may include vegetation, organic debris, animal burrows, boulders, rocks, logjams, industrial debris, or any other object that provides cover. Agricultural features such as watering troughs, spring boxes, abandoned sheds, or haystacks may also be utilized by the species. Incised stream channels with portions narrower and depths greater than 18 inches may also provide important summer sheltering habitat. During periods of high water flow, California red-legged frogs are rarely observed; individuals may seek refuge from high flows in pockets or small mammal burrows beneath banks stabilized by shrubby riparian growth (Jennings and Hayes 1994). Accessibility to cover habitat is essential for the survival of California red-legged frogs within a watershed and can be a factor limiting frog population numbers and survival.

Breeding

The California red-legged frog typically breeds between November and April; however, breeding may occur later in the Sierra Nevada Range (Barry 2002). Females deposit their egg masses on emergent vegetation, floating on or near the surface of the water. The California red-legged frog is often a prolific breeder, laying eggs during or shortly after large rainfall events in late winter and early spring. Egg masses containing 300-4,000 eggs hatch after six to fourteen days (Storer 1925; Jennings and Hayes 1994; Fellers 2005). Historically, the California red-legged frog in the Sierra Nevada likely bred within stream pools, which tend to be small with limited forage, constraining the size and number of populations (Barry and Fellers 2013).

California red-legged frog tadpoles undergo metamorphosis three to seven months following hatching. Most males reach sexual maturity in two years, while it takes approximately three years for females (Jennings and Hayes 1985; Fellers 2005). Under favorable conditions, California red-legged frogs may live eight to ten years (Jennings et al. 1992). Of the various life stages, tadpoles likely experience the highest mortality rates; only one percent of each egg mass completes metamorphosis (Jennings et al. 1992).

Diet

The California red-legged frog has a variable diet that changes with each of its life history stages. The feeding habits of the early stages are likely similar to other ranids, whose tadpoles feed on algae, diatoms, and detritus by grazing on the surface of rocks and vegetation (Fellers 2005). Hayes and Tennant (1985) found invertebrates to be the most common food items of adult California red-legged frogs collected in southern California; however, they speculated that this was opportunistic and varied based on prey availability. Vertebrates, such as Pacific tree frogs and California mice, represented over half of the prey mass eaten by larger frogs, although invertebrates were the most numerous food items. Bishop et al. (2014) found that diet changed throughout the seasons based on prey available but that terrestrial invertebrate prey made up the majority of adult California red-legged frog diet regardless of season. Data was based on stable isotope analysis and stomach sampling of live frogs in Pacifica, California, and museum specimens from the San Francisco Bay Area. Feeding typically occurs along the shoreline and on the surface of the water; juveniles appear to forage during both daytime and nighttime, whereas adults appear to feed at night (Hayes and Tennant 1985).

Movement

California red-legged frogs do not have a distinct breeding migration (Fellers 2005), rather they may move seasonally from non-breeding pools or refugia to breeding pools. Some individuals remain at breeding sites year-round while others disperse to neighboring water features or moist upland sites when breeding is complete and/or when breeding pools dry (Service 2002; Bulger et al. 2003; Fellers and Kleeman 2007; Tatarian and Tatarian 2008; Tatarian 2008). Studies in the several San Francisco Bay counties showed movements are typically along riparian corridors (Fellers and Kleeman 2007; Tatarian 2008). Although, some individuals, especially on rainy nights and in more mesic areas, travel without apparent regard to topography, vegetation type, or riparian corridors, and can move directly from one site to another through normally inhospitable habitats such as heavily grazed pastures or oak-grassland savannas (Bulger et al 2003).

California red-legged frogs show high site fidelity (Tatarian and Tatarian 2008) and typically do not move significant distances from breeding sites (Bulger et al. 2003; Fellers and Kleeman

2007; Tatarian and Tatarian 2008; Tatarian 2008). When traveling between aquatic sites, California red-legged frogs typically travel less than 0.31 mile (Fellers and Kleeman 2007; Tatarian and Tatarian 2008), although they have been documented to move more than two miles in Santa Cruz County (Bulger et al. 2003). Various studies have found that the frogs typically do not make terrestrial forays further than 200 feet from aquatic habitat (Bulger et al. 2003; Fellers and Kleeman 2007; Tatarian and Tatarian 2008; Tatarian 2008). Upland movements are typically associated with precipitation events and usually last for one to four days (Tatarian 2008).

Threats

Factors associated with declining populations of the California red-legged frog throughout its range include degradation and loss of habitat through agriculture, urbanization, mining, overgrazing, recreation, timber harvesting, non-native species, impoundments, water diversions, erosion and siltation altering upland and aquatic habitat, degraded water quality, use of pesticides, and introduced predators (Service 2002, 2010). Urbanization often leaves isolated habitat fragments and creates barriers to frog dispersal.

Non-native species pose a major threat to the recovery of California red-legged frogs. Several researchers have noted the decline and eventual local disappearance of California and northern red-legged frogs in systems supporting bullfrogs (*Lithobates catesbeianus*) (Jennings and Hayes 1990; Twedt 1993), red swamp crayfish (*Procambarus clarkii*), signal crayfish (*Pacifastacus leniusculus),* and several species of warm water fish including green sunfish (*Lepomis cyanellus*), goldfish (*Carassius auratus*), common carp (*Cyprinus carpio*), and mosquitofish (*Gambusia affinis*) (Moyle 1976; Barry 1992; Hunt 1993; Fisher and Shaffer 1996). The decline of the California red-legged frog due to these non-native species has been attributed to predation, competition, and reproduction interference (Twedt 1993; Bury and Whelan 1984; Storer 1933; Emlen 1977; Kruse and Francis 1977; Jennings and Hayes 1990; Jennings 1993).

Chytridiomycosis, an infectious disease caused by the chytrid fungus, *Batrachochytrium dendrobatidis* (*Bd*), has been found to adversely affect amphibians globally (Davidson et al. 2003; Lips et al. 2006). While *Bd* prevalence in wild amphibian populations in California is unknown (Fellers et al. 2011), chytrid is expected to be widespread throughout much of the California red-legged frog's range. The chytrid fungus has been documented within the California red-legged frog populations at Point Reyes National Seashore, two properties in Santa Clara County, Yosemite National Park, Hughes Pond, Sailor Flat, Big Gun Diggings, and Spivey Pond (Padgett-Flohr and Hopkins 2010; Tatarian and Tatarian 2010; Fellers et al. 2011; Barry and Fellers 2013). However, no chytrid-related mortality has been reported in these populations, suggesting that California red-legged frogs are less vulnerable to the pathogenic effects of chytrid infection than other amphibian species (Tatarian and Tatarian 2010; Barry and Fellers 2013; Fellers et al. 2017). While chytrid infection may not directly lead to mortality in California red-legged frogs, Padgett-Flohr (2008) states that this infection may reduce overall fitness and could lead to long-term effects. Therefore, it is difficult to estimate the full extent and risk of chytridiomycosis to the California red-legged frog populations.

Negative effects to wildlife populations from roads and pavement may extend some distance from the actual road. The phenomenon can result from any of the effects already described in this Biological Opinion, such as vehicle-related mortality, habitat degradation, and invasive exotic species. Forman and Deblinger (1998, 2000) described the area affected as the "road effect" zone. Along a four-lane road in Massachusetts, they determined that this zone extend for an average of approximately 980 feet to either side of the road for an average total zone width of

approximately 1,970 feet. They describe the boundaries of this zone as asymmetric and in some areas diminished wildlife use attributed to road effects was detected greater than 0.6 mile from Massachusetts Route 2. The "road-zone" effect can also be subtle. Van der Zande *et al.* (1980) reported that lapwings and black-tailed godwits feeding at 1,575-6,560 feet from roads were disturbed by passing vehicles. The heart rate, metabolic rate and energy expenditure of female bighorn sheep increase near roads (MacArthur *et al.* 1979). Trombulak and Frissell (2000) described another type of "road-zone' effect due to contaminants. Heavy metal concentrations from vehicle exhaust were greatest within 66 feet of roads, but elevated levels of metals in both soil and plants were detected at 660 feet of roads. The "road-zone" apparently varies with habitat type and traffic volume. Based on responses by birds, Forman and Deblinger (2000) estimated the effect zone along primary roads of 1,000 feet in woodlands, 1,197 feet in grasslands, and 2,657 feet in natural lands near urban areas. Along secondary roads with lower traffic volumes, the effect zone was 656 feet. The "road-zone" effect with regard to California red-legged frogs has not been adequately investigated.

The necessity of moving between multiple habitats and breeding ponds means that many amphibian species, such as the California red-legged frog, are especially vulnerable to roads and well-used large paved areas in the landscape. Van Gelder (1973) and Cooke (1995) have examined the effect of roads on amphibians and found that because of their activity patterns, population structure, and preferred habitats, aquatic breeding amphibians are more vulnerable to traffic mortality than some other species. Large, high-volume highways pose a nearly impenetrable barrier to amphibians and result in mortality to individual animals as well as significantly fragmenting habitat. Hels and Buchwald (2001) found that mortality rates for anurans on high traffic roads are higher than on low traffic roads. Vos and Chardon (1998) found a significant negative effect of road density on the occupation probability of ponds by the moor frog in the Netherlands. In addition, incidents of very large numbers of road-killed frogs are well documented (*e.g.*, Ashley and Robinson 1996), and studies have shown strong population level effects of traffic density (Carr and Fahrig 2001) and high traffic roads on these amphibians (Van Gelder 1973; Vos and Chardon 1998). Most studies regularly count road kills from slow moving vehicles (Hansen 1982; Rosen and Lowe 1994; Drews 1995; Mallick *et al.* 1998) or by foot (Munguira and Thomas 1992). These studies assume that every victim is observed, which may be true for large conspicuous mammals, but it certainly is not true for small animals, such as the California red-legged frog. Amphibians appear especially vulnerable to traffic mortality because they readily attempt to cross roads, are slow-moving and small, and thus cannot easily be avoided by drivers (Carr and Fahrig 2001).

Recovery Plan

The Recovery Plan for the California red-legged frog identifies eight recovery units (Service 2002). Based on various regional areas of the species' range, the establishment of these recovery units is essential to its survival and recovery. The goal of the recovery plan is to protect the long-term viability of all extant populations within each recovery unit. Within each recovery unit, delineated core areas, designed to protect metapopulations, represent contiguous areas of moderate to high California red-legged frog densities. The management strategy identified within this Recovery Plan will allow for the recolonization of habitats within and adjacent to core areas naturally subjected to periodic localized extinctions, thus assuring the long-term survival and recovery of California red-legged frogs.

Alameda Whipsnake

Please refer to the *Alameda Whipsnake 5-Year Review: Summary and Evaluation* (Service 2020) (available at http://ecos.fws.gov/docs/five_year_review/doc6444.pdf) for the latest published status of the species. No change in the species' listing status was recommended in the July 2020 5-year review.

Environmental Baseline

The action area includes SR 84 at post mile (PM) 17.2 between Main Street and the Pleasanton-Sunol Road/SR 84 intersection, as well as Arroyo de la Laguna upstream and downstream of the existing bridge, in the town of Sunol in Alameda County. The action area is located at the east end of Niles Canyon at an elevation of approximately 225 feet and is mostly surrounded by developed properties, with the exception of the riparian vegetation that runs along the creek and the less developed area to the northeast. SR 84 runs through the center of the action area and within the action area is a two-lane state route with no median barrier and narrow shoulders.

The action area is within the lower portion of the Alameda Creek watershed, the watershed covers an area that includes the southern two-thirds of Alameda County and drains approximately 700 square miles. Along with the watersheds of Calaveras Creek and Arroyo Hondo, the Arroyo de la Laguna watershed flows into Alameda Creek, which continues to the San Francisco Bay. Arroyo de la Laguna has high winter and spring flows, but for most of the year the creek in the vicinity of the action area exhibits slow to moderate flows with several deep pools and some riffles.

Beyond road mortality, baseline risks to wildlife and surrounding habitat also includes adverse effects generated from erosion, traffic related noise, exhaust, head-lighting, heavy metal and other solid deposition, toxic liquid discharges, and discarded waste. Chemicals also leach from pavement and are transported into the local environment. Paved surfaces absorb and reflect heat, creating elevated heat "islands". It is also likely that noxious weeds have been introduced or spread to the SR-84 right-of-way and surrounding environment through deposition from passing vehicles. The Niles Canyon area, which the proposed action area falls within, has been consistently the subject of consultation for federal nexus projects within the area.

California Red-Legged Frog

The proposed action area is located within the California red-legged frogs' range and contains the upland habitat, non-breeding aquatic habitat, and nearby aquatic breeding habitat associated with its life history. The Niles Canyon area, which the proposed action area falls within, has been consistently the subject of consultation for federal nexus projects within the area.

A map depicting the species' range is included in the Service's online profile for the species at https://ecos.fws.gov/ecp0/profile/speciesProfile?sId=2891#rangeInfo. The proposed action area is also located within the frog's South and East San Francisco Bay Recovery Unit (Unit 4) and more specifically, it's East San Francisco Core Unit (Service 2002, 2006). As noted in the species' Recovery Plan, Contra Costa and Alameda Counties contain the majority of known California red-legged frog localities within the San Francisco Bay area.

Caltrans did not conduct protocol or roadkill surveys for the California red-legged frog within the action area but there are numerous occurrences of the species in the CNDDB in the vicinity

of the proposed project. The action area includes suitable upland, dispersal, and aquatic habitat for the species and is within navigable dispersal distance, generally given as at least 2 miles, to suitable and confirmed breeding habitat. Within the action area, Arroyo de la Laguna generally is too swift-flowing to provide suitable breeding habitat for California red-legged frog, though slower-moving eddies and pools at the margins may provide places for egg attachment. However, egg masses placed in these areas are still susceptible to being washed away during high flows, and the main channel is not likely suitable breeding habitat for California red-legged frog. Additionally, species that prey upon California red-legged frog, including common carp, green sunfish, and largemouth bass, have been documented in Alameda Creek (Leidy 2007), which is hydrologically connected to Arroyo de la Laguna. In 2012, Kleinfelder/GANDA biologists completed protocol-level surveys for California red-legged frog as part of the I-680 Northbound High Occupancy Vehicle/Express Lane Project, including six breeding season surveys and two non-breeding season surveys within the action area. No California red-legged frogs were observed during these surveys. Predators of California red-legged frog, including bullfrogs, common carp, and red swamp crayfish were observed. A review of the CNDDB (CDFW 2021) indicated that a total of seven CNDDB occurrences of California red-legged frog have been reported within a dispersal distance of two mile to the Action Area, the closest of which is approximately 0.5 mile west of the action area. Caltrans mapped 3.95 acres (3.81 acres of prolonged temporary and 0.132 acres of permanent impact) of red-legged frog habitat (riparian, wetland, riverine, woodland, and grassland vegetation types) that would be affected by ground disturbance associated with the proposed project.

The road effects zone applies to the California red-legged frog and in this case, SR-84 is a barrier to north and south movement due to road mortality and obstructions such as concrete medians and curbs. Artificial lighting and vehicle noise along the SR 84 and adjacent roads within the Town of Sunol are also a likely source of behavioral disruption and may interfere with the animals' ability to forage and avoid detection by predators. These baseline conditions likely create a risk for California red-legged frogs that diminishes with distance from the SR-84 travel corridor and the Town of Sunol.

The Service has determined that the California red-legged frog is reasonably certain to occur within the action area due to: (1) the proposed project being located within the species' range and current distribution; (2) the habitat within the action area is similar to that which is found in nearby areas with confirmed California red-legged frog occupancy; (3) individuals being found in locations well within the species' movement capabilities to the project footprint; (4) confirmed and suitable breeding habitat is located within the species' known movement capabilities to the project footprint; (5) the action area being contiguous with occupied habitat, with no significant barriers to frog movement between confirmed occupied areas and the action area; (6) the lack of significant disturbance or history of significant threats to the species in the general vicinity; and (7) the biology and ecology of the animal.

Alameda whipsnake

The proposed action area is located within the Alameda whipsnake' range and contains the grassland, oak woodland, and riparian habitat, and nearby chapparal habitat associated with its life history. The nearest CNDDB occurrence of Alameda whipsnake is approximately three miles west of the action area (CDFW 2021). Due to the sensitivity of the species, the specific localities of Alameda whipsnake occurrences are suppressed in CNDDB. During trapping surveys for the Caltrans Tyler Ranch Project, 12 individual Alameda whipsnake were captured and released

between May 8 and May 29, 2012. This trapping was conducted approximately one mile northwest of the action area, and the data has not yet been made available in CNDDB.

Habitat for the Alameda whipsnake may be found in grasslands and various oak woodlands that are linked to scrub habitats by substantial rock outcrops or riparian corridors. The dominant habitat type throughout the action area is riparian and also includes woodlands, grasslands, and wetlands. No chaparral habitat exists in or within 500 feet of the action area. The action area is not part of a habitat mosaic that contains scrub/chaparral habitat, but there is scrub habitat that is contiguous to the action area and could support Alameda whipsnakes. The Alameda whipsnake has been documented in the vicinity, and because the species has been found in grassland habitats miles away from chaparral habitat, the species could utilize the action area for foraging and migration. The action area is not expected to support breeding Alameda whipsnakes.

The road effects zone applies to the Alameda whipsnake by the same means described for California red-legged frog. However, the Alameda whipsnake is further threatened because snakes often warm themselves on road surfaces which increase their risk of being killed on roads.

The Service believes that the Alameda whipsnake is reasonably certain to occur within the action area due to: (1) the proposed project being located within the species' range and current distribution; (2) the presence of woodland and grassland habitat that is contiguous with scrub habitat; (3) connectivity to known occupied habitat; and (4) the biology and ecology of the animal.

Effects of the Action

Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action.

The direct effects of the proposed project are those effects occurring within the action area during construction of the proposed project. For the proposed project, the direct effects are primarily associated with ground-disturbing activities including ground clearing and grubbing, bridge replacement, installation and removal of a creek diversion, installation of drainage system, utility relocation, equipment staging, parking, and soil and material storage. The indirect effects of the proposed project include the creek to flow more naturally through the action area due to the reduction of concrete within the main channel, which is not expected to alter the suitability or use of the habitat by California red-legged frog or Alameda whipsnake.

The effects of habitat loss/degradation were analyzed based on the term of the loss, restoration potential, and the associated changes to functional value. As a result, habitat loss was characterized as permanent or prolonged temporary. *Permanent habitat loss/degradation* was defined as those areas where baseline ecological function for the California red-legged frog and Alameda whipsnake and the ecological processes that they depend on, have been lost or significantly reduced. Proposed ground-disturbing construction activities will result in the net permanent loss of 0.132 acres of habitat.

Prolonged temporary habitat loss was considered for any landscape cover that will be restored to baseline habitat values for the California red-legged frog and Alameda whipsnake, but baseline habitat values will take more than one year from the initiation of the proposed project to occur. Since the proposed project will be ongoing for three years, all impacts regardless of vegetation type will be considered prolonged temporary impacts. Caltrans estimated that the proposed construction activities will result in the prolonged temporary habitat loss of 3.807 acres of habitat occupied by riparian, woodland, wetland, riverine, and grassland that could be utilized by the California red-legged frog, and 3.149 acres of habitat that could be utilized by Alameda whipsnake. Riverine habitat was not considered suitable for Alameda whipsnake. These areas will be utilized during construction for workspace and will be actively restored at the end of the proposed project. The amount of time it will take the temporarily impacted area to reach baseline habitat values will vary greatly depending on the habitat type, as the woodland and scrub habitat could take 5-20 years following construction, but the grassland area is expected to take less than one year following construction to reach baseline conditions. The adverse effects due to noise, vibration, and visual disturbance will be limited to the proposed project's 500 working days.

Caltrans proposes to minimize construction related effects by implementing the *Conservation Measures* included in the project description section of this Biological Opinion. Effective implementation of *Conservation Measures* will likely minimize effects to the California red-legged frog and Alameda whipsnake during construction but incidental take is still likely to occur. Therefore, the proposed project has the potential to result in a variety of adverse effects to the California red-legged frog and Alameda whipsnake.

California Red-Legged Frog
The California red-legged frog could be encountered throughout the project footprint where they risk injury or mortality under staged and moving equipment/vehicles and ground disturbing activities. Pre-construction surveys by a Service-Approved Biological Monitor will assist in clearing California red-legged frogs from the project footprint prior to the introduction of a potential construction-related threat. The presence of the Service-Approved Biological Monitor anytime vegetation removal or ground-disturbing project activities are occurring and any other time when project activities could reasonably result in adverse effects to California red-legged frog during construction will increase the chances of identifying frogs in the work area that would be susceptible to injury. Biological clearance of work areas is limited by the experience of the biologist, the complexity and abundance of potential cover sites, and the small size and inconspicuous nature of the species. Despite being "cleared" prior to construction, California red-legged frogs could move into the work site undetected. Implementing a seasonal work window will minimize this risk by the construction taking place between April and October when frogs are less likely to be migrating through the action area.

All vegetation within the project footprint could be utilized by California red-legged frog for dispersal, foraging, or cover. Following construction, as noted previously in the Description of the Proposed Action section, the project proponent has included the commitment to restore all temporarily impacted habitat following project completion as a condition of the action. Therefore, the habitat, although not meeting pre-project conditions for up to twenty years following construction for some areas, will be available for frogs to continue utilizing for dispersal, foraging, and cover as the vegetation reestablishes over time. The proposed project will remove 0.136 acres of valley foothill riparian habitat adjacent to SR-84, and therefore will not result in significant permanent habitat loss for the California red-legged frog.

Educating project personnel will make workers aware of their requirements to comply with the conservation measures and increase the possibility that California red-legged frog in the work area will be identified and addressed appropriately for avoidance. Worker education is limited by the effectiveness of the presentation and the willingness of the construction personnel to participate in compliance.

Monitoring and the proposed installation of escape ramps in open trenches or holes should provide a means of exit, but amphibians risk being directly killed or may be unable to escape and be killed due to predation, desiccation, entombment, or starvation. Caltrans' commitment to use erosion control devices other than mono-filament should be effective in avoiding the associated risk of entrapment that can result in death by predation, starvation, or desiccation (Stuart *et al.* 2001). Proper trash disposal is often difficult to enforce and is a common non-compliance issue. Improperly disposed edible trash could attract predators, such as raccoons, crows, and ravens, to the site, which could subsequently prey on the listed herpetofauna.

Discovery, capture, and relocation of individual California red-legged frogs may avoid injury or mortality due to construction activities; however, capturing and handling animals may result in stress and/or inadvertent injury during handling, containment, and transport.

California red-legged frogs and their prey could also be affected by contamination due to chemical or sediment discharge. Exposure pathways could include inhalation, dermal contact, direct ingestion, or secondary ingestion of contaminated soil, plants or prey species. Exposure to contaminants could cause short- or long-term morbidity, possibly resulting in reduced productivity or mortality. However, Caltrans proposes to reduce these risks by implementing BMPs and the SWPPP that consist of refueling, oiling, or cleaning of vehicles and equipment a minimum of 50 feet from riparian and aquatic areas; installing coir rolls, straw wattles and/or silt fencing to capture sediment and prevent runoff or other harmful chemicals from entering the aquatic habitat; and locating staging, storage and parking areas away from aquatic habitat.

The completed project is unlikely to increase the local risk of California red-legged frog mortality due to vehicle collision. The completed project will not provide wildlife with increased access to the roadway. Consequently, the road effects zone described in the baseline section is unlikely to change.

As noted previously in the Description of the Proposed Action section, the project proponent has also proposed a set of conservation measures, including the commitment to provide compensatory habitat as a condition of the action. This compensatory habitat is intended to minimize the effect on the species of the proposed project's anticipated incidental take, resulting from the permanent and prolonged temporary loss of habitat described above. The compensatory habitat proposed will be in the form of 6.11 acres at a Service-approved mitigation bank. Restoration of temporary work areas will also provide continued functional habitat for the species on site.

Alameda Whipsnake

The potential effects to the Alameda whipsnake are similar to those described above for California red-legged frog. Construction activities could result in mortality, injury, and/or disturbance to juvenile and adult snakes in the action area.

Alameda whipsnake is most likely to be affected during construction of the proposed project due to habitat loss, exclusion from the habitat within the work area, and disruption of movement through the action area, loss of prey, and displacement into adjacent areas where they may be vulnerable to increased predation, exposure, starvation, or stress through disorientation, loss of shelter, and intraspecific and inter-specific aggression (Grigione 2002). Alameda whipsnakes are diurnal, and therefore their behavior is likely to be adversely affected by construction activities, resulting in avoidance of areas that have suitable habitat but intolerable levels of disturbance.

Alameda whipsnakes are difficult to find and very difficult to capture. Therefore it will be challenging for biological monitors to find them in dense vegetation and effectively move them from harm's way. Whipsnake-specific fencing can be an effective barrier to snakes but animals can still gain access to work areas through the fence openings that allow access for construction. Not allowing the use of mono-filament erosion control is an important measure to avoid entrapment and likely injury or death. The completed project is not likely to increase the local risk of Alameda whipsnake mortality from vehicle collision.

Effective restoration of the areas needed for access and work space is expected to reestablish baseline grassland and habitat values for the Alameda whipsnake within a year of project completion. Restoration of woodland and riparian habitat may begin providing some functional habitat component for the snake within a year of project completion but baseline habitat function is unlikely to be achieved until 5 to 20 years following planting.

As noted previously in the Description of the Proposed Action section, the project proponent has also proposed a set of conservation measures, including the commitment to provide compensatory habitat as a condition of the action. This compensatory habitat is intended to minimize the effect on the species of the proposed project's anticipated incidental take, resulting from the permanent and prolonged temporary loss of habitat described above. The compensatory habitat proposed will be in the form of 5.12 acres at a Service-approved mitigation bank.

This component of the action will have the effect of protecting and managing lands for the species' conservation in perpetuity. The compensatory lands will provide suitable habitat for breeding, feeding, or sheltering commensurate with or better than habitat lost as a result of the proposed project. Providing this compensatory habitat as part of a relatively large, contiguous block of conserved land may contribute to other recovery efforts for the species.

Cumulative Effects

Cumulative effects include the effects of future State, Tribal, local, or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act. During this consultation, the Service did not identify any future non-federal actions that are reasonably certain to occur in the action area of the proposed project.

Conclusion

After reviewing the current status of California red-legged frog and Alameda whipsnake, the environmental baseline for the action area, the effects of the proposed Arroyo de la Laguna Bridge Project, and the cumulative effects, it is the Service's biological opinion that the Arroyo de la Laguna Bridge Project, as proposed, is not likely to jeopardize the continued existence of

the California red-legged frog and Alameda whipsnake. The Service reached this conclusion because the project-related effects to the species, when added to the environmental baseline and analyzed in consideration of all potential cumulative effects, will not rise to the level of precluding recovery or reducing the likelihood of survival of the species based on the following:

1) Successful implementation of the described *Conservation Measures* is likely to reduce the potential for proposed project activities to result in the disruption of normal California red-legged frog and Alameda whipsnake behavior or risk of injury;

2) Habitat disturbed for access and work space is minimal and will be restored to baseline levels;

3) Ground disturbing activities will be located within, adjacent to, and below the existing roadway;

4) Caltrans will partially offset permanent and prolonged temporary habitat loss with the purchase of occupied California red-legged frog and Alameda whipsnake habitat credits at a Service-approved conservation bank or other acceptable means in Alameda County.

INCIDENTAL TAKE STATEMENT

Section 9 of the Act and federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harass is defined by Service regulations at 50 CFR 17.3 as an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering. Harm is defined by the same regulations as an act which actually kills or injures wildlife. Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavior patterns, including breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with the terms and conditions of this Incidental Take Statement.

The measures described below are non-discretionary, and must be undertaken by Caltrans so that they become binding conditions of any grant or permit issued to the applicant, as appropriate, for the exemption in section 7(o)(2) to apply. Caltrans has a continuing duty to regulate the activity covered by this incidental take statement. If Caltrans (1) fails to assume and implement the terms and conditions or (2) fails to require the applicant to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, the protective coverage of section 7(o)(2) may lapse. In order to monitor the impact of incidental take, Caltrans must report the progress of the action and its impact on the species to the Service as specified in the incidental take statement [50 CFR §402.14(i)(3)].

Amount or Extent of Take

California Red-Legged Frog

The Service anticipates that incidental take of the California red-legged frog may occur as a result of capture, injury, or mortality. Losses of California red-legged frog may be difficult to quantify due to seasonal fluctuations in their numbers, random environmental events, changes in water regime at their breeding ponds, or additional environmental disturbances. Furthermore, finding an injured or dead California red-legged frog is unlikely due to their relatively small body size, cryptic coloration, rapid carcass deterioration, and likelihood the remains will be removed by a scavenger or indistinguishable amongst the disturbed soil and debris. Therefore, we are providing a mechanism to quantify when take of this listed species would be considered to be exceeded as a result of implementation: we will use detection of one dead or injured California red-legged frog as the level of injurious and lethal take permitted. Additionally, if frogs are observed healthy and require relocation, we will use the capture and relocation of three California red-legged frogs as the level of take permitted. We believe that if this level of take is exceeded then likely other California red-legged frogs have also been adversely affected by the proposed project but not detected. If more than one California red-legged frog is injured or killed as a result of the proposed Arroyo de la Laguna Bridge Project, or more than three California red-legged frogs are captured and relocated, then take is exceeded and, as provided in 50 CFR §402.16, reinitiation of formal consultation would be required to determine appropriate measures to further minimize the effect of take of listed species.

Alameda Whipsnake

The Service anticipates that incidental take of the Alameda whipsnake will be difficult to detect due to their small size, wariness, and cryptic nature. The project footprint includes vegetative cover, rocks, and debris which provide cover for Alameda whipsnake. Finding an injured or dead Alameda whipsnake is unlikely due to their relatively small body size, rapid carcass deterioration, and likelihood that the remains will be removed by a scavenger or indistinguishable amongst the disturbed soil and debris. Losses of Alameda whipsnake may also be difficult to quantify due to a lack of baseline survey data and seasonal/annual fluctuations in their numbers due to environmental or human-caused disturbances. Therefore, we are providing a mechanism to quantify when take of this listed species would be considered to be exceeded as a result of implementation: we will use detection of one injured or killed Alameda whipsnake as the level of injurious and lethal take permitted. Additionally, if snakes are observed healthy and require relocation, we will use the capture and relocation of two Alameda whipsnakes as the level of take permitted. We believe that if this level of take is exceeded then likely other Alameda whipsnakes have also been adversely affected by the proposed project but not detected. If more than one Alameda whipsnake is injured or killed as a result of the proposed Arroyo de la Laguna Bridge Project, or more than two Alameda whipsnakes are captured and relocated, then take is exceeded and, as provided in 50 CFR §402.16, reinitiation of formal consultation would be required to determine appropriate measures to further minimize the effect of take of listed species.

Upon implementation of the following *Reasonable and Prudent Measures*, the incidental take of California red-legged frogs and Alameda whipsnakes associated with the proposed project in proportion to the amount and type of take outlined above will become exempt from the prohibitions described under section 9 of the Act. No other forms of take are exempted under this opinion.

Effect of the Take

In the accompanying biological opinion, the Service determined that this level of anticipated take is not likely to result in jeopardy to the species.

Reasonable and Prudent Measures

The Service believes the following reasonable and prudent measure is necessary and appropriate to minimize incidental take of the California red-legged and Alameda whipsnake:

1) All conservation measures, as described in the biological assessment and restated here in the Description of the Proposed Action section of this biological opinion, shall be fully implemented and adhered to. Further, this reasonable and prudent measure shall be supplemented by the terms and conditions below.

Terms and Conditions

In order to be exempt from the prohibitions of section 9 of the Act, Caltrans must ensure compliance with the following terms and conditions, which implement the reasonable and prudent measure described above. These terms and conditions are nondiscretionary.

The following *Terms and Conditions* implement the *Reasonable and Prudent Measure*:

1. Caltrans shall include language in their contracts that expressly requires contractors and subcontractors to work within the boundaries of the project footprint identified in this biological opinion, including staging and access.

2. Each California red-legged frog and Alameda whipsnake encounter shall be treated on a case-by-case basis in coordination with the Service but general guidance is as follows: (1) leave the non-injured animal if it is not in danger or (2) move the animal to a nearby location if it is in danger.

   These two options are further described as follows:

   1) When one of the two listed animals is encountered in the action area the first priority is to stop all activities in the surrounding area that have the potential to result in the harm, harassment, injury, or death of the individual. Then the monitor needs to assess the situation in order to select a course of action that will minimize adverse effects to the individual. Contact the Service once the site is secure. The contacts for this situation are Ryan Olah (ryan_olah@fws.gov) or Meghan Bishop (meghan_bishop@fws.gov). Contact the Service prior to the start of construction to confirm the status of this contact information.

      Avoid contact with the animal and allow it to move out of the project footprint and hazardous situations on its own to a safe location. The animal should not be picked up and moved because it is not moving fast enough or it is inconvenient for the construction schedule. This guidance only applies to situations where an animal is encountered on the move during conditions that make their upland travel feasible. This does not apply to animals that are uncovered or otherwise

exposed or in areas where there is not sufficient adjacent habitat to support the life history of the animal should they move outside the construction footprint.

Avoidance is the preferred option if the animal is not moving and is using aquatic habitat or is within some sort of burrow or other refugia. The area should be well marked for avoidance by construction and a Service-Approved Biological Monitor should be assigned to the area when work is taking place nearby.

2) The animal should be captured and moved when it is the only option to prevent its death or injury.

If appropriate habitat is located immediately adjacent to the capture location then the preferred option is short distance relocation to that habitat. This must be coordinated with the Service but the general guidance is the animal should not be moved outside of the area it would have traveled on its own. Under no circumstances should an animal be relocated to another property without the owner's written permission. It is Caltrans' responsibility to arrange for that permission.

The release must be coordinated with the Service and will depend on where the individual was found and the opportunities for nearby release. In most situations the release location is likely to be into the mouth of a small burrow or other suitable refugia and in certain circumstances pools without non-native predators may be suitable.

Only Service-Approved Biological Monitors for the proposed project can capture California red-legged frog and Alameda whipsnake. Nets or bare hands may be used to capture California red-legged frogs, Alameda whipsnakes may be captured by bare hands or with snake tongs. Soaps, oils, creams, lotions, repellents, or solvents of any sort cannot be used on hands within 2 hours before and during periods when they are capturing and relocating California red-legged frog and Alameda whipsnake. To avoid transferring disease or pathogens between sites during the course of surveys or handling California red-legged frog, Service-Approved Biological Monitors must use the following guidance for disinfecting equipment and clothing. These recommendations are adapted from the *Declining Amphibian Population Task Force's Code* (http://www.open.ac.uk/daptf/).

i. All dirt and debris, including mud, snails, plant material (including fruits and seeds), and algae, must be removed from nets, traps, boots, vehicle tires and all other surfaces that have come into contact with water and/or an amphibian. Cleaned items should be rinsed with fresh water before leaving each site.

ii. Boots, nets, traps, etc., must then be scrubbed with either a 70 percent ethanol solution, a bleach solution (0.5 to 1.0 cup of bleach to 1.0 gallon of water), QUAT 128 (quaternary ammonium, use 1:60 dilution), or a 6 percent sodium hypochlorite 3 solution and rinsed clean with water between sites. Avoid cleaning equipment in the immediate vicinity of a

pond or wetland. All traces of the disinfectant must be removed before entering the next aquatic habitat.

iii. Used cleaning materials (liquids, etc.) must be disposed of safely, and if necessary, taken back to the lab for proper disposal.

iv. Service-Approved Biological Monitors must limit the duration of handling and captivity. If required to be in captivity, California red-legged frog shall be kept in a cool, dark, moist, aerated environment, such as a clean and disinfected bucket or plastic container with a damp sponge. Containers used for holding or transporting should not contain any standing water. Alameda whipsnakes should be kept in a cloth bag to reduce stress and maintained at a moderate temperature.

3. If requested, before, during, or upon completion of groundbreaking and construction activities, Caltrans shall allow access by Service personnel into the project footprint to inspect the proposed project and its activities.

Reporting Requirements

In order to monitor whether the amount or extent of incidental take anticipated from implementation of the proposed project is approached or exceeded, Caltrans shall adhere to the following reporting requirements. Should this anticipated amount or extent of incidental take be exceeded, Caltrans must reinitiate formal consultation as per 50 CFR 402.16.

1. Notification of injured or dead listed species will be made to the Coast-Bay Division Supervisor at the Sacramento Fish and Wildlife Office Ryan Olah (ryan_olah@fws.gov) or District 4 Caltrans Liaison Meghan Bishop (meghan_bishop@fws.gov). When an injured or dead individual of the listed species is found, Caltrans shall follow the steps outlined in the following *Salvage and Disposition of Individuals* section.

2. Sightings of any listed or sensitive animal species should be reported to the CNDDB (http://www.dfg.ca.gov/biogeodata/cnddb/).

3. Construction compliance reports will be addressed to the Coast-Bay Division Supervisor at the SFWO.

4. Caltrans shall submit post-construction compliance reports prepared by the Service-Approved Biological Monitor to the Service within 60 calendar days following completion of each project phase 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 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.

Salvage and Disposition of Individuals:

Listed species found injured will be cared for by a licensed veterinarian or a wildlife rehabilitation facility. After hours, interim care may be provided by another experienced person, including the Service-Approved Biological Monitor, until the animal can be delivered to a facility. Dead individuals must be sealed in a resealable plastic bag containing a paper with the date and time when the animal was found, the location where it was found, and the name of the person who found it. The bag containing the specimen should be stored in a freezer located in a secure site, until instructions are received from the Service regarding the disposition of the dead specimen.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information. The Service recommends the following actions:

1) Caltrans District 4 should work with the Service to develop a conservation strategy that would identify the current safe passage potential along Bay Area highways and the areas where safe passage for wildlife could be enhanced or established.

2) Caltrans should assist the Service in implementing recovery actions identified in the Draft Recovery Plan for Chaparral and Scrub Community Species East of San Francisco Bay, California (Service 2003) and Recovery Plan for the California Red-legged Frog (Service 2002).

3) Caltrans should consider participating in the planning for a regional habitat conservation plan for the California red-legged frog and Alameda whipsnake, and other listed species and special-status species.

4) Caltrans should consider establishing functioning conservation banking systems to further the conservation of the Alameda whipsnake, California red-legged frog, and other appropriate species. Such banking systems also could possibly be utilized for other required mitigation (i.e., seasonal wetlands, riparian habitats, etc.) where appropriate. Efforts should be made to preserve habitat along roadways in association with wildlife crossings.

5) Roadways can constitute a major barrier to critical wildlife movement. Therefore, Caltrans should incorporate culverts, tunnels, or bridges on highways and other roadways that allow safe passage by the California red-legged frog, Alameda whipsnake, and other wildlife. Photographs, plans, and other information should be included in the BAs if "wildlife friendly" crossings are incorporated into projects. Efforts should be made to establish upland culverts designed specifically for wildlife movement rather than accommodations for hydrology. Transportation agencies should also acknowledge the value of enhancing human safety by providing safe passage for wildlife in their early project design.

6) Adequate wildlife road mortality data is a critical factor in assessing where wildlife and the travelling public are most at risk due to animal-vehicle collision along California's highways. Caltrans should make its wildlife road mortality data available or provide it to a database service such as the California Roadkill Observation System (https://www.wildlifecrossing.net/california/) to enhance road ecology-based planning, add to our resources of "best available science", and increase public safety.

7) Caltrans should ensure that their container plants used for restoration are sourced from nurseries utilizing the Working Group for Phytophthoras in Native Habitats' Guidelines to Minimize Phytophthora Pathogens in Restoration Nurseries (available at http://www.suddenoakdeath.org/wp-content/uploads/2016/04/Restoration.Nsy_.Guidelines.final_.092216.pdf).

8) To avoid and minimize effects to the western monarch butterfly, all native milkweed host plants should be flagged and avoided to the extent feasible. Post-construction suitable native milkweed host plants and adult nectar plants for the western monarch butterfly should be restored within suitable grassland habitat that would not be further disturbed. No milkweed plants should be planted within 5 miles of overwintering habitat for the western monarch butterfly along the California Coast to encourage the natural migratory behavior of the monarch butterfly.

In order for the Service to be kept informed of actions minimizing or avoiding adverse effects or benefiting listed species or their habitats, the Service requests notification of the implementation of any conservation recommendations.

REINITIATION—CLOSING STATEMENT

This concludes formal consultation on the proposed Arroyo de la Laguna Bridge Project. As provided in 50 CFR §402.16, reinitiation of consultation is required and shall be requested by the federal agency or by the Service where discretionary federal involvement or control over the action has been retained or is authorized by law, and:

1) If the amount or extent of taking specified in the incidental take statement is exceeded;

2) If new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered;

3) If the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion; or written concurrence, or

4) If a new species is listed or critical habitat designated that may be affected by the identified action.

If you have any questions regarding this biological opinion, please contact Meghan Bishop (meghan_bishop@fws.gov) or Ryan Olah (ryan_olah@fws.gov), at the letterhead address or at (916) 414-6623 or both.

Sincerely,

MEGHAN SNOW

Digitally signed by MEGHAN SNOW
Date: 2021.11.12 08:34:52 -08'00'

Meghan Snow
Acting Field Supervisor

ec:
Robert Stanley, California Department of Fish and Wildlife, Fairfield, California
Nicole Christie and Matthew Rechs, Caltrans District 4, Oakland, California

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Appendix M Farmland Conversion Impact Rating Form

U.S. DEPARTMENT OF AGRICULTURE
Natural Resources Conservation Service

NRCS-CPA-106
(Rev. 1-91)

FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

PART I *(To be completed by Federal Agency)*	3. Date of Land Evaluation Request 11/3/21	4. Sheet 1 of 1
1. Name of Project **Arroyo de la Laguna Bridge Project**	5. Federal Agency Involved **FHWA**	
2. Type of Project **Transportation**	6. County and State **Alameda County, CA**	
PART II *(To be completed by NRCS)*	1. Date Request Received by NRCS 11/3/21	2. Person Completing Form Philip Smith
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form) YES ☑ NO ☐		4. Acres Irrigated 7,511 / Average Farm Size 411
5. Major Crop(s) **Livestock & Poultry, Fruit, Nuts, Vegetables**	6. Farmable Land in Government Jurisdiction Acres: 174, 343 % 33.2	7. Amount of Farmland As Defined in FPPA Acres: 109,050 % 20.8
8. Name Of Land Evaluation System Used **California Revised Storie Index**	9. Name of Local Site Assessment System **None**	10. Date Land Evaluation Returned by NRCS 11/19/21

PART III *(To be completed by Federal Agency)*	Alternative Corridor For Segment			
	Corridor A	Corridor B	Corridor C	Corridor D
A. Total Acres To Be Converted Directly	0.73			
B. Total Acres To Be Converted Indirectly, Or To Receive Services	0.00			
C. Total Acres In Corridor				
PART IV *(To be completed by NRCS) Land Evaluation Information*				
A. Total Acres Prime And Unique Farmland	0.73			
B. Total Acres Statewide And Local Important Farmland	0			
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	0.0007			
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	2.95			
PART V *(To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)*	96			
PART VI *(To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))* — Maximum Points				
1. Area in Nonurban Use — 15				
2. Perimeter in Nonurban Use — 10				
3. Percent Of Corridor Being Farmed — 20				
4. Protection Provided By State And Local Government — 20				
5. Size of Present Farm Unit Compared To Average — 10				
6. Creation Of Nonfarmable Farmland — 25				
7. Availablility Of Farm Support Services — 5				
8. On-Farm Investments — 20				
9. Effects Of Conversion On Farm Support Services — 25				
10. Compatibility With Existing Agricultural Use — 10				
TOTAL CORRIDOR ASSESSMENT POINTS — 160	0	0	0	0
PART VII *(To be completed by Federal Agency)*				
Relative Value Of Farmland (From Part V) — 100	96	0	0	0
Total Corridor Assessment (From Part VI above or a local site assessment) — 160	0	0	0	0
TOTAL POINTS *(Total of above 2 lines)* — 260	96	0	0	0

1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used?
State Route 84	0.73		YES ☐ NO ☑

5. Reason For Selection:

In order to limit impacts to Sunol Glen Elementary School to the north of the project and the Sunol Water Temple entry gates to the east of the project, project design requires acquisition of a portion of the southern property with designated Prime Farmland.

Signature of Person Completing this Part: | DATE

NOTE: Complete a form for each segment with more than one Alternate Corridor

Clear Form

Appendix N State Historic Preservation Officer Concurrence Letter

State of California • Natural Resources Agency — Gavin Newsom, *Governor*

DEPARTMENT OF PARKS AND RECREATION — Armando Quintero, *Director*
OFFICE OF HISTORIC PRESERVATION
Julianne Polanco, State Historic Preservation Officer
1725 23rd Street, Suite 100, Sacramento, CA 95816-7100
Telephone: (916) 445-7000 FAX: (916) 445-7053
calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov

November 22, 2021

VIA ELECTRONIC MAIL

Reply in Reference To: FHWA_2019_1125_001

Ms. Helen Blackmore
Acting Chief, Office of Cultural Resource Studies
California Department of Transportation, District 4
111 Grand Avenue
P.O. BOX 23660
Mail Station 8-A
Oakland, CA 94623-0660

Subject: Continuing Consultation on the Addendum to the Finding of Adverse Effect for the Arroyo de la Laguna Bridge Project, on State Route 84, Alameda County, California.

Dear Ms. Blackmore:

The Office of Historic Preservation (OHP) is in receipt of a November 5, 2021 letter from the California Department of Transportation (Caltrans), District 4 continuing consultation with the State Historic Preservation Officer (SHPO) regarding the above referenced undertaking in accordance with the January 1, 2014 *First Amended Programmatic Agreement Among the Federal Highway Administration (FHWA), the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (Section 106 PA) and the 2015 *Memorandum of Understanding between the California Department of Transportation and the California State Historic Preservation Officer Regarding Compliance with Public Resources Code Section 5024 and Governor's Executive Order W-26-92*, addended 2019 (5024 MOU). Pursuant to Stipulation X.C.2 of the Section 106 PA, Caltrans is seeking SHPO comment on a finding of effect for the proposed undertaking.

On October 25, 2021, the SHPO submitted a letter to Caltrans, District 4 seeking further information on the current integrity of CA-ALA-677/H and whether it remains eligible under Criterion D of the National Register of Historic Places (NRHP) following adverse effects to the property from the separate federal undertaking, the Caltrans Niles Canyon Medium Term Safety Improvements project (Medium Term Safety) (FHWA041116A) and data recovery efforts conducted at CA-ALA-677/H in the Spring of 2021 to mitigate adverse effects resulting from the Medium Term Safety project. The SHPO also stated in the October 25, 2021 letter that comments on Caltrans' finding of adverse effect for

the Arroyo de la Laguna Bridge project would be withheld pending further consultation on the reevaluation of CA-ALA-677/H. In response to the SHPO's comments, Caltrans, District 4 has submitted the November 2021 *Addendum to the Finding of Adverse Effect Arroyo de la Laguna Bridge Project Alameda County, State Route 84* (Addendum FAE) with their November 5, 2021 letter.

The Addendum FAE contains a summary of prior archaeological identification efforts conducted at CA-ALA-677/H from 2014 and up to the most recent Phase III data recovery efforts for the Medium Term Safety project. The Addendum FAE also contains the results of Caltrans' 2019 Extended Phase I (XPI) identification efforts conducted within portions of CA-ALA-677/H to be affected by the current Arroyo de la Laguna Bridge project and not subject to prior testing or Phase III data recovery efforts for the Medium Term Safety project. Based on the results of the 2019 XPI testing, Caltrans asserts that the portion of CA-ALA-677/H that remains uninvestigated and within the area of direct impact (ADI) of the current Arroyo de la Laguna Bridge project has the potential to yield data sets with the ability to address research questions regarding Settlement Patterns and Seasonality; Diet and Health; and Trade and Exchange. Therefore, Caltrans argues that CA-ALA-677/H continues to retain integrity under Criterion D is likely to yield robust archaeology deposits and intact Native American human burials that contribute to our understanding of the prehistory of the region. Following a review of the Addendum FAE, I find the supplemental information provided by Caltrans, District 4 to be sufficient, and I have no further questions or comments on the current integrity of CA-ALA-677/H or its ability to further yield data sets that contribute to its significance under Criterion D of the NRHP.

In accordance with Stipulation X.A of the Section 106 PA, Caltrans, District 4 has applied the Criteria of Adverse Effect set forth in 36 CFR §800.5(a)(1) and finds that the undertaking will result in an adverse effect to CA-ALA-677/H due to the excavation of bridge abutments, relocation of utilities, widening of State Route 84, installation and replacement of guardrails, and the construction and use of a northeastern access road. Caltrans states that effects to P-01-002192, the Sunol Water Temple and Associated Structures (including the entry gates), will be avoided through the establishment of an Environmentally Sensitive Area (ESA). I agree that effects to P-01-002192 will be avoided through the establishment of an ESA and that indirect effects will not affect the historic significance of the property. Pursuant to Stipulation X.C.2 of the Section 106 PA, Caltrans is requesting SHPO comment on a finding of adverse effect for the undertaking as a whole. Following a review of the documentation provided to-date, **I agree** with this finding.

In accordance with Stipulation XI of the Section 106 PA, Caltrans will continue consultation with the SHPO on the resolution of adverse effects as a result of this undertaking through the development of a Memorandum of Agreement and Historic Property Treatment Plan.

If you require further information, please contact Associate State Archaeologist Alicia Perez at Alicia.Perez@parks.ca.gov.

Sincerely,

Julianne Polanco
State Historic Preservation Officer

Appendix O Memorandum of Agreement

MEMORANDUM OF AGREEMENT
BETWEEN THE CALIFORNIA DEPARTMENT OF TRANSPORTATION AND
THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER
REGARDING THE ARROYO DE LA LAGUNA BRIDGE PROJECT, ALAMEDA COUNTY, CALIFORNIA

WHEREAS, pursuant to §23 U.S.C. the Federal Highway Administration (FHWA), has assigned and California Department of Transportation (Caltrans) (including all subordinate divisions defined below) has assumed FHWA responsibility for environmental review, consultation, and coordination under the provisions of the *Memorandum of Understanding (MOU) between the Federal Highway Administration and the California Department of Transportation Concerning the State of California's Participation in the Project Delivery Program Pursuant to 23 U.S.C. 327*, which became effective on December 23, 2016, and applies to this undertaking; and

WHEREAS, pursuant to the January 2014 *First Amended Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (Section 106 PA), Caltrans is deemed to be a federal agency for all highway-aid projects it has assumed, and in that capacity Caltrans has assigned the role of "agency official" to the Caltrans Division of Environmental Analysis (DEA) Chief for the purpose of compliance with 36 CFR § 800. The responsibility for oversight, day-to-day responsibilities, and coordination of the Section 106 process are further delegated to the DEA Cultural Studies Office (CSO) Chief; and

WHEREAS, Caltrans proposes to implement the federally funded Arroyo de la Laguna Bridge Project (Undertaking) in Alameda County, California. The project will maintain connectivity and provide a safe highway facility by replacing the Arroyo de la Laguna Bridge as described in Attachment A; and

WHEREAS, the Undertaking's Area of Potential Effects (APE) in Attachment B includes all areas where work is proposed and the known or reasonably anticipated boundaries of any built environment or archaeological resources which may experience direct or indirect effects as a result of the Undertaking; and

WHEREAS, Caltrans has determined that the Undertaking will have an adverse effect on CA-ALA-677/H, a property determined to be eligible for inclusion in the National Register of Historic Places (National Register) under Criterion D (with

concurrence from the California State Historic Preservation Officer), and therefore is a historic properties as defined at 36 CFR § 800.16(il)(1); and

WHEREAS, Caltrans has determined that the Undertaking will have no adverse effect on the Sunol Water Temple and Associated Structures, a property determined to be eligible for inclusion in the National Register under Criterion C; and

WHEREAS, Caltrans has thoroughly considered alternatives to the Undertaking and has determined, in consultation with the California State Historic Preservation Officer (SHPO), that the statutory and regulatory requirements on the design of the Undertaking preclude the possibility of avoiding adverse effects to CA-ALA-677/H during the Undertaking's implementation, and has further determined that the execution and implementation of this Memorandum of Agreement (MOA) will take into account the adverse effects of the Undertaking; and

WHEREAS, Caltrans has consulted with the SHPO pursuant to Stipulations X.C, and XI of the Section 106 PA, and where the Section 106 PA so directs, in accordance with 36 CFR § 800, the regulation that implements Section 106 of the National Historic Preservation Act (NHPA) of the 1966 (16 U.S.C. 470f), as amended, regarding the Undertaking's effects on historic properties and will file a copy of this MOA with the Advisory Council on Historic Preservation (ACHP) in accordance with Stipulation X.C.3.b of the Section 106 PA; and

WHEREAS, Caltrans has consulted with the Alameda County Planning, Washington Township Museum of Local History, Mission Peak Heritage Foundation and Alameda County Historical Society, regarding the Undertaking and its effects on historic properties; Caltrans will continue to consult with them in the implementation of the Undertaking itself and this MOA; and

WHEREAS, Caltrans has consulted with representatives from the Costanoan Rumsen Carmel Tribe, Amah Mutsun Tribal Band of Mission San Juan Bautista, Muwekma Ohlone Indian Tribe of the SF Bay Area, Indian Canyon Mutsun Band of Costanoan, the Ohlone Indian Tribe and the North Valley Yokuts-Bay Miwok Tribe regarding the effects of the Undertaking; Caltrans will continue to consult with them and will afford them, should they so desire, further opportunity to more directly and actively participate in the implementation of the Undertaking itself and this MOA; and

WHEREAS, the Muwekma Ohlone Indian Tribe of the SF Bay Area and the Ohlone/Costanoan-Northern Valley Yokuts-Bay Miwok have participated in the consultation and are participating as concurring parties; and

WHEREAS, Caltrans District 4 have participated in the consultation, have a responsibility to fulfill the terms of this MOA, and are participating as invited signatories; and

NOW, THEREFORE, Caltrans and the SHPO agree that if the Undertaking proceeds, the Undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the Undertaking on historic properties, and further agrees that these stipulations shall govern the Undertaking and all of its parts until this MOA expires or is terminated.

STIPULATIONS

Caltrans shall ensure that the following stipulations are carried out:

I. AREA OF POTENTIAL EFFECTS

A. The Undertaking's APE was established in accordance with Stipulation VIII.A of the Section 106 PA and is depicted in Attachment B of this MOA. The APE was delineated to include all areas where work is proposed, including the known or reasonably anticipated boundaries of archaeological and cultural properties and any locations where construction activities will take place.
B. If Caltrans determines that additional APE revisions are necessary, Caltrans shall inform the parties of the MOA of the revisions and consult no more than fifteen (15) days to reach agreement on the proposed revisions. If Caltrans, the SHPO, and other appropriate signatories cannot reach such an agreement, then the parties to this MOA shall resolve the dispute in accordance with VI.C below. If all parties reach mutual agreement on the proposed revisions, Caltrans will submit a new APE map reflecting the revisions, consistent with Stipulation VIII.A and Attachment 3 of the Section 106 PA, no later than thirty (30) days following such agreement. Any further investigation or document necessitated by the revised APE will follow the procedures for the identification and evaluation of potential historic properties as specified in Stipulation VIII of the Section 106 PA and in accordance with 36 §CFR 800.4(a)(2-4) and 88.4(b). The amendment of the APE will not require amendment to the MOA. The revised APE and supporting documentation shall be incorporated into Attachment B to this MOA.

II. TREATMENT OF HISTORIC PROPERTIES

Caltrans shall ensure that inadvertent effects are avoided and adverse effects of the Undertaking on CA-ALA-677/H are resolved through the following measures.

A. Historic Property Treatment Plan

1. Caltrans shall ensure that the adverse effects of the Undertaking on archaeological site CA-ALA-677/H are resolved by implementing the October 2021 Historic Property Treatment Plan for CA-ALA-677/H (P-04-0011540) for the Arroyo de la Laguna Bridge Project, Alameda County, California (HPTP) that is Attachment C of this MOA. Data recovery is prescribed for archaeological deposits contributing to the National Register eligibility of this historic property adversely affected by construction activities.
    a. Caltrans will develop a Data Recovery Proposal (DPR) following the Project Specification and Estimates phase and prior to construction. The DRP will outline specific protocols for data recovery at CA-ALA-677/H. Caltrans will submit the draft DRP to all consulting parties and invited signatories to this MOA for review and comment for a period of 30 days. If the SHPO does not respond within 30 days Caltrans may consider the submitted report as final. The SHPO may request a 15-day extension, if needed. Caltrans will take all comments and concerns into consideration before issuing a final DRP
2. Portions of CA-ALA-677/H that will not be adversely affected by the Undertaking will be established as ESAs and work within these areas will be prohibited or restricted and monitored. Archaeological Monitoring Areas (AMAs) will also be established for areas immediately adjacent to the known site boundaries where work will occur. Further detail is provided in Attachment C of this MOA.
3. Caltrans shall develop a construction Environmental Awareness Training and Cultural Sensitivity Training for Alameda County covering cultural resource laws, best practices, and management, identifying possible cultural resources in the field, and procedures. Trainings will incorporate Tribal views on cultural sensitivity and respectful conduct while working on culturally sensitive sites. Further detail is provided Attachment C of this MOA.
4. Any party to this MOA may propose to amend the Treatment Plan. Such amendment will not require amendment of this MOA. Consultation on Treatment Plan amendments will be no longer than 30 days in duration beginning upon receipt of proposed amendments by consulting parties.
5. In the event that disputes regarding amendments proposed hereunder arise, they shall be addressed through the process outlined in Stipulation VI.C of this MOA.

6. Caltrans will not authorize the execution of any Undertaking activity that may adversely affect historic properties in the Undertaking's APE prior to the implementation and completion of the fieldwork that the Treatment Plan prescribes.

B. Reporting Requirements and Related Reviews

1. Within eighteen (18) months after Caltrans, District 4 has determined that all fieldwork required by Stipulation II has been completed, Caltrans will ensure preparation, and subsequent distribution to Caltrans Cultural Studies Office (CSO) and any participating representatives of the Ohlone community for review and comment, a draft technical report that documents the results of implementing and completing the Treatment Plan. These parties will be afforded thirty (30) days following receipt of the draft technical report to submit any written comments to District 4. Failure to respond within this time frame shall not preclude District 4 from authorizing revisions to the draft technical report as District 4 may deem appropriate.
2. District 4 will take all comments into account in revising the technical report and submit a final version to CSO for approval. Upon approval, CSO will transmit the technical report to the SHPO along with any comments from the Ohlone community that were not addressed in the report. The SHPO will have thirty (30) days to comment on the report. If the SHPO does not respond within thirty (30) days Caltrans may consider the submitted report as final. The SHPO may request a fifteen (15) day extension if needed.
3. Copies of the final technical report documenting the results of the Treatment Plan implementation will be distributed by District 4 to the SHPO, participating Native Americans, and to the Northwest Information Center of the California Historical Resources Information System.

III. NATIVE AMERICAN CONSULTATION

Caltrans has consulted with the Muwekma Ohlone Tribe of the San Francisco Bay Area and the Ohlone/Costanoan-Northern Valley Yokuts-Bay Area Miwok (Nototomne Tribe) regarding the proposed Undertaking and its effects on historic properties, will continue to consult with them, and will afford them, should they so desire, the opportunity to participate in the implementation of this MOA and the Undertaking. If other tribes or Native American groups who attach religious or cultural significance to historic properties that may be affected by this Undertaking are identified, Caltrans will invite them to participate as consulting parties as the Section 106 process moves forward.

IV. TREATMENT OF HUMAN REMAINS

As legally mandated, human remains and related items discovered during implementation of the terms of this Agreement and the Undertaking will be treated in accordance with the requirements of Health and Safety Code Section 7050.5(b). If pursuant to Health and Safety Code § 7050.5(c), the coroner determines that the human remains are or may be those of a Native American, then the discovery shall be treated in accordance with the provisions of Public Resources Code § 5097.98 (a)(d).

Caltrans, as the landowner of a portion of the APE, shall ensure, to the extent possible, that the views of the Most Likely Descendent(s), as determined by the Native American Heritage Commission (NAHC), is taken into consideration when decisions are made about the disposition of Native American human remains and associated objects.

V. DISCOVERIES AND UNANTICIPATED EFFECTS

If Caltrans determines, during implementation of the terms of this MOA or after construction of the Undertaking has commenced, that the Undertaking will affect a previously unidentified property that may be eligible for listing in the National Register or affect a known historic property in an unanticipated manner, Caltrans will address the discovery or unanticipated effect in accordance with attachment C of this MOA.

VI. ADMINSTRATIVE PROVISIONS

A. Standards

1. **Definitions.** The definitions provided at 36 CFR § 800.16 are applicable throughout this MOA.
2. Parties to this agreement are defined as follows:
   a. Signatory parties have the sole authority to execute, amend, or terminate the MOA.
   b. Invited Signatories have the authority to amend or terminate the MOA.
   c. Concurring parties, signing the MOA do so to acknowledge their agreement or concurrence with the MOA, but have no legal authority under the MOA to terminate or amend this MOA. Concurring with the terms of this MOA does not constitute their agreement with the Undertaking.
3. **Professional Qualifications.** Caltrans will ensure that only individuals meeting the *Secretary of the Interior's Professional Qualification Standards* (48 FR 44738-39) as defined in Attachment 1 of the Section

106 PA, in the relevant field of study carry out or review appropriateness and quality of the actions and products required by Stipulations I, II, III, IV, and V in this MOA. However, nothing in this stipulation may be interpreted to preclude Caltrans or any agent or contractor thereof from using persons who do not meet the PQS as long as they are directly supervised by professionals who meet the standards.

4. **Documentation Standards.** Written documentation of activities prescribed by Stipulations I, II, III, IV, and V of this MOA shall conform to *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation* (48 FR 44716-44740) as well as to applicable standards and guidelines established by the SHPO.
5. **Curation and Curation Standards.** If legal owner(s) of materials resulting from the activities presented by this MOA choose to curate those materials, Caltrans shall ensure that, to the extent permitted under § 5097.98 and § 5097.991 of the California Public Resources Code and the Native American Graves Protection and Repatriation Act (NAGPRA) [25 USC 3001-3013] and its implementing regulations (43 CFR Part 10), the materials and records resulting from the activities prescribed by this MOA are curated in accordance with 36 CFR Part 79. Caltrans shall ensure that the views of the consulting parties are taken into consideration prior to decisions being made about the final disposition of archaeological materials resulting from activities prescribed by this MOA.

B. Confidentiality

The MOA parties acknowledge that the historic properties covered by this MOA are subject to the provisions of § 304 of the NHPA and § 6254.10 of the California Government Code (Public Records Act), relating to the disclosure of archaeological site information and, having so acknowledged, will ensure that all actions and documentation prescribed by this MOA are consistent with said sections.

C. Resolving Objections

1. Should any party to this MOA object at any time in writing to the manner in which the terms of this MOA are implemented, to any action carried out or proposed with respect to implementation of the MOA (other than the Undertaking itself), or to any documentation prepared in accordance with and subject to the terms of this MOA, Caltrans shall immediately notify the other MOA parties of the objection, request their comments on the objection within fifteen (15) days following receipt of Caltrans' notification, and proceed to consult with the objecting party for no more than thirty (30) days to resolve the objection. Caltrans will

honor the request of the other parties to participate in the consultation and will take any comments provided by those parties into account.

2. If the objection is resolved during the 30-day consultation period, Caltrans may proceed with the disputed action in accordance with the terms of such resolution.
3. If at the end of the 30-day consultation period, Caltrans determines that the objection cannot be resolved through such consultation, then Caltrans shall forward all documentation relevant to the objection to the ACHP, including Caltrans' proposed response to the objection, with the expectation that the ACHP will, within thirty (30) days after receipt of such documentation:
   a. Advise Caltrans that the ACHP concurs in Caltrans' proposed response to the objection, whereupon Caltrans will respond to the objection accordingly. The objection shall thereby be resolved; or
   b. Provide Caltrans with recommendations, which Caltrans will take into account in reaching a final decision regarding its response to the objection. The objection shall thereby be resolved; or
   c. Notify Caltrans that the objection will be referred for comment pursuant to 36 CFR § 800.7(c) and proceed to refer the objection and comment. Caltrans shall take the resulting comments into account in accordance with 36 CFR § 800.7(c)(4) and Section 110(1) of the NHPA. The objection shall thereby be resolved.
4. Should the ACHP not exercise one of the above options within 30 days after receipt of all pertinent documentation, Caltrans may proceed to implement its proposed response. The objection shall thereby be resolved.
5. Caltrans shall take into account any of the ACHP's recommendations or comments provided in accordance with this stipulation with reference only to the subject of the objection. Caltrans' responsibility to carry out all actions under this MOA that are not the subjects of the objection shall remain unchanged.
6. At any time during implementation of the measures stipulated in this MOA, should a member of the public raise an objection in writing pertaining to such implementation to any signatory party to this MOA, that signatory party shall immediately notify Caltrans. Caltrans shall immediately notify the other signatory parties in writing of the objection. Any signatory party may choose to comment in writing on the objection to Caltrans. Caltrans shall establish a reasonable time frame for this comment period. Caltrans shall consider the objection, and in reaching its decision, Caltrans will take all comments from the other signatory parties into account. Within fifteen (15) days following closure of the comment period, Caltrans will render a decision regarding the objection and respond to the objecting party. Caltrans will promptly notify the other signatory parties of its decision in writing, including a copy of the

response to the objecting party. Caltrans' decision regarding resolution of the objection will be final. Following issuance of its final decision, Caltrans may authorize the action subject to dispute hereunder to proceed in accordance with the terms of that decision.

7. Caltrans shall provide all parties to this MOA, and the ACHP, if the ACHP has commented, and any parties that have objected pursuant to this stipulation, with a copy of its final written decision regarding any objection addressed pursuant to this stipulation.
8. Caltrans may authorize any action subject to objection under this stipulation to proceed after the objection has been resolved in accordance with the terms of this stipulation.

D. Amendments

1. Any signatory party to this MOA may propose that this MOA be amended, whereupon all signatory parties shall consult for no more than thirty (30) days to consider such amendment. The amendment will be effective on the date a copy signed by all of the original signatories is filed with the ACHP. If the signatories cannot agree to appropriate terms to amend the MOA, any signatory may terminate the agreement in accordance with VI.E.
2. Attachments to this MOA may be amended through consultation as prescribed in I.B, as appropriate, without amending the MOA proper.

E. Termination

1. If this MOA is not amended as provided for in Section D of this stipulation, or if either signatory proposes termination of this MOA for other reasons, the signatory party proposing termination shall, in writing, notify the other MOA parties, explain the reasons for proposing termination, and consult with the other parties for at least thirty (30) days to seek alternatives to termination. Such consultation shall not be required if Caltrans proposes termination because the Undertaking no longer meets the definition set forth in 36 CFR § 800.16(y).
2. Should such consultation result in an agreement on an alternative to termination, the signatory parties shall proceed in accordance with the terms of that agreement.
3. Should such consultation fail, the signatory party proposing termination may terminate this MOA by promptly notifying the other MOA parties in writing. Termination hereunder shall render this MOA without further force or effect.
4. If this MOA is terminated hereunder, and if Caltrans determines that the Undertaking will nonetheless proceed, then Caltrans shall comply with

the requirements of 36 CFR 800.3-800.6, or request the comments of the ACHP pursuant to 36 CFR Part 800.

F. Annual Reporting

1. Caltrans shall prepare an Annual Report documenting actions carried out pursuant to this MOA. The reporting period shall commence one year from the date of execution. The Annual Report shall be distributed to all consulting parties to this MOA.
2. The Annual Report shall address the following: any scheduling changes proposed, historic property surveys and results, status of treatment and mitigation activities, ongoing and completed public programming, any uses that are affecting or may affect the ability of the federal lead agency to continue to meet the terms of this MOA, any disputes and objections received, and how they were resolved, and any additional parties who have become signatories or concurring parties to this MOA in the past year.
3. Caltrans District 4, shall coordinate a meeting of the signatories and consulting parties to this MOA, to be scheduled within ninety (90) calendar days of distribution of the Annual Report, or another mutually agreed upon date, to discuss activities carried out pursuant to this MOA during the preceding year and activities scheduled for the upcoming year. This meeting, should it be deemed unnecessary, may be cancelled by mutual consent of the signatory parties.

G. Duration

1. Unless terminated pursuant to Section E of this Stipulation, or unless it is superseded by an amended MOA, this MOA will be in effect following execution by the signatory parties until Caltrans, in consultation with the other signatory parties, determines that all of its stipulations have been satisfactorily fulfilled. This MOA will terminate and have no further force or effect on the day that Caltrans notifies the other MOA signatories in writing of its determination that all stipulations of this MOA have been satisfactorily fulfilled.
2. The terms of this MOA shall be satisfactorily fulfilled within five (5) years following the date of execution by the signatory parties. If Caltrans determines that this requirement cannot be met, the MOA parties will consult to reconsider its terms. Reconsideration may include continuation of the MOA as originally executed, amendment of the MOA, or termination. In the event of termination, Caltrans will comply with Section E of this Stipulation if it determines that the Undertaking will proceed notwithstanding termination of this MOA.
3. If the Undertaking has not been implemented within five (5) years following execution of this MOA, this MOA shall automatically terminate

and have no further force or effect. In such event, Caltrans shall notify the other signatory parties in writing and, if it chooses to continue with the Undertaking, shall reinitiate review of the Undertaking in accordance with 36 CFR Part 800.

H. Effective Date

This MOA will take effect on the date that it has been executed by Caltrans and the SHPO.

EXECUTION of this MOA by Caltrans and the SHPO, its filing with the ACHP in accordance with 36 CFR §800.6(b)(1)(iv), and subsequent implementation of its terms, shall evidence, pursuant to 36CFR§800.6(c), that this MOA is an agreement with the ACHP for purposes of Section 110(l) of the NHPA, and shall further evidence that Caltrans has afforded the ACHP an opportunity to comment on the Undertaking and its effects on historic properties, and that Caltrans has taken into account the effects of the Undertaking on historic properties.

MEMORANDUM OF AGREEMENT
BETWEEN THE CALIFORNIA DEPARTMENT OF TRANSPORTATION AND
THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER
REGARDING THE ARROYO DE LA LAGUNA BRIDGE PROJECT
IN ALAMEDA COUNTY, CALIFORNIA

SIGNATORY:

CALIFORNIA OFFICE OF HISTORIC PRESERVATION

By _____ Date 12/6/2021

Julianne Polanco
State Historic Preservation Officer

MEMORANDUM OF AGREEMENT
BETWEEN THE CALIFORNIA DEPARTMENT OF TRANSPORTATION AND
THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER
REGARDING THE ARROYO DE LA LAGUNA BRIDGE PROJECT
IN ALAMEDA COUNTY, CALIFORNIA

SIGNATORIES CONTINUED:

CALIFORNIA DEPARTMENT OF TRANSPORTATION

By Philip J. Stolarski Date 12/06/2021
Philip J. Stolarski, Division Chief
Caltrans Division of Environmental Analysis

BETWEEN THE CALIFORNIA DEPARTMENT OF TRANSPORTATION AND THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER REGARDING THE ARROYO DE LA LAGUNA BRIDGE PROJECT IN ALAMEDA COUNTY, CALIFORNIA

INVITED SIGNATORIES:

CALIFORNIA DEPARTMENT OF TRANSPORTATION DISTRICT 4

Dtawansy 12/09/2021 Date

Dina El-Tawansy
District Director

MEMORANDUM OF AGREEMENT
BETWEEN THE CALIFORNIA DEPARTMENT OF TRANSPORTATION AND
THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER
REGARDING THE ARROYO DE LA LAGUNA BRIDGE PROJECT
IN ALAMEDA COUNTY, CALIFORNIA

CONCURRING PARTIES:

MUWEKMA OHLONE TRIBE OF THE SAN FRANCISCO BAY AREA

_____Date
Charlene Nijmeh, Chairperson

OHLONE/COSTANOAN-NORTHERN VALLEY YOKUTS-BAY MIWOK (NOTOTOMNE TRIBE)

_____Date
Katherine Perez, Chairperson

Attachment A: Project Description

Arroyo de la Laguna Bridge Project, EA 0J550, 04-84-Ala PROJECT DESCRIPTION

1.1 Project Purpose & Need

Purpose

The purpose of the project is to maintain connectivity and provide an improved highway facility for the traveling public along State Route 84 by replacing the existing bridge over Arroyo de LaGuna Creek.

Need

The project is needed to address several critical issues associated with the existing bridge: the bridge is "scour critical" and its structural integrity does not meet current design standards for safety.

The existing Arroyo de la Laguna Bridge was constructed in 1939 at a width of about 38 feet. The current bridge features 12-foot-wide, single lanes in each direction, 1-foot-wide shoulders, 5-foot-wide pedestrian sidewalks in each direction, and original railing from 1939Structural maintenance inspections completed in October 2013 identified that drift at Piers 4 and 5 of the bridge is causing scour, which potentially undermines the footing at Pier 5. The bridge is currently classified as "scour critical." Additionally, in 2016, the Office of Earthquake Engineering Analysis and Research identified the bridge to be seismically vulnerable and a candidate for seismic retrofit. Furthermore, the existing 1939 railing of the Arroyo de la Laguna Bridge does not meet current safety standards and needs to be updated.

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1.1. Project Description

The proposed action would take place on SR-84 at PM 17.2 in the town of Sunol. This section describes the proposed actions that achieve the purpose while avoiding or minimizing impacts to the human and natural environment. One potential Build Alternative has been designed for the project, involving complete replacement of the existing Arroyo de la Laguna Bridge with a new, wider bridge.

1.1.1. Build Alternative

APS#17:

This Build Alternative would replace the existing 38-foot-wide and 310-foot-long Arroyo de la Laguna Bridge with a new 320-foot-long and 64-foot-wide bridge consisting of two through lanes. The new bridge would either be flat (as the existing structure) and box-shaped, or it would contain an arch. The bridge profile would be raised between one to three feet to improve the improve both the non-standard bridge profile and the existing non-standard stopping sight distance. At completion, the finished structure would provide 12-foot-wide lanes, 14-foot-wide shared path on the south side of the bridge, standard 42-inch-high barriers, 9-foot-wide shoulders to accommodate 6-foot-wide bicycle lanes, and a 2-foot-wide painted median with median rumble strip. Construction would take three seasons.

APS#17 will have one sidewalk (shared path) on the right side of the roadway, the roadway is shifted 8 feet to the left, and a cross-walk will be delineated at the signalized intersection of SR 84/Main Street. See table 1 below for summary of both APS#16 and APS#17.

Table 1. Summary of APS#17

ROADWAY FEATURE		APS#17
Number of Staging seasons		three
Environmental Footprint		See the provided TCE and R/W take exhibit.
Bridge Dimension		. 64 foot wide bridge.
Sidewalk		14' wide protected sidewalk/shared path on the right side of the bridge.
Travel Lanes		. Two 12 foot travel lanes and 2 feet for rumble strip.
Shoulders		9'

APS#17 Design discussion:

The existing roadway alignment is non-standard for the posted speed of 45 mph. APS#17 seeks to improve both the roadway alignment and traffic safety by doing the following:

- shift the roadway alignment 8 feet to left to correct the existing alignment that is directing northbound traffic into the path of the Water Temple Gates.
- help preserve the Water temple Gates by straightening the existing roadway alignment and shifting vehicles to the left and away from the gates.
- Improve vertical stopping sight distance which will help reduce vehicle collisions in this segment of the corridor.
- construct a protected shared path for both pedestrian/bicyclists on the right side of the bridge.

Features Common to All Project Alternatives

1.1.2. Temporary Creek Diversion

A temporary creek diversion is proposed to dewater the work area within the creek bed during each of the annual construction windows proposed over the duration of the project. A dry working environment for the column and foundation concrete operations will prevent alkaline concrete materials from entering Arroyo de la Laguna. All work within suitable aquatic habitat for Central California Coast steelhead (*Oncorhynchus mykiss irideus*) and California red-legged frog (*Rana draytonii*) would occur between June 1 and October 15, when there is less potential for these species to enter the work area.

The temporary creek diversion involves the installation of two temporary dams—one 200 feet upstream of the work area to prevent inflow, and one 300 feet downstream to prevent backflow—and a PVC pipe for diverting the flow in the creek. All equipment used for the construction of the creek diversion would use the same access road needed to conduct work in the creek.

The means and methods of the installation may include installation of temporary berms (plastic-wrapped gravel bags, aquadams, Super Sacks, or cofferdams) to create a dewatered work area and to control sediment dispersal within the creek. In addition, a cutoff wall may be necessary to reduce the flow of water through the substrate under the upstream berm. The cutoff wall would consist of a two-foot-deep by two-foot-wide trench, spanning the width of the creek, with a pump placed below grade to reduce seepage into the work area. The trenching and construction of the cutoff wall would not occur in the flowing Arroyo de la Laguna Creek; the berm would be built first, followed by the trenching and construction of the cutoff wall.

The temporary dam would be constructed approximately 10 feet wide at the base and approximately six feet tall. Prior to placement of the dam, sharp objects, boulders, and cobbles would be removed from the dam area to create a smooth streambed and prevent channels by which water can pass beneath the dam after it is built; these objects would be removed by hand or, if necessary, by a grapple located on either side of the creek. The water would flow by gravity through the construction site in a single, four-foot diameter pipe. Following the implementation of the creek diversion, any ponded water located between the upstream berm and the downstream berm would be pumped out to create a dry working environment.

An additional area of 10 feet upstream from the upstream base of the dam, and 10 feet

downstream from the downstream base of the dam, is proposed for access to construct the temporary dam, and may have temporary impacts by construction equipment and/or personnel.

During the demolition of each stage of the existing Arroyo de la Laguna Bridge, the dewatered area underneath the portion of the bridge that is being demolished and extending approximately 10 feet from either edge of the bridge would be covered with a temporary ground cover consisting K-rail and timber mats. No temporary stockpiling of material in the creek is proposed; if any material falls in the creek during the demolition of the bridge, it must be removed on a daily basis.

Following each construction season, materials used for the creek diversion would be removed from the creek. Restoration of the creek bed would not include the addition of any elements to direct water flow.

1.1.3. Bridge Foundations

The three-span bridge would be supported by two abutment foundations and by two piers consisting of six approximately 36-inch-diameter piles. The piles would be installed via cast-in-drilled-hole (CIDH) method. The exact pile diameter would be determined during the design phase of the project. The western pier would be located outside the ordinary high water mark (OHWM). The eastern pier would be along the edge of the OHWM.

1.1.4. Retaining wall

The new bridge will require the construction of several retaining walls. The first retaining wall is at the northwest corner of the bridge to reduce fill impacts to the school property. The wall will be about 10 feet in height at the abutment and will taper down to 3 feet in height at the end of the wall near Main Street. The wall is estimated to be about 100 feet in length. The base of the wall will have a spread footing that will require excavation up to 3 feet 6 inches to construct. Forms will be used to construct both the spread footing and the wall itself; wall materials will consist of steel rebar and Portland cement concrete. The wall is expected to have aesthetic treatment.

A second retaining wall will be constructed on the right side of the bridge, with a height of 11 feet at the abutment and will taper down to 3 feet in height at the end of the wall (past Main Street). Total length of this wall is estimated to be about 255 feet and it will have the same construction materials/methods/aesthetic treatment as the first wall.

1.1.5. Bridge Construction

Since the new bridge is longer than the existing, all excavation work for the new abutment foundations would be behind the existing abutments. The old abutments would be removed before construction of the new abutments. The depth of excavation for new abutment foundations is expected to be 10 feet, and shoring would be placed as needed.

A 30-foot-long cast-in-place cement concrete approach slab would be constructed on both ends of the bridge as a transition from the asphalt concrete roadway to the bridge. 100 cubic yards of cement concrete will be used for the construction of the approach slab which would rest on an aggregate base.

Construction of the bridge deck would involve the placement of falsework within the Arroyo de la Laguna channel. Temporary falsework would be installed for support and to create a work area for the construction of each new section of bridge. To allow for adequate work space at each stage of construction, the falsework would be five feet wider than the new bridge segment being constructed. Wooden falsework would be supported on temporary pads, approximately 16 feet wide by 40 feet long. The temporary pads would be constructed on the grade of the existing Arroyo de la Laguna channel. No pile driving will be needed to install the falsework. Equipment used to create this pad would include cranes, loaders, man lifts, forklifts, dump trucks, hand tools, and a soil compactor. Falsework would be constructed using the same equipment necessary to build the temporary pads. After each construction season, falsework would be removed and pads would be graded to match surrounding conditions.

With the implementation of the temporary creek diversion, a dry working environment is anticipated to set up the temporary falsework. Access to the creek bed for the construction of the temporary falsework would be via the construction access roads. All falsework installation and removal would be completed between June 1 and October 15.

1.1.6. Construction Staging

Demolition of the existing Arroyo de la Laguna Bridge would occur in three stages to allow two lanes of traffic to be open at all times. During the first stage of construction, the north portion of the bridge would be demolished, leaving two 11-foot-wide lanes

open to traffic. In this stage, the southern railing and sidewalk would also be removed and replaced with temporary K-rails. The existing concrete railings would most likely be jack hammered and removed in smaller pieces. Construction of the new bridge would begin on the north side of the remaining bridge. Upon completion of the new north portion of the new bridge, westbound traffic would be shifted to the new bridge and eastbound traffic would stay on the existing bridge.. Shuttles would be provided in lieu of sidewalks for pedestrian access during this stage of bridge construction.

In the second stage of construction, the southern portion of the new bridge would be constructed, and eastbound traffic would then be shifted to the remaining middle portion of the existing bridge . When the southern portion of the new bridge is completed southbound traffic will be shifted to this new portion of bridge. Pedestrian access on the western side of the bridge would be available during this stage of bridge construction.

In the third stage of construction, The middle segment of the existing bridge would be removed and then reconstructed, completing the new bridge. Pedestrian access on the northern side of the bridge would be available during this stage of bridge construction.

The specifics for each construction stage/season are shown below; see bridge construction sequence attachment for specific bridge work for each stage/season.

- Relocate utilities one year prior to start of construction
- Stage 1
    - Install construction area signs.
    - Place temporary creek diversion system.
    - Construct access road in northeast corner of bridge.
    - Install temporary traffic signals.
    - Start clearing and grubbing.
    - Place temporary railing (type K) on the existing bridge along the construction stage line and close bridge portion to be removed.
    - Temporary paving and striping of roadway.
    - Shift traffic to southern bridge portion that will not be removed.
    - Construct access road in southeast corner of bridge
    - Implement BMPs underneath the bridge.

  - Saw cut and remove the north side of the bridge deck.
  - Remove northern portion of abutments, wing walls, and foundations.
  - Construct the northern portion of the new bridge.
  - Construct the retaining wall located near the elementary school right of way line.
  - .
  - Temporary paving and striping of roadway.
  - Shift westbound traffic to the western portion of the new bridge.
  - Remove temporary creek diversion system.
  - Place erosion control and temporary bmps.
  - Restore access road back to pre-construction conditions.

- Stage 2
  - Place temporary creek diversion system.
  - Start clearing and grubbing.
  - Construct access road in both northeast and southeast corner of bridge.
  - Place temporary railing (type K) on the existing bridge along the construction stage line and close bridge portion to be removed.
  - Temporary paving and striping of roadway.
  - Shift northbound traffic to the middle portion of the existing bridge.
  - Remove southern bridge (portion)
  - Construct southern portion of new bridge
  - Temporary paving and striping of roadway.
  - Shift northbound traffic to the souththern portion of the new bridge.Remove temporary creek diversion system.
  - Place erosion control and temporary bmps.
  - Restore access road back to pre-construction conditions.
  -

- Stage 3
  - Place temporary creek diversion system.
  - Construct access road in both northeast and southeast corner of bridge.
  - Start clearing and grubbing.
  - Remove middle exist bridge (portion)
  - Construct middle portion of new bridge.
  - Shift southbound traffic to new middle segment of new bridge.
  - Construct the shared path.

- Remove temporary creek diversion system.
- Place erosion control and temporary bmps.
- Restore access road back to pre-construction conditions.
- Install MGS or crash cushion.
- Repave the roadway to final grade and restripe the final delineation.
- Remove lane closures and open the roadway for traffic.
- Complete implementing permanent erosion control and site cleanup.

1.1.7. Roadway Widening

Limited roadway shoulder widening would be needed to conform to the new bridge north of the westbound travel way and south of the eastbound travel way. The existing east and west roadway approaches on Niles Canyon Road are about 25 feet wide. The Niles Canyon roadway shoulders would be widened to match the new wider shoulder on the bridge and would taper down to meet the existing shoulders approximately 400 feet west of the bridge, past Main Street, and approximately 200 feet east of the bridge A two-foot-wide portion of the asphalt concrete pavement at the existing edge of pavement would be removed completely and replaced with an aggregate base and a new asphalt concrete pavement to conform to the new bridge elevation. Removal and replacement of the pavement would require a maximum of 30-inch-deep excavations.

To construct the new pavement sections, the area to be widened would be cleared and grubbed, the original ground excavated (maximum depth of 30 inches) or filled as necessary with a bulldozer equipped with a scraper, and the area compacted with a compactor. The structural section would then be built up by placing pavement structural subbase followed by asphalt concrete; each layer would be compacted after having been applied.

The profile of the existing bridge is at zero percent slope, a sag occurs at the right side of the bridge, and the roadway vertical curve immediately after the bridge has a nonstandard stopping sight distance. To improve these deficiencies, both Design HQ and Hydraulics have recommended that the new bridge have a minimum 0.3% slope profile; so the new bridge profile would be raised between 1 to 3 feet above the existing bridge profile and the roadway profile will also be raised to conform to the new bridge. All suitable excavated material would be used as a fill. Any unused excavated materials would be disposed of properly to certified landfills. Due to the relative traffic volume of this route, the amount of Aerially Deposited Lead (ADL) is not expected to be significant. However, ADL tests

would be conducted during the next project stage.

1.1.8. Removal of Existing Arroyo de la Laguna Bridge

The Build Alternative would require removal of the existing Arroyo de La Laguna Bridge. Segments of the existing superstructure would be saw-cut into relatively large pieces and removed by a crane situated on SR-84 or an access road. The creek bed would be protected by placing timber mats on top of temporary railing (K-rail) placed along the edge of the creek bed under the existing bridge and extending 10 feet past the dripline of both sides of the bridge. Following the complete removal of the existing bridge superstructure, construction personnel would access Arroyo de la Laguna and transport equipment using ramps from SR-84 down into the dry streambed to remove the abutments and columns. The abutments would be demolished from top down to the foundation. The spread footing foundations would be completely removed. Sheet piles would be driven to protect any roadway structure fallout that could result from demolishing the abutments. The piers and their foundations would be removed manually using hand operated jack hammers. A backhoe or excavator with a fitted ram would be used to break up the abutments and piers. Then, a loader would be used to collect the debris to be hauled away by trucks. The steel portions of the piers and abutments would be reclaimed and recycled. All concrete debris would be recycled and Caltrans would require contractors to utilize certified land fill for debris that would not be recycled.

1.1.9. Staging Areas and Environmentally Sensitive Areas (ESAs)

There are two proposed construction staging areas for the project. The first one is located at the end of the Arroyo de la Laguna Bridge, outside of Caltrans right-of-way. at/near northeast of the Pleasanton-Sunol Road and SR-84 intersection. Preparation of the area would include clearing and grubbing. Gravel would then be placed on top of a filter fabric on the unpaved portions of the construction staging areas. Heavy equipment, such as cranes, could enter the staging area. Staging areas would be considered as temporarily impacted and would be restored to original conditions upon completion of the project.

A second, smaller staging area is proposed within right of way at/near the north east corner of the existing bridge for the following construction work:

- Delivering, setting up of the the CIDH pile rebar cages for use at the piers.
- Delivering, setting up of the pier-column rebar, pier-column forms.

See the temporary construction easement/RW take exhibit for locations of both staging areas (labeled #4 and #5).

Temporary access roads would be provided at two locations. The first access road (130 feet long) would be at the northeast corner of the existing bridge. The second access road (133 feet long) would be near the southeast corner of the bridge. The access roads would be 10 to 12 feet wide and paved with gravel (6 inches thick). The slope on the access roads would be 25% and 50%, respectively. The maximum depth of cut for the construction of the access roads would be 7 feet utilities must be relocated prior to construction of the new bridge. During winter suspensions access roads would be restored back to existing, and appropriate erosion control measures would be implemented.

Midwest Guardrail System

All existing metal beam guard rails (MBGR) on both sides of the bridge would be removed and replaced with new Midwest guardrail system (MGS) or crash cushions.

1.1.10. Utilities

The overhead electric and cable lines, underground gas line, and underground fiber optic lines along the eastern side of the existing bridge and roadway in addition to the water line crossing the end of the bridge would all be relocated within the project footprint one year prior to the start of construction. Approximately 205 feet of overhead lines would be relocated along with three poles. The gas line to be relocated is a 3-inch diameter, 600-foot-long pipe; the water line to be relocated is 8 inches in diameter and 600 feet long; and the fiber optic line to be relocated is approximately 600 feet long. Approximate depth of excavation for removal/relocation for these utilities are as follows:

Utility	Excavation Depth (inches)
Gas line	40 to 50
Fiber optic line	30 to 40
Water line	50 to 80
Electric pole	70 to 85

Light equipment, such as backhoes, hand operated augers, and trenchers would be used for utility relocation.

1.1.11. Drainage

Drainage system improvements may be needed due to the roadway widening, the new sidewalks, the new bridge, and permanent Best Management Practices (BMPs). New drainage systems could consist of ditches, drainage inlets, and culverts. The inlets would be precast cement concrete boxes approximately 4 feet wide 6 feet long and 6 feet in depth. The average depth of excavation to place a drainage culvert would be about 4 feet.

Light equipment such as back hoes, hand operated augers, and trenchers would be used for drainage system placement.

1.1.12. Revegetation

In areas of temporary construction impact, appropriate replacement native vegetation would be planted in areas where it would not affect roadway safety. Where appropriate, areas within the project construction area would be hydroseeded and/or replanted with native vegetation and trees. Specifications regarding vegetation and tree replacement would be provided during the design phase of the project (estimated to be completed in 2023).

1.1.13. Traffic Management Plan and Stage Construction

Two lanes would always remain open during day construction. When needed, One-lane traffic control may be implemented during off-peak hours (at night). Intermittent full night time closures (both EB and WB lanes) will be needed; operations needing the full closures include the following:

- Delivering, setting with a crane the CIDH pile rebar cages at the piers.
- Delivering, setting pier-column rebar, pier-column forms.
- Pour concrete (CIDH piles, pier columns) with a pump
- Delivering, setting a large cranes the precast girders.
- Delivering and setting with a crane the Bidwell deck finishing machine.
- Pouring deck concrete.

Estimated number of full night time closures needed per season is 21.

1.1.14. Construction Impacts

Sunol Elementary School: The existing school is located immediately North of the project construction site respectively. Allowable work hours will be adhered to and construction noise will be kept within the Ordinance to minimize any disruptions to the school. And a noise control and monitoring plan will be implemented specifically for the school (for details see attached NSSP that will be added to the project special provisions.)

Neighborhood Residences: There are single-family residences located to the North-West of the project site. Allowable work hours will be used by construction crews and noise will be kept within the Ordinance to minimize any disruptions to the residences.

Construction Mitigation Plan (CMP)

The Department will implement a CMP for the construction duration of the project. The CMP is intended to anticipate and reduce the potential impacts from construction activities, and minimize impacts of construction activities to both Sunol Elementary school and neighbors. Impacts addressed relate to construction, erosion control, air quality, noise, traffic. The department will meet with the school district early in the construction planning process to identify specific procedures for minimizing disruption of student activities.

A key component of the CMP is the implementation of regular communications with the community and the School District regarding concerns, process, and schedule. The Department will designate an individual to fill the position of "Construction Contact" to the local community to address comments regarding ongoing operations and schedule. Additionally, the department will designate an individual to fill the position of "Community Liaison" to the local community.

Construction Noise and Sensitive Receivers

To mitigate general noise impacts during the construction phases, a noise control and monitoring plan may be implemented. This will allow the department to enforce compliance with noise limits and construction time restrictions. A construction noise analysis report has been conducted; the report will identify specific mitigation measures.

Specific mitigation measures for construction noise may include locating stationary equipment away from receiving properties, erecting temporary portable noise barriers, limiting construction hours to the appropriate County ordinance, turning off idling construction equipment, requiring contractors to rigorously maintain all equipment, and training construction crews to avoid unnecessarily loud actions near noise-sensitive areas may be employed.

Air, Construction Dust, & Erosion Control Measures

Dust controls will include watering soils to prevent blowing of dust. Potential BMPs include using water sprays or other non-toxic dust control methods on unpaved roadways, minimizing vehicle speed while traveling on unpaved surfaces, preventing the tracking out of mud onto public streets, covering soil piles when practical, and minimizing work during periods of high winds. Construction vehicles will be turned off when not in use to help control emissions. Construction activities and equipment will follow the appropriate regulations for controlling emissions to the air.

Additionally, to minimize air quality and odor issues caused by tailpipe emissions, BMPs will be used. Such BMPs include maintaining engines of construction equipment, while also minimizing the idling of construction equipment.

Erosion Control and Construction Discharges

A stormwater pollution plan and associated Best Management Practices (BMPs) will be implemented to manage stormwater properly. The project will comply with Erosion and Sediment Control guidelines. The civil engineer will prepare a Temporary Erosion and Sediment Control Plan (TESC) and a Stormwater Pollution Prevention Plan (SWPPP).

Prior to commencement of construction activities, a SWPPP would be prepared by the Contractor and approved by Caltrans. The SWPPP addresses potential temporary impacts via implementation of appropriate BMPs to protect water quality. These BMPs include covering exposed soil, temporary creek diversion systems, drainage inlet protection, the use of fiber rolls, silt fence, street sweeping, and concrete washouts. Disturbed soil areas would be stabilized by paving, rock slope protection, or erosion

control. Erosion control methods include the use of hydroseed, hydromulch, fiber rolls, and erosion control netting.

Construction adjacent to Sunol Elementary School

To preclude unauthorized entry, vandalism, and potential safety risks, contractors, as part of their routine construction procedures, will install temporary chain link fences around all construction sites and laydown/mobilization areas. The chain link fences will have gawk screening. The contractor will also provide traffic controls during school hours, with the specifics to be worked out with the local jurisdiction.

Finally, the department will coordinate with the city of Sunol in the formulation of construction plans to minimize construction impacts on the neighborhood and the elementary school. Specific measures to mitigate construction impacts include a public information program to alert residents and meeting with the Sunol Glen Unified School District to address concerns.

Construction of retaining wall near the elementary school (Timeline)

A retaining wall will be constructed in the immediate vicinity of the Sunol Glen elementary school at the north-east corner of SR/84 and Main Street. The retaining wall will be about 120 feet in length, 3 to 10 foot in height, and will be constructed on the roadway side, eight feet away from the elementary school right of way line.

An 8 foot gawk screen will be placed for the entire length of the chain link fence, on the roadway side, at the elementary school right of way line for the entire duration of construction. And construction of the retaining wall will be scheduled to occur only during the school's summer break (construction and completion of the wall would take three to five weeks). A special provision enforcing this timeline restriction will be added to the project contract.

State law requires mitigation of construction noise near a school. During the duration of construction, a noise control and monitoring plan will be implemented. For details of the noise control and monitoring plan see attached NSSP.

Construction schedule

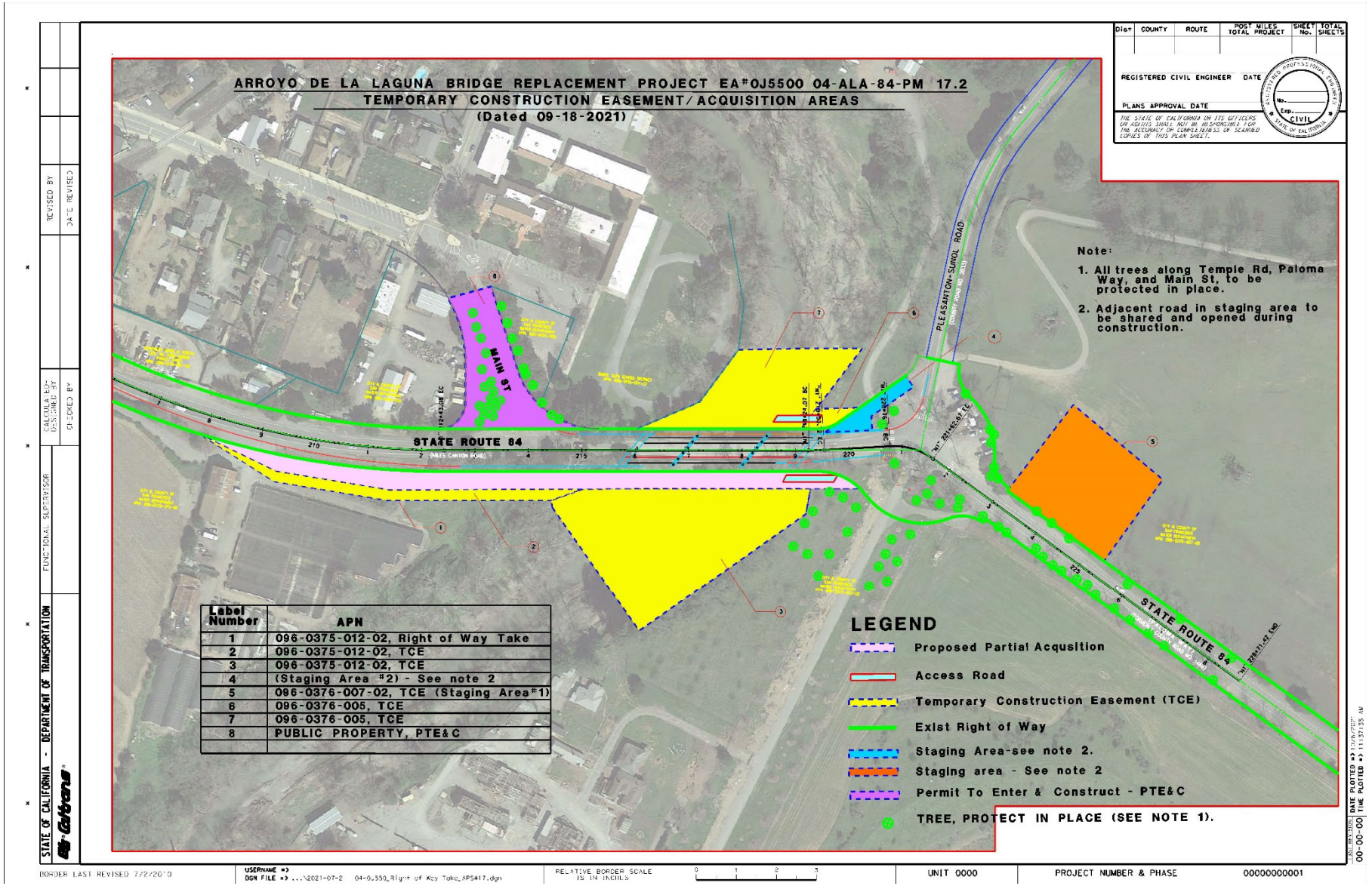
The bridge would be constructed in sections, starting on the western side, then moving to the eastern side, and ending in the middle section. Construction of the proposed project would take approximately three years to complete. Construction activities within the creek would be limited to the summer dry season or June 1 to October 15, except for clearing of vegetation and staging activities. Night work will be required for both bridge and road activities; specific work includes placing/moving K-rail, lane delineation, shifting of traffic, asphalt paving, concrete pour, and bridge structural work (see section 1.1.14 and bridge construction sequence attachment). Limiting work to daylight hours would increase construction time and potentially lead to an additional construction season.

Clearing and Grubbing and Tree Impacts

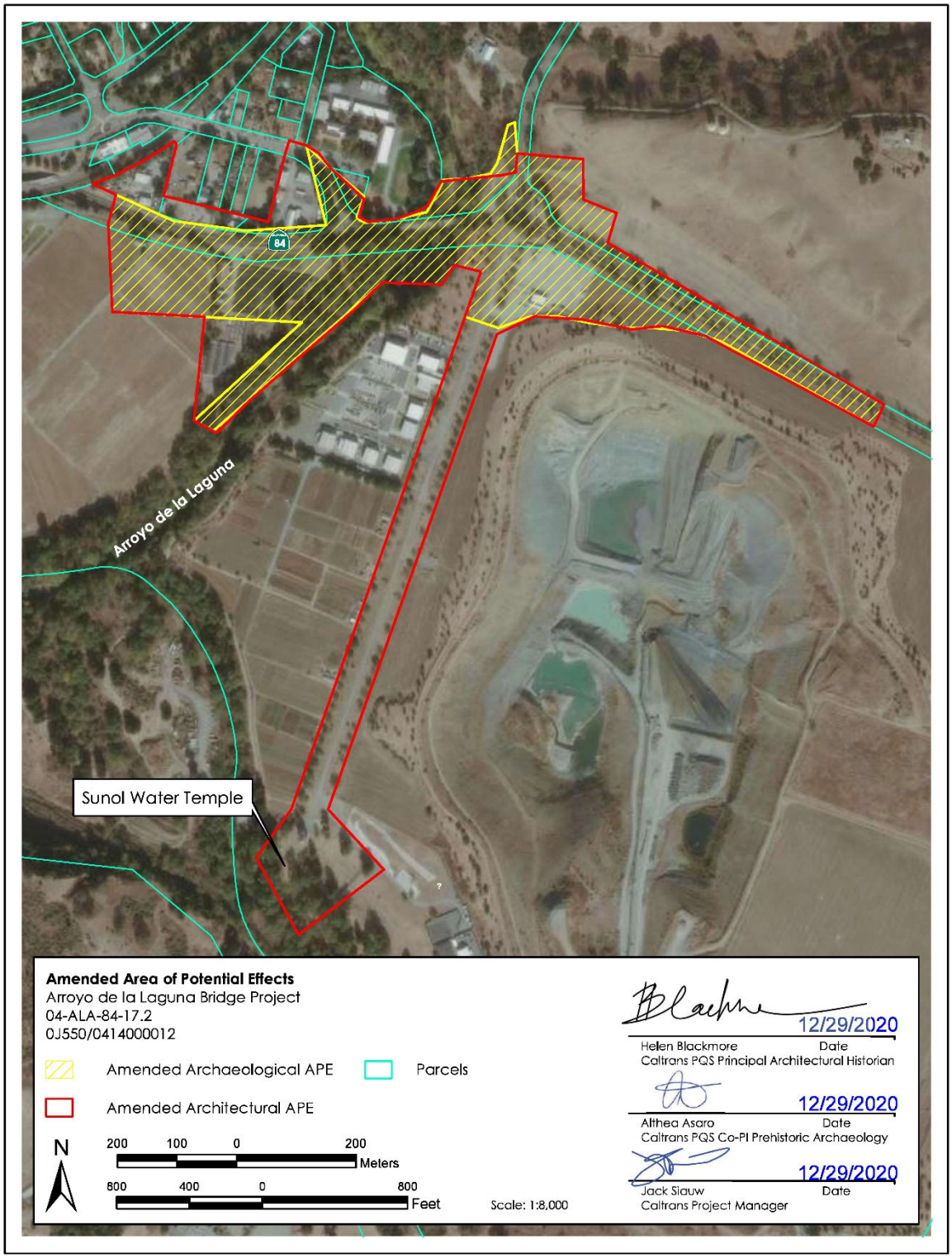
Within the project footprint, tree and vegetation removal shall be minimized to the extent feasible. Trees and vegetation outside of clearing and grubbing limits shall be protected from the contractor's operations, equipment, and materials storage. Removal of trees behind the right of way line at Sunol Elementary school will not occur.

Revegetation and Plant Establishment

After all construction materials are removed, the site would be restored to a natural setting by grading, placing erosion control, and replanting with native vegetation. Also, replanting of trees onsite is planned for the right side of the roadway.


ARROYO DE LA LAGUNA BRIDGE REPLACEMENT PROJECT EA#0J5500 04-ALA-84-PM 17.2
TEMPORARY CONSTRUCTION EASEMENT/ACQUISITION AREAS
(Dated 09-18-2021)
Dist
COUNTY
ROUTE
POST MILES TOTAL PROJECT
SHEET No.
TOTAL SHEETS
REGISTERED CIVIL ENGINEER
DATE
PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.
REGISTERED CIVIL ENGINEER
No.
Exp.
CIVIL
STATE OF CALIFORNIA
Note:
1. All trees along Temple Rd, Paloma Way, and Main St, to be protected in place.
2. Adjacent road in staging area to be shared and opened during construction.
MAIN ST
STATE ROUTE 84
(MILES CANYON ROAD)
PLEASANTON-SUNOL ROAD
(COUNTY ROAD NO. J800)
STATE ROUTE 84
Label Number
APN
1
096-0375-012-02, Right of Way Take
2
096-0375-012-02, TCE
3
096-0375-012-02, TCE
4
(Staging Area #2) - See note 2
5
096-0376-007-02, TCE (Staging Area#1)
6
096-0376-005, TCE
7
096-0376-005, TCE
8
PUBLIC PROPERTY, PTE&C
LEGEND
Proposed Partial Acquisition
Access Road
Temporary Construction Easement (TCE)
Exist Right of Way
Staging Area-see note 2.
Staging area - See note 2
Permit To Enter & Construct - PTE&C
TREE, PROTECT IN PLACE (SEE NOTE 1).
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
FUNCTIONAL SUPERVISOR
CALCULA TED/ DESIGNED BY
CHECKED BY
REVISED BY
DATE REVISED
BORDER LAST REVISED 7/2/2019
USERNAME =>
DGN FILE => ...\2021-07-2 04-0.550_Right of Way Take_APS417.dgn
RELATIVE BORDER SCALE IS IN INCHES
UNIT 0000
PROJECT NUMBER & PHASE
00000000001
DATE PLOTTED =>
TIME PLOTTED =>

Attachment B: APE Map


Arroyo de la Laguna
84
Sunol Water Temple
Amended Area of Potential Effects
Arroyo de la Laguna Bridge Project
04-ALA-84-17.2
0J550/0414000012
Amended Archaeological APE
Parcels
Amended Architectural APE
N
200 100 0 200
Meters
800 400 0 800
Feet
Scale: 1:8,000
12/29/2020
Helen Blackmore
Date
Caltrans PQS Principal Architectural Historian
12/29/2020
Althea Asaro
Date
Caltrans PQS Co-PI Prehistoric Archaeology
12/29/2020
Jack Siauw
Date
Caltrans Project Manager