

California Department of Fish and Wildlife
Central Region
1234 EAST SHAW AVENUE
FRESNO, CALIFORNIA 93710

California Endangered Species Act Incidental Take Permit No. 2081-2021-068-04

STATE ROUTE 156 CASTROVILLE BOULEVARD INTERCHANGE PROJECT (PROJECT)

CALTRANS EA 05-31601

I. Authority:

This California Endangered Species Act (CESA) incidental take permit (ITP) is issued by the California Department of Fish and Wildlife (CDFW) pursuant to Fish and Game Code section 2081, subdivisions (b) and (c), and California Code of Regulations, Title 14, section 783.0 et seq. CESA prohibits the take¹ of any species of wildlife designated by the California Fish and Game Commission as an endangered, threatened, or candidate species.² Additional prohibitions found in Fish and Game Code section 5050 prohibit the take of fully protected reptiles and amphibians except as provided by Fish and Game Code. With respect to the Project, CDFW can authorize take pursuant to Fish and Game Code section 2081.5. Notwithstanding section 5050, CDFW may authorize the incidental take of Santa Cruz long-toed salamander (*Ambystoma macrodactylum croceum*) (SCLTS) resulting from impacts attributable to, or otherwise related to, construction along the State Route (SR) 156 corridor through Moro Cojo Slough in Monterey County if the conditions set forth in Fish and Game Code sections 2081.5, subdivisions (a-c) and 2081, subdivisions (b) and (c) are met. (See Senate Bill No. 1231 (stats. 2000)). CDFW may authorize the take of California tiger salamander (*Amystoma californiense*) (CTS) resulting from the Project pursuant to the conditions set forth in Fish and Game Code section 2081, subdivisions (b) and (c). (See Cal. Code Regs., tit. 14, § 783.4).

Permittee: California Department of Transportation (Caltrans)

Principal Officer: Jennifer Moonjian, Branch Chief

Contact Person: Alexandra Thiel, (805) 441-8484

Mailing Address: 50 South Higuera Street

San Luis Obispo, CA 93401

II. Effective Date and Expiration Date of this ITP:

This ITP shall become effective as of the date signed by CDFW below. Unless renewed by CDFW, this ITP and its authorization to take the Covered Species shall expire on **December 31, 2034**.

¹Pursuant to Fish and Game Code section 86, "'take' means hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." (See also *Environmental Protection Information Center v. California Department of Forestry and Fire Protection* (2008) 44 Cal.4th 459, 507 [for purposes of incidental take permitting under Fish and Game Code section 2081, subdivision (b), "'take' ... means to catch, capture or kill".)

²The definition of an endangered, threatened, and candidate species for purposes of CESA are found in Fish and Game Code sections 2062, 2067, and 2068, respectively.

Notwithstanding the expiration date on the take authorization provided by this ITP, Permittee's obligations pursuant to this ITP do not end until CDFW accepts as complete the Permittee's Final Mitigation Report required by Condition of Approval 7.12 of this ITP.

III. Project Location:

The Project is located in northern Monterey County and includes three distinct locations: 1) the primary transportation element (including utility relocation work); 2) an off-site wetland mitigation site; and 3) and an off-site amphibian mitigation site (Figure 1). The transportation element is located just east of the City of Castroville, on State Route (SR) 156 between postmile (PM) 1.4 and PM 2.1, at the intersection with Castroville Boulevard (Figure 2). It is centered at approximately latitude 36.770167 and longitude -121.738779, within the southeastern quadrant of Section 22, Township 13 South, Range 2 East. All three locations are in the Mount Diablo Baseline and Meridian (MDB&M), on the Prunedale, California 7.5-minute quadrangle United States Geological Survey topographic map.

The wetland mitigation site is located at the Elkhorn Highlands Reserve approximately 4 miles northeast of the City of Castroville and 2 miles northwest of the City of Prunedale (Figure 3). It is centered at approximately latitude 36.803736 and longitude -121.689235, within the northern half of Section 19, Township 13 South, Range 3 East, and the eastern half of Section 13, Township 13 South, Range 2 East. The amphibian mitigation site is located at the North Monterey County High School approximately 1 mile east of the City of Castroville (Figure 4). It is centered at approximately latitude 36.779221 and longitude -121.733586, within the eastern portion of Section 22, Township 13 South, Range 2 East.

IV. Project Description:

The Project includes four distinct Project Components: (1) the transportation element to improve the safety and operations at the interchange of SR 156 and Castroville Boulevard; (2) utility relocations within the transportation element area; (3) off-site wetland mitigation site, and (4) an off-site amphibian mitigation site, as described below.

1. Transportation Project

The transportation element will construct a new section of Castroville Boulevard and three roundabouts to replace the existing signaled intersection at Castroville Boulevard and SR 156 at PM 1.8. Currently, Castroville Boulevard forms the axis of a triangle with SR 45. Castroville Boulevard will be realigned to form more of a perpendicular roadway approach to SR 156, intersecting SR 156 approximately 1,550 feet to the east. The first and second roundabouts will be connected by a new roadway bridge over SR 156 and will also be connected to new on- and off-ramps for Castroville Boulevard. The third roundabout will be located on the new segment of Castroville Boulevard approximately 1,200 feet to the north of the new intersection. The existing segment of Castroville Boulevard will remain in place at the request of the local transportation authority, forming a deadhead just before SR 156. The transportation project will also provide new bike lanes, a frontage road, access to driveways, and access to a local road (Monte Del Lago). Shoulder width will vary throughout the project between 2- and 10-feet wide. Slopes will vary

throughout the project area from 2:1 to 4:1 depending on the nearby habitats and road requirements.

Transportation element activities include the following: vegetation clearing and grubbing, grading, and demolition of existing paved areas; installation of new or replacement of existing drainage facilities (culverts, ditches and associated infrastructure); replacement of existing and installation of new lighting; construction of a bridged overcrossing; paving and striping of new roadways; installation of dikes (curbs) and guardrail; installation of electrical facilities; replacement of road signs; application of erosion control measures; and revegetation. Shields will be installed on the 22 new overhead lights to direct light away from habitat, as feasible. Ground-level lighting will be installed on the bike path and lights will be directed to paved areas. Existing metal beam guardrail will be replaced with the new standard ("Midwest Guardrail System") to bring the entire Project limits up to current safety standards. Work in wetland areas will be completed during the dry season, between May 1 and November 1, and no water diversion or dewatering activities will be necessary unless agricultural flows occur. If agricultural flows occur, a single small (<18 inches in diameter) pipe and sand-bag cofferdam will be temporarily installed to dewater the work area. Temporary and permanent erosion control will be applied using locally native species seed mixes to all temporary construction areas, and temporarily disturbed natural habitats will be restored with locally native species landscaping.

Amphibian Undercrossings

Caltrans will construct two amphibian undercrossings adjacent to Moro Cojo Slough on SR 156 at approximately PMs 1.40 and 1.53. They will be designed to improve connectivity for amphibians between a large pond located on the south side of SR 156 and aquatic and wetland habitats in the Moro Cojo Ecological Reserve located on the north side of SR 156. A new concrete box culvert will be constructed at PM 1.40. It will be approximately 4-feet wide by 3-feet tall and installed in the upper portion of the existing fill slope. It will not be designed to convey stream flow or roadway stormwater runoff. The undercrossing at PM 1.53 is currently comprised of a concrete box culvert that will be modified to facilitate amphibian use. It is approximately 6-feet wide and 8-feet tall and does not convey stream flow or roadway stormwater runoff. It was originally constructed to provide passage for cattle under the highway but is no longer used for this purpose.

Design features for both amphibian undercrossings will include: a natural soil substrate bottom to encourage amphibian movement, woody debris and rock and boulders to provide refugia and moisture, a sloped bottom to capture rainfall and increase soil moisture within the tunnel, and wingwalls and barrier fencing installed on either side of SR-156 to guide animals towards the undercrossings and reduce the risk of roadkill on the highway. The barrier fencing will be constructed of thick plastic "anti-climb" material, have an above ground height of 16 inches or more, will be countersunk to prevent burrowing underneath, and include "turnarounds" at the ends to redirect animals towards suitable habitat and the amphibian undercrossing structures. Minor amounts of non-native vegetation will be removed at the entrances of each undercrossing;

however, most vegetation will be left in place to avoid destabilizing soils. After construction, Caltrans will monitor amphibian use of the amphibian undercrossing structures using cameras, tracking (e.g., track plates), or other methods.

Transportation Element Schedule

The transportation element will be constructed in eight stages, utilizing existing or new road segments for temporary traffic detours. It will require approximately 315 working days to complete over the course of approximately 3 consecutive years, starting in approximately fall of 2025 and ending in approximately 2028. An additional 750 working days will be required for follow-up landscaping within the transportation element area. The landscaping will have a 1-to 3-year plant establishment period for maintaining plantings and invasive species control. Caltrans will perform 3 to 5 years of monitoring of the landscaping, depending on regulatory requirements. Some work activities will be stopped intermittently during winter months because of pavement and asphalt curing requirements. All vegetation removal will be timed to avoid impacts to nesting birds (nesting season February 1 through September 30), if feasible. Work in wetlands and streams will only occur in the dry season from May 1 through October 31. Various construction activities must occur at night to avoid conflicts with traffic and are anticipated to require approximately 70 nights over the approximately 3-year construction schedule. If possible, nightwork will be completed during the dry season, when amphibians are less likely to be moving through upland habitat. However, the actual seasonal timing of the work will depend on Project staging and work progress.

Transportation Element Equipment

Equipment used to conduct this work will include trucks, excavators, scrapers, graders, front loaders, back hoes, water trucks, pile drivers, and pavers.

2. Utility Relocation Work

Several utilities within the transportation element area will require temporary and/or permanent relocation or modification prior to construction of the interchange. Existing utilities will be removed via trenching or abandoned in place and relocated. Pipe abandonment will involve capping and filling the pipe with a grouted cement material. Some utilities will be trenched underground to a depth of 10 to 40 feet, and work to do this includes both "cut and cover" and "horizontal directional drilling" (HDD) methods. The cut and cover method is a form of open trenching, where the trench is covered overnight. HDD is a trenchless method for installing underground utilities where a specialized drilling machine is used to directionally bore the conduit along a subsurface path. It will be used to cross wetland areas where the alignment is along a straight path. HDD activities will involve the use of an entry and exit pit for equipment, the size of which will depend on the size of equipment and the depth and angle of the bore. HDD is accomplished by advancing a drill bit while utilizing a mixture of bentonite clay or polymer slurry as lubrication, until it reaches the receiving point; the pipe or conduit is then pulled through. Overhead power lines will be replaced in kind or with updated overhead equipment. Where

feasible, work will be restricted to the Caltrans right of way. No tree removal will be required for utility relocation; however, clearing and grubbing of herbaceous vegetation will be required.

Utility Relocation Schedule

Utility relocation activities are expected to start in the spring 2024 and may extend into the summer and fall, as needed. The utility work will take place up to 6 months prior to the transportation element work, and there may be some overlap in the timing of the transportation element construction and some utility relocations. The various relocations will require up to 90 working days, per utility, for a total of 6 to 9 months and will be completed by the utility companies and/or their subcontractors. Work areas located outside of the transportation element area of disturbance will be restored immediately after work is complete. The utility relocations will require up to 20 nights of work.

Utility Relocation Equipment

Trenchers, vacuum trucks, cranes, pickup trucks/passenger vehicles, mud pumps, concrete trucks, cranes, dump trucks, backhoes, augers, line trucks, bucket trucks, flatbeds, forklifts, water trucks, reamers, excavators, drill rigs, and helicopters may be used for utility work.

3. Wetland Mitigation Site

To offset impacts to wetland habitats resulting from the transportation element, Caltrans will restore approximately 5 acres of historically modified wetland habitat located in the lowlands of a headwater tributary of Moro Cojo Slough, on the Elkhorn Highlands Ecological Reserve. The floodplains have filled with deposited sediment due to years of agricultural activities in the surrounding hills. The restoration work will involve vegetation clearing, grading, contouring, and compacting of soils and revegetation to correct issues which have resulted from land use in the area before it was permanently preserved with a recorded conservation easement. Portions of the wetland will be contoured to support seasonal ponding. Following vegetation clearing and grubbing, approximately 8,700 cubic yards of soil will be excavated from the stream, then the restoration area will be planted with native vegetation using a combination of seeding, cuttings, and plugs. The excavated soil will be disposed of within disturbed upland areas on the Elkhorn Highlands Ecological Reserve, outside of the wetland mitigation site; the spoil disposal location is not covered by this ITP. The outcome will be a wet meadow mosaic, intermixed with small areas of seasonal ponding. Staging will occur in previously disturbed areas, such as adjacent to a barn located directly north of the restoration area. Site access will occur along existing roads. Irrigation systems for establishment of the new wetland plantings are not anticipated. However, if conditions are abnormally dry, supplemental irrigation systems may be implemented during the first 2 years after initial planting.

Wetland Mitigation Site Schedule

Wetland restoration work will be started in the summer or fall of 2024 or 2025 and will be completed by approximately June 2026 or 2027 (start and end dates depend on contracting). The

restoration work will take a total of approximately 72 non-consecutive working days. All grading work within wetland areas will occur during the dry season and plantings will take place during the late fall to early winter. No night work is anticipated for work at the wetland mitigation Site. Following initial planting in the fall, the restoration contract will have a 3-year plant establishment period for maintaining plantings and invasive species control, ending in approximately 2029 or 2030. Caltrans will provide 5 years of monitoring, starting the year after initial planting; monitoring may end in 2031 or 2032.

Wetland Mitigation Site Equipment

Equipment used to conduct this work includes trucks, excavators, scrapers, graders, front loaders, back hoes, water trucks, pile drivers, scrapers, pickup trucks, and pavers.

4. Amphibian Mitigation Site

To offset impacts to State listed amphibians resulting from the transportation element of the Project, Caltrans will protect, enhance, and restore upland and aquatic habitat on approximately 49 acres of land owned by North Monterey County School District adjacent to the North Monterey County High School. Caltrans will facilitate recordation of a Conservation Easement for the perpetual protection of approximately 48 acres at the site, implement initial restoration on up to 49 acres of upland and seasonal wetland habitat, and install anti-trespass fencing to reduce or eliminate known ongoing illegal trespass from the surrounding properties. The site has undergone various restoration activities to benefit State listed amphibians since they were discovered in 2007 in artificial depressions on the site, including a grant funded by the Wildlife Conservation Board (WCB) and mitigation by Pacific Gas & Electric (PG&E). The previous and currently ongoing restoration activities focused primarily on enhancing breeding pond habitat at the central pond as well as native plant establishment, particularly adjacent to the three existing breeding ponds. The restoration work to be completed by Caltrans will either occur outside of the areas covered by the WCB and PG&E grants, or where they overlap, Caltrans will be doing restoration activities not being performed by WCB or PG&E.

The initial restoration activities by Caltrans will focus on creating quality upland and seasonal wetland habitat through minor grading and woody vegetation establishment, which will provide physical refugia (leaf litter, woody debris, etc.) and appropriate conditions for upland survival (moisture, temperature, etc.) of amphibians. Additionally, Caltrans will install anti-trespass fencing around the perimeter of the property to reduce or eliminate the current habitat disturbance that results from illegal trespass from the surrounding properties (mainly from the north), thereby protecting and enhancing State listed amphibian species and their habitat. Caltrans may also install amphibian directional fencing, as appropriate, to help facilitate upland habitat use and dispersal movements across the landscape. Directional fencing may be temporary or permanent, and will consist of wood, plastic, metal, or concrete barrier, approximately 16-inches high and dug into the ground approximately 6-inches deep. Locations of directional fencing will be adaptive in nature and will depend on plant establishment locations and success

and may be implemented under the long-term management of the site instead of during initial restoration efforts.

It is anticipated that restoration activities will require grading, installing a of layer of bentonite in low areas to facilitate seasonal moisture retention, installing a mix of native woodland plants, installing no-trespass fencing, expansion of suitable upland habitat surrounding the north and south ponds, invasive species management (including herbicide use, grazing, mowing, and hand-pulling), native plant establishment, and barrier/directional fencing installation. Temporary irrigation systems may be installed for establishment of the new plantings for the first 2 or 3 years after initial planting. Up to 5 years of maintenance activities are anticipated and may include similar types of activities of a smaller scale than initial work. Vegetation growth will be monitored for approximately 5 years after planting. The property will be surveyed for State listed amphibians adaptively throughout restoration activities to establish a baseline for species presence and compare year to year species abundance. Methodology will depend on activities that are occurring on the property and localized site conditions in any given year, but may include coverboard, pit fall, drift fence, breeding pond/egg/larvae, camera, and eDNA surveys.

Amphibian Mitigation Site Schedule

The initial restoration activities for the amphibian restoration work will be completed between approximately fall 2024 and fall 2025, followed by 5 years of maintenance and monitoring. Caltrans anticipates that work will take a total of approximately 150 non-consecutive working days. All grading work will occur during the dry season and plantings will take place during the late fall to early winter. No night work is anticipated for work at the amphibian mitigation project.

Amphibian Mitigation Site Equipment

Equipment used to conduct this work includes trucks, excavators, scrapers, graders, front loaders, back hoes, water trucks, pile drivers, scrapers, and pavers.

V. Covered Species Subject to Take Authorization Provided by this ITP:

This ITP covers the following species:

Name <u>CESA Status</u>³

1. California tiger salamander (*Ambystoma californiense*) Threatened⁴

2. Santa Cruz long-toed salamander (Ambystoma macrodactylum croceum) Endangered⁵

These species and only these species are the "Covered Species" for the purposes of this ITP.

Incidental Take Permit No. 2081-2021-068-04

³ Under CESA, a species may be on the list of endangered species, the list of threatened species, or the list of candidate species.

⁴See Cal. Code Regs. tit. 14 § 670.5, subd. (b)(3)(G).

⁵See Cal. Code Regs. Tit. 14 § 670.5, subd. (a)(3)(A). Santa Cruz long-toed salamander is also designated as a fully protected species (Fish & G. Code, § 5050 et seq.), for which Fish and Game Code § 2081.5 allows the department to authorize take for this Project.

VI. Impacts of the Taking on Covered Species:

Project activities and their resulting impacts are expected to result in the incidental take of individuals of the Covered Species. The activities described above expected to result in incidental take of individuals of the Covered Species include grading, cut-and-fill, scraping, contouring, vegetation-clearing, grubbing, excavating, trenching, stockpiling, backfilling, compacting, paving, planting, hydro-seeding, temporary irrigation, and invasive species control. The Project will also result in installation of temporary exclusion fencing, excavation of burrow habitat, species salvage, and relocation and mortality reduction efforts required by this ITP (Covered Activities).

Incidental take of individuals of the Covered Species in the form of mortality ("kill") may occur as a result of Covered Activities due to construction crews or equipment running over, crushing, or entombing Covered Species situated either above or below ground during initial ground-breaking or during ongoing work. Incidental take of individuals may also occur from the Covered Activities in the form of catch, capture or attempt to do so from entrapment in holes or open trenches; entrapment in exclusion fencing; uncovering individuals during the excavation of burrow systems; corralling individuals into a confined area; increased light, noise, and vibration from human and construction activity that could cause individuals to become active at inappropriate times, increasing stress levels and exposure to adverse environmental conditions; capturing, collecting, and relocating individuals of the Covered Species during mortality reduction activities required by this ITP; and temporary and permanent loss of habitat. Incidental take of individuals may also occur from the Project's incremental contribution to cumulative impacts (indirect impacts) including exposure to chemical contamination from uncured concrete, concrete dust, drilling fluids, petroleum products, paint, and other construction chemicals; loss of breeding and burrow habitat used for shelter, reproduction, and escape cover; long term effects due to increased pollution; displacement from preferred habitat; increased competition for food and space; introduction or spread of invasive species; changes in drainage patterns; and increased vulnerability to predation.

The areas where authorized take of the Covered Species is expected to occur include the four Project Components (the transportation element, utility relocation work, the wetland mitigation site, and the amphibian mitigation site) as well as any locations where Project activities will occur, including grading, grubbing, cut, fill, or other ground or vegetation disturbance (collectively, the Project Area). Although implementation of ITP Conditions of Approval (outlined below) will reduce the risk of construction personnel encountering individuals, a reasonable likelihood remains that the Covered Species will be present within the Project Area. The impacts to Covered Species will occur within and directly adjacent to existing two-lane roadways and in both mitigation areas. Habitat conditions for Covered Species in the Project Area vary from marginal quality annual grassland habitat (upland dispersal and refugia habitat) in the majority of the transportation element and amphibian mitigation site, to known aquatic breeding habitat for Covered Species in the north-western portion of the amphibian mitigation site. In addition, known and potential aquatic Covered Species breeding habitat occurs directly adjacent to the portions of the Project Area. Individuals of Covered Species may be

present in underground burrows throughout the Project Area that may not be visible on the ground surface.

The transportation element and utility relocation portions of the Project is expected to cause the permanent loss of approximately 5.6 acres of upland habitat and a temporary loss of approximately 31.6 acres of temporary impacts to upland and non-breeding wetland habitat for both Covered Species (see Table 1). The temporary impacts are expected to vary in duration between initial impact and completed restoration, from less than 1 year for the utility relocation impacts and up to 8 years for the transportation element impacts. The transportation element will take approximately 3 years to be completed followed by approximately 1-5 years for restoration (shorter time frame for annual grassland habitat). The Project will also result in approximately 5 acres of temporary impacts to upland and non-breeding wetland habitat for CTS at the wetland mitigation site and approximately 49 acres of temporary impacts to upland and non-breeding wetland habitat for both Covered Species for initial restoration work at the amphibian mitigation site. Restoration impacts may occur over a 1-to 7-year period.

Table 1. Project Impacts to Covered Species Habitats

	Impacts (acres)		
		Short-term	Long-term
		Temporary	Temporary
Habitat Type	Permanent	(<1 year)	(1-8 years)
Transportation Element and Utility			
Relocation:			
Coyote Brush Scrub, Arroyo Willow Scrub,	1.3	0.5	2.5
Coastal Brackish Marsh			
Annual Grassland	4.3	5.8	22.8
Total Transportation and Utility Impacts	5.6	6.3	25.3
Wetland Mitigation Site:			
Wetland and Stream		-	1.9
Coast Live Oak Woodland			1.5
Annual Grassland			1.6
Total Wetland Mitigation Impacts ¹			5.0
Amphibian Mitigation Site:			
Wetlands and Ponds		-	9
Coyote Brush Scrub, Arroyo Thickets, Coast			7.9
Live Oak Woodland			
Annual Grassland & Mustard Fields			32.1
Total Covered Species Impacts ¹			49

^{1.} Impacts to mitigation areas include initial restoration work as well as non-ground disturbing activities such as species monitoring, invasive species control, and maintaining plantings.

VII. Incidental Take Authorization of Covered Species:

This ITP authorizes incidental take of the Covered Species and only the Covered Species. With respect to incidental take of the Covered Species, CDFW authorizes the Permittee, its employees, contractors, and agents to take Covered Species incidentally in carrying out the Covered Activities, subject to the limitations described in this section and the Conditions of Approval identified below. This ITP does not authorize take of Covered Species from activities outside the scope of the Covered Activities, take of Covered Species outside of the Project Area, take of Covered Species resulting from violation of this ITP, or intentional take of Covered Species except for capture and relocation of Covered Species as authorized by this ITP.

VIII. Conditions of Approval:

Unless specified otherwise, the following measures apply to all Covered Activities within the Project Area, including areas used for vehicular ingress and egress, staging and parking, and noise and vibration generating activities that may cause take. CDFW's issuance of this ITP and Permittee's authorization to take the Covered Species are subject to Permittee's compliance with and implementation of the following Conditions of Approval:

- **1. Legal Compliance:** Permittee shall comply with all applicable federal, state, and local laws in existence on the effective date of this ITP or adopted thereafter.
- 2. CEQA Compliance: Permittee shall implement and adhere to the mitigation measures related to the Covered Species in the Biological Resources section of the Final Environmental Impact Report (SCH No. 1999111063) certified by Caltrans on January 31, 2013, with CEQA addenda prepared by Caltrans on April 6, 2022, June 7, 2022, and November 6, 2023. Caltrans is the lead agency for the Project pursuant to the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.).
- **3. LSA Agreement Compliance:** Permittee shall implement and adhere to the mitigation measures and conditions related to the Covered Species in the pending Streambed Alteration Agreement (SAA) (Notification No. EPIMS-MON-15904-R4) for the Project to be executed by CDFW pursuant to Fish and Game Code section 1600 et seq.
- 4. ESA Compliance: Permittee shall implement and adhere to the terms and conditions related to the Covered Species in the June 7, 2012 Biological Opinion for the State Route 156 West Corridor Improvement Project in Monterey County, California (No. 08EVEN00-2012-F-0368) and the November 9, 2018 Programmatic Biological Opinion for California Red-Legged Frog, CTS, and SCLTS on Issuance of Recovery Permits and Recovery Projects in Santa Cruz, Monterey, and San Benito Counties, California (No. 08EVEN00-2017-F-0584), pursuant to the Federal Endangered Species Act (ESA). For purposes of this ITP, where the terms and conditions for the Covered Species in the federal authorizations are less protective of the Covered Species or otherwise conflict with this ITP, the conditions of approval set forth in this ITP shall control.

5. ITP Time Frame Compliance: Permittee shall fully implement and adhere to the conditions of this ITP within the time frames set forth below and as set forth in the Mitigation Monitoring and Reporting Program (MMRP), which is included as Attachment 1 to this ITP.

6. General Provisions:

- **6.1.** <u>Designated Representative</u>. Before starting Covered Activities, Permittee shall designate a representative (Designated Representative) responsible for communications with CDFW and overseeing compliance with this ITP. Permittee shall notify CDFW in writing before starting Covered Activities of the Designated Representative's name, business address, and contact information, and shall notify CDFW in writing if a substitute Designated Representative is selected or identified at any time during the term of this ITP.
- **6.2.** Designated Biologists and Designated Monitors. Permittee shall submit to CDFW, in writing, the name, qualifications, business address, and contact information of the Designated Biologists and Designated Monitors using the Biologist Resume Form (ATTACHMENT 2) or another format containing the same information at least 30 days before starting Covered Activities at each Project Component. The Designated Monitors may assist the Designated Biologists in compliance monitoring under the direct supervision of the Designated Biologists and as specified in the Compliance Monitoring Condition of Approval below. Permittee shall ensure that the Designated Biologists are knowledgeable in the biology and natural history of both Covered Species and have experience with collecting and handling of the Covered Species or equivalent taxa, excavating small mammal burrows/crevices for the Covered Species or equivalent, enforcing no-disturbance buffers, and monitoring construction activities under an ITP for the Covered Species or equivalent. Equivalent experience may only be substituted for SCLTS and only as approved by CDFW. Permittee shall ensure that the Designated Monitors are knowledgeable and experienced in the biology and natural history of the Covered Species. The Designated Biologists and Designated Monitors shall be responsible for monitoring Covered Activities to help minimize and fully mitigate or avoid the incidental take of individual Covered Species and to minimize disturbance of Covered Species' habitat. Permittee shall obtain CDFW approval of the Designated Biologists and Designated Monitors in writing before starting Covered Activities and shall also obtain approval in advance, in writing, if the Designated Biologists and Designated Monitors must be changed.
- 6.3. Designated Biologist and Designated Monitor Authority. To ensure compliance with the Conditions of Approval of this ITP, the Designated Biologists and Designated Monitors shall immediately stop any activity that does not comply with this ITP and/or order any reasonable measure to avoid the unauthorized take of an individual of the Covered Species. Permittee shall provide unfettered access to the Project Area and otherwise facilitate the Designated Biologists and Designated Monitors in the performance of his/her duties. If the Designated Biologist is unable to comply with the ITP, then the Designated Biologist shall

notify the CDFW Representative immediately. Permittee shall not enter into any agreement or contract of any kind, including but not limited to non-disclosure agreements and confidentiality agreements, with its contractors and/or the Designated Biologist that prohibit or impede open communication with CDFW, including but not limited to providing CDFW staff with the results of any surveys, reports, or studies or notifying CDFW of any non-compliance or take. Failure to notify CDFW of any non-compliance or take or injury of a Covered Species as a result of such agreement or contract may result in CDFW taking actions to prevent or remedy a violation of this ITP.

- or otherwise working in the Project Area before performing any work. The program shall consist of a presentation from a Designated Biologist or Designated Monitor that includes a discussion of the biology and general behavior of the Covered Species, information about the distribution and habitat needs of the Covered Species, sensitivity of the Covered Species to human activities, its status pursuant to CESA including legal protection, recovery efforts, penalties for violations and Project-specific protective measures described in this ITP. Permittee shall prepare and distribute wallet-sized cards or a fact sheet handout containing this information for workers to carry in the Project Area. Permittee shall provide interpretation for non-English speaking workers, and the same instruction shall be provided to any new workers before they are authorized to perform work in the Project Area. Upon completion of the program, employees shall sign a form stating they attended the program and understand all protection measures. This training shall be repeated at least once annually for long-term and/or permanent employees that will be conducting work in the Project Area.
- 6.5. Construction Monitoring Documentation. The Designated Biologists and Designated Monitors shall maintain construction-monitoring documentation on-site in either hard copy or digital format throughout the construction period, which shall include a copy of this ITP with attachments and a list of signatures of all personnel who have successfully completed the education program. Permittee shall ensure a copy of the construction-monitoring documentation is available for review at the Project site upon request by CDFW.
- **6.6.** <u>Trash Abatement</u>. Permittee shall initiate a trash abatement program before starting Covered Activities and shall continue the program for the duration of the Project. Permittee shall ensure that trash and food items are contained in animal-proof containers and removed, ideally at daily intervals but at least once a week, to avoid attracting opportunistic predators such as ravens, coyotes, and feral dogs.
- 6.7. <u>Dust Control</u>. Permittee shall implement dust control measures during Covered Activities to facilitate visibility for monitoring of the Covered Species by the Designated Biologist. Permittee shall keep the amount of water used to the minimum amount needed and shall not allow water to form puddles. Permittee shall not apply dust suppressant, surfactant, soil

binders, or stabilizer products that may be harmful to Covered Species. Permittee shall obtain written approval from CDFW before applying any dust suppressant (other than water), surfactant, soil binders, stabilizer products, hydromulch, or hydroseed. Permittee shall provide all available documentation of each product's safety or hazards to wildlife to CDFW with any such request for approval.

- **6.8.** <u>Erosion Control Materials</u>. Permittee shall prohibit use of erosion control materials potentially harmful to Covered Species and other species, such as monofilament netting (erosion control matting) or similar material, in potential Covered Species' habitat.
- **6.9.** <u>Delineation of Property Boundaries</u>. Before starting Covered Activities within each discrete part of the Project Area in active construction (Work Area), Permittee shall clearly delineate the boundaries of the Work Area with fencing, stakes, or flags and shall be maintained until the completion of Covered Activities in that area. Permittee shall restrict all Covered Activities to within the fenced, staked, or flagged Work Area.
- **6.10.** <u>Delineation of Habitat</u>. Before starting Covered Activities at any Work Area, Permittee shall clearly delineate habitat of the Covered Species within or adjacent to the Work Area with posted signs, posting stakes, flags, and/or rope or cord, and place fencing as necessary to minimize the disturbance of Covered Species' habitat.
- **6.11.** Project Access. Project-related personnel shall access the Project Area using existing routes, or temporary detours in the highway construction area and shall not cross Covered Species' habitat outside of or enroute to the Project Area. Permittee shall restrict Project-related vehicle traffic to established roads, staging, and parking areas as per the Staging Areas Condition of Approval. Permittee shall ensure that construction vehicle speeds do not exceed a daytime speed limit of 20 miles per hour (mph) and a nighttime speed limit of 15 mph to avoid Covered Species on or traversing the roads. If Permittee determines construction of routes for travel is necessary outside of the Project Area, the Designated Representative shall contact CDFW for written approval before conducting such an activity. CDFW may require an amendment to this ITP, among other reasons, if additional take of Covered Species occurs because of the Project modification.
- 6.12. Staging Areas. Permittee shall confine all Project-related parking, storage areas, laydown sites, equipment storage, and any other surface-disturbing activities to the Project Area using, to the extent possible, previously disturbed areas. No parking, storage, laydown, or staging areas shall be located within 50-feet of potential Covered Species burrows or breeding habitat unless they have had exclusionary fencing installed according to Covered Species Exclusion Fencing Condition of Approval, or as otherwise approved by CDFW in the Covered Species Mortality Reduction Plan (as per Covered Species Mortality Reduction and Relocation Plan(s) Condition of Approval). Additionally, Permittee shall not use or cross Covered Species' habitat outside of the marked Project Area unless provided for as

- described in the <u>Project Access</u> Condition of Approval. If Permittee determines parking, storage, laydown, or staging areas are necessary outside of the Project Area, the Designated Representative shall contact CDFW for written approval before carrying out such an activity. CDFW may require an amendment to this ITP, among other reasons, if additional take of Covered Species will occur because of the project modification.
- **6.13.** Precipitation. The Designated Biologist and Permittee shall monitor the National Weather Service 72-hour forecast for the Project Area. If a 50 percent or greater chance of rainfall is predicted within 72 hours, or if rainfall commences with a less than 50 percent chance predicted, Permittee shall cease all Covered Activities in all portions of the Project Area where <u>Burrow Avoidance</u>, <u>Burrow and Crevice Excavation</u>, and <u>Covered Species Exclusion Fencing</u> Conditions of Approval have not yet been completed until a zero percent chance of precipitation in the 72-hour forecast, or as otherwise approved in writing by CDFW. Work may continue 24 hours after the rain ceases and the forecast has the approved chance of precipitation.
- **6.14.** <u>Hazardous Waste</u>. Permittee shall immediately stop and, pursuant to pertinent state and federal statutes and regulations, arrange for repair and clean up by qualified individuals of any fuel or hazardous waste leaks or spills at the time of occurrence, or as soon as it is safe to do so. Permittee shall exclude the storage and handling of hazardous materials from the Project Area and shall properly contain and dispose of any unused or leftover hazardous products off-site.
- **6.15.** <u>CDFW Access</u>. Permittee shall provide CDFW staff with reasonable access to the Project and mitigation lands under Permittee control and shall otherwise fully cooperate with CDFW efforts to verify compliance with or effectiveness of mitigation measures set forth in this ITP.
- **6.16.** Refuse Removal. Upon completion of Covered Activities at each Project Component, Permittee shall remove from the Project Area and properly dispose of all temporary fill and construction refuse, including, but not limited to, broken equipment parts, wrapping material, cords, cables, wire, rope, strapping, twine, buckets, metal or plastic containers, and boxes.
- **6.17.** <u>Wildfire Avoidance.</u> Permittee or Permittee's contractors shall minimize the potential for human-caused wildfires by carrying water or fire extinguishers and shovels in all Project-related vehicles and equipment. The use of shields, protective mats, or use of other fire preventative methods shall be used during grinding and welding to minimize the potential for fire. Personnel shall be trained regarding the fire hazard for wildlife as part of the worker education program described in the Education Program Condition of Approval above.

7. Monitoring, Notification and Reporting Provisions:

- **7.1.** Notification Before Commencement. The Designated Representative shall notify CDFW 14 calendar days before starting Covered Activities at each Project Component and shall document compliance with all pre-Project Conditions of Approval before starting Covered Activities at each Project Component. The Designated Representative shall also notify CDFW no less than 14 calendar days before resuming Covered Activities after a lapse in project work of 60 days or longer.
- **7.2.** <u>Design Plans</u>. Permittee shall provide CDFW with final engineering design plans at least 30 calendar days before starting Covered Activities at each Project component and as-constructed design plans with the Final Mitigation Report (<u>Final Mitigation Report</u> Condition of Approval).
- 7.3. Notification of Non-compliance. The Designated Representative shall immediately notify CDFW if the Permittee is not in compliance with any Condition of Approval of this ITP, including but not limited to any actual or anticipated failure to implement measures within the time periods indicated in this ITP and/or the MMRP. The Designated Representative shall follow up within 24 hours with a written report to CDFW describing, in detail, any non-compliance with this ITP and suggesting measures to remedy the situation.
- **7.4.** Pre-Activity Survey Report. At least 3 days prior to starting Covered Activities at each Project component, Permittee shall prepare and submit to CDFW the results of pre-activity surveys and maps of burrows and crevices (as per Pre-Activity Clearance Surveys and Reporting and Flag and Map Burrows/Crevices Conditions of Approval).
- **7.5.** Covered Species Mortality Reduction and Relocation Plan(s). Permittee shall submit a Covered Species Mortality Reduction and Relocation Plan to CDFW at least 30 calendar days before starting Covered Activities. Separate Plans may be prepared for each Project Component, each provided at least 30-calendar days prior to starting Covered Activities for the applicable Project Component(s). Burrow excavation and relocation activities shall not proceed until the Mortality Reduction and Relocation Plan has been approved in writing by CDFW's Regional Representative (identified in Quarterly Compliance Reports Condition of Approval below). The Mortality Reduction and Relocation Plan shall include, but not be limited to: (1) methods to survey, identify, flag and map Covered Species burrows and/or crevices; (2) avoidance buffers per types of Work Areas; (3) techniques to excavate burrows and crevices; (4) timing activities to survey for Covered Species, excavate burrows and crevices and install exclusionary fencing; (5) techniques to capture, handle, and relocate Covered Species safely if they are encountered; (6) measures to protect Covered Species during restoration work; (7) identification of relocation areas; (8) specifications of the fencing which will be installed to exclude the Covered Species from the Project Area, including maps or plan sheets; (9) details regarding the use of coverboards which will be

employed accessory to the exclusion fencing; (10) adaptive management strategies to protect Covered Species; and (11) protocols for encounters with injured Covered Species including identification of a wildlife rehabilitation center or veterinary facility where injured individuals of the Covered Species will be taken.

Covered Activities within the Project Area of any given Project Component may not proceed until the relevant Covered Species Mortality Reduction and Relocation Plan has been approved in writing by CDFW. The Mortality Reduction and Relocation Plan must specify that only the approved Designated Biologists are authorized to capture and handle individuals of the Covered Species. Once a Covered Species Mortality Reduction and Relocation Plan is approved in writing by CDFW, it shall be used for all Covered Species mortality reduction activities associated with the specified Project Component for the duration of this ITP. Any proposed changes to a CDFW-approved Covered Species Mortality Reduction and Relocation Plan shall be submitted in writing to CDFW and approved by CDFW in writing prior to implementation of any proposed Plan modifications.

7.6. Compliance Monitoring. The Designated Biologist(s) shall be on-site daily during active construction work within a Project Component, for the duration of the day and/or night, until the pre-activity clearance survey (Pre-Activity Clearance Surveys Condition of Approval); burrow/crevice flagging, avoidance, or excavation (Flag and Map Burrows/Crevices, Burrow Avoidance, and Animal Burrow and Crevice Excavation Conditions of Approval); exclusion fence installation and removal (Covered Species Exclusion Fencing Condition of Approval); and initial grading activities are all complete for that Project Component. Thereafter, the Designated Biologists or Designated Monitors shall conduct compliance inspections at least once a week, including at least once during the day and once during the night when night work is occurring, during all work activities in each active Project Component. Alternatively, Permittee may elect to maintain daily monitoring for the duration of the day and/or night instead of burrow excavation and exclusion fence installation, for certain work activities within a Work Area, when approved in writing by CDFW on a case-by-case basis, or as described in the CDFW approved Mortality Reduction and Relocation Plan (Covered Species Mortality Reduction and Relocation Plan(s) Condition of Approval). Burrow flagging, monitoring during fence installation, and compliance inspections may be performed independently by specific Designated Monitors upon written approval from CDFW.

Designated Biologists or Designated Monitors shall conduct compliance inspections to: (1) minimize incidental take of the Covered Species; (2) prevent unlawful take of species; (3) check for compliance with all measures of this ITP; (4) check all exclusion zones and exclusionary fencing for presence of Covered Species in work areas or entrapped in the fencing; (5) ensure that signs, stakes, and fencing are intact; and (6) ensure that Covered Activities are only occurring at the Project Area.

- 7.7. Inspection Records. The Designated Biologists or Designated Monitors shall prepare written observation and inspection records for compliance monitoring as per the Compliance Monitoring Condition of Approval, summarizing: (1) name of the applicable Project Component; (2) inspection date and start/stop times; (3) weather conditions; (4) active construction activities and locations; (5) integrity of signs, stakes or protective fencing; (5) wildlife observations; (6) observations of Covered Species and their sign; (7) observations of non-compliance with any Conditions in this ITP; and (8) measures implemented or anticipated to rectify or remediate any incidents of non-compliance with this ITP. The inspection records shall be submitted with the Quarterly Compliance Reports identified in the Quarterly Compliance Reports
- 7.8. Quarterly Compliance Reports. The Designated Representative or a Designated Biologist shall compile the observation and inspection records identified in the Inspection Records Condition of Approval, Covered Species observation/handling/relocation information as in Covered Species Record of Observations and Handling Condition of Approval, and documentation of night work according to Lighting and Night Work Condition of Approval into a Quarterly Compliance Report (QCR) and submit it to CDFW, along with a copy of the MMRP table with notes showing the current implementation status of each mitigation measure. QCRs shall be submitted before the 15th day of the month that it is due via electronic mail to CDFW's Regional Representative, Regional Office, and Headquarters CESA Program. At the time of this ITP's approval, the CDFW Regional Representative is Mindy Trask (mary.trask@wildlife.ca.gov), the Regional Office e-mail is RRR.R4@wildlife.ca.gov, and the Headquarters CESA Program e-mail is CESA@wildlife.ca.gov. CDFW may at any time increase the timing and number of compliance inspections and reports required under this provision depending upon the results of previous compliance inspections. If CDFW determines the reporting schedule must be changed, CDFW will notify Permittee in writing of the new reporting schedule.
- 7.9. Annual Status Reports. Permittee shall provide CDFW with an Annual Status Report (ASR) no later than January 31 of every year beginning with issuance of this ITP and continuing until CDFW accepts the Final Mitigation Report identified below. Each ASR shall include, at a minimum: (1) a summary of all QCRs for that year identified in the Quarterly Compliance Reports Condition of Approval; (2) a record of the Education Program training sessions provided over the reporting year; (3) a general description of the status of the Project Area and Covered Activities per Project Component, including actual or projected completion dates, if known and representative photographs; (4) a copy of the table in the MMRP for each Project Component with notes showing the current implementation status of each mitigation measure; (5) an assessment of the effectiveness of each completed or partially completed mitigation measure in avoiding, minimizing and mitigating Project impacts; (6) a summary of findings from all pre-activity surveys conducted and any other Covered Species observations, including but not limited to, the number of times a Covered Species was encountered, location, if avoidance was achieved, and if not, what measures were

implemented; (7) all available information about Project-related incidental take of the Covered Species; and (8) information about other Project impacts on the Covered Species. ASRs shall be submitted via email to the entities identified in the <u>Quarterly Compliance</u> Reports Condition of Approval.

- **7.10.** <u>CNDDB Observations</u>. The Designated Biologist shall submit all observations of Covered Species to CDFW's California Natural Diversity Database (CNDDB) within 60 calendar days of the observation and the Designated Biologist shall include copies of the submitted forms in the ASRs (per <u>Annual Status Reports</u> Condition of Approval).
- 7.11. Covered Species Record of Observations and Handling. All Covered Species captures, relocations, and observations by the Designated Biologist(s) shall include the following documented information: (1) the date, time, and location of each occurrence using Global Positioning System (GPS) technology; (2) the name of the party that actually identified the Covered Species; (3) circumstances of the incident; the general condition and health of each individual; (4) any diagnostic markings, sex, age (juvenile or adult); (5) actions undertaken; (6) and habitat description. Permittee shall also submit this information to the CNDDB (CNDDB Observations Condition of Approval). This information shall also be included in the QCRs and ASRs (per Quarterly Compliance Reports and Annual Status Reports Conditions of Approval).
- 7.12. Final Mitigation Report. No later than 60 days after completion of all mitigation measures, Permittee shall provide CDFW with a Final Mitigation Report, submitted via email to the entities identified the Quarterly Compliance Reports Condition of Approval. The Designated Biologist shall prepare the Final Mitigation Report which shall include, at a minimum: (1) a summary of all QCRs and all ASRs; (2) a copy of the table in the MMRP for each Project Component with notes showing when each of the mitigation measures was implemented; (3) all available information about Project-related incidental take of the Covered Species; (4) information about other Project impacts on the Covered Species; (5) maps and a summary table of the actual temporary and permanent habitat impact areas authorized under this ITP; (6) beginning and ending dates of Covered Activities; (7) an assessment of the effectiveness of this ITP's Conditions of Approval in minimizing and fully mitigating Project impacts of the taking on Covered Species; (8) recommendations on how mitigation measures might be changed to more effectively minimize take and mitigate the impacts of future projects on the Covered Species; (9) representative before, during and after photographs; (9) as-constructed design plans; and (10) any other pertinent information. The Permittee shall also submit Geographic Information Systems (GIS) data files of the actual temporary and permanent habitat impact areas authorized under this ITP with the Final Mitigation Report.
- **7.13.** <u>Notification of Take or Injury</u>. Workers shall immediately notify the Designated Biologist(s) if a Covered Species is taken or injured by a Project-related activity, or if a Covered Species is

otherwise found dead or injured within the vicinity of the Project. The Designated Biologist or Designated Representative shall provide initial notification to CDFW through email to the Regional Representative and Regional Office identified in the Quarterly Compliance Report Condition of Approval, immediately unless the incident occurs outside of normal business hours. In that event, CDFW shall be notified no later than the next business day. The initial notification to CDFW shall include: (1) information regarding the location, species, and number of animals taken or injured; (2) circumstances of the incident; (3) the name of the wildlife rehabilitation center or veterinary facility where dead or injured individuals were taken or treated; and (4) the ITP Number. Following initial notification, Permittee shall send CDFW a written report within 3 calendar days. The report shall include the date and time of the finding or incident, location of the animal or carcass, and if possible, provide a photograph, explanation as to cause of take or injury, and any other pertinent information. The written report shall be submitted via email to the Regional Representative and Regional Office identified in the Quarterly Compliance Reports Condition of Approval.

- **8. Take Minimization Measures:** The following requirements are intended to ensure the minimization of incidental take of Covered Species in the Project Area during Covered Activities. Permittee shall implement and adhere to the following conditions to minimize take of Covered Species:
 - **8.1.** Rodenticide Use. Permittee shall prohibit the use of rodenticides in the Project Area.
 - 8.2. Lighting and Night Work. Permittee shall not use temporary, fixed, exterior lighting, including motion-triggered security lighting, that casts light on Covered Species habitat beyond the footprint of the Project Area or that is turned on all night between sunset and sunrise unless authorized in writing from CDFW. Permittee shall not install new permanent or upgrade existing lighting in the Project Area, except as otherwise identified in the Project Description. New permanent or upgraded lights shall be designed to avoid or minimize illuminating Covered Species habitat, such as the use of shields, warm-spectrum luminaries, or lowering the height of fixtures. The number of nights worked shall be documented in the QCR (as per Quarterly Compliance Reports Condition of Approval). The documentation shall summarize, for each Project Component, the number of nights that work occurred for the quarter that the report covers and a cumulative tabulation of the total number of nights worked since Project initiation.
 - **8.3.** Equipment and Vehicle Fueling. Permittee shall ensure that all equipment and vehicle fueling and maintenance occur at least 50 feet from any wetlands and Covered Species burrows unless otherwise approved in writing by CDFW. Permittee shall ensure that sufficient spill containment and cleanup equipment shall be present at all fueling locations.
 - **8.4.** Herbicide Use. Permittee shall ensure that all herbicide use (mixing, application, and clean-up) is done by a licensed applicator in accordance with all applicable State, federal, and local

- regulations. Permittee shall only apply herbicide sprays via ground application when wind speed measures less than 10 miles per hour. Permittee shall ensure that great care is taken to avoid herbicide outside the boundaries of the Project Area. All herbicide sprays utilized within the Project Area shall contain a dye to prevent overspray.
- **8.5.** Avoid Introduction of Herbicides into Waters. Permittee shall ensure herbicide mixing occurs within the Project Area where there is no potential of a spill reaching waters at and near the Project Area. Permittee shall not apply herbicides on or within 50 feet of known or potential Covered Species breeding habitat during the breeding season (onset of fall/winter rains, generally November 1 through May 31) unless Permittee has confirmed Covered Species are not present and approved in writing by CDFW.
- **8.6.** <u>Soil Stockpiles</u>. Permittee shall ensure that soil stockpiles are placed where soil cannot pass into "Waters of the State," including streams which traverses the Project Area, in accordance with Fish and Game Code section 5650. Permittee shall appropriately protect stockpiles to prevent soil erosion and discharge from the Project Area.
- **8.7.** Open Trenches and Excavations. Biological Monitor(s) shall inspect all open holes, sumps, and trenches within the Project Area at the beginning, middle, and end of each day (including weekends and any other non-workdays) for trapped individuals of the Covered Species. To prevent inadvertent entrapment of Covered Species, all open trenches, holes, sumps, and other excavations with sidewalls steeper than a 1:1 (45 degree) slope shall have an escape ramp of earth or a non-slip material with a less than 1:1 (45 degree) slope, or all excavated, trenches, holes, sumps, or other excavations with a greater than 1:1 (45 degree) slope of any depth shall be covered with barrier material (such as hardware cloth) at the close of each working day such that animals are unable to dig or squeeze under the barrier and become entrapped. The outer 2 feet of excavation cover shall conform to solid ground so that gaps do not occur between the cover and the ground, and the excavation cover shall be secured with soil staples or by similar means to prevent gaps. Worker(s) shall thoroughly inspect all trenches, holes, sumps, or other excavations for Covered Species (or other wildlife) before they are backfilled. If any Biological Monitor or worker discovers that Covered Species have become trapped, Permittee shall cease all Covered Activities in the vicinity and notify a Designated Biologist immediately. Biological Monitor(s), Project workers and the Designated Biologist(s) shall allow Covered Species to escape unimpeded if possible before Covered Activities are allowed to continue, or the Designated Biologist(s) shall capture and relocate the Covered Species as per the CDFW-approved Mortality Reduction and Relocation Plan (Covered Species Mortality Reduction and Relocation Plan(s) Condition of Approval).
- **8.8.** <u>Pre-Activity Clearance Surveys</u>. Prior to initiating Covered Activities within a Work Area, the Designated Biologist shall survey the Work Area for individuals of the Covered Species. Pre-Activity Clearance Surveys shall be repeated if there is a disruption of work by more than 30

days or re-growth of vegetation that could obscure presence of Covered Species. These surveys shall provide 100 percent visual coverage of the Work Area including burrow and crevice openings. If individuals of the Covered Species are found, the Designated Biologist shall relocate them from the Project Area in accordance with the CDFW approved Mortality Reductin and Relocation Plan (Covered Species Mortality Reduction and Relocation Plan(s) Condition of Approval). Permittee shall provide the survey results to CDFW in a written report prior to the beginning of Covered Activities (as per Pre-Activity Survey Report Condition of Approval).

- 8.9. <u>Flag and Map Burrows/Crevices</u>. During the Pre-Activity Clearance Surveys, Designated Biologists and CDFW-approved Designated Monitors shall flag and map locations of all animal burrows and crevices suitable for Covered Species occupancy at and within 50 feet (if adjoining lands are accessible) of the Work Area, which could potentially harbor individuals of the Covered Species. The mapped locations of all animal burrows and crevices suitable for Covered Species occupancy shall be submitted with the results of pre-activity surveys (as per Pre-Activity Survey Report Condition of Approval).
- **8.10.** <u>Burrow Avoidance</u>. The Designated Biologist shall establish a no disturbance buffer of 50 feet or greater around suspected or known to be occupied Covered Species burrows within and adjacent to a Work Area. If a 50-foot no-disturbance buffer cannot be established, burrow excavation and temporary exclusion fencing or daily monitoring shall occur in accordance with <u>Burrow and Crevice Excavation</u> and <u>Covered Species Exclusion Fencing</u> Conditions of Approval. Alternatively, a buffer reduction may be requested to allow for burrow preservation where impacts can reasonably be avoided or otherwise minimized. Any buffer reduction strategy shall be identified in the CDFW approved Mortality Reduction and Relocation Plan (<u>Covered Species Mortality Reduction and Relocation Plan(s)</u> Condition of Approval) or otherwise approved in writing by CDFW prior to the implementation of a reduced buffer.
- 8.11. Burrow and Crevice Excavation. Prior to any vegetation- or ground-disturbing activities in the transportation element or utility work areas or prior to grading activities with mechanical equipment in the mitigation areas, all small mammal burrows identified and flagged (per the Pre-Activity Clearance Surveys and Flag and Map Burrows/Crevices
 Conditions of Approval) that cannot be avoided by approved buffers (per Burrow Avoidance
 Condition of Approval) shall be fully excavated under the direct supervision of the
 Designated Biologist in accordance with the CDFW-approved Mortality Reduction and
 Relocation Plan (Covered Species Mortality Reduction and Relocation Plan(s) Condition of
 Approval). This excavation requirement applies regardless of whether the burrow is located within the Project Area or within 50 feet of the Project Area except those burrows outside of the Permittee's access and/or control. Individuals of the Covered Species which are found shall be relocated by the Designated Biologist in accordance with the CDFW approved
 Mortality Reduction and Relocation Plan (Covered Species Mortality Reduction and

- <u>Relocation Plan(s)</u> Condition of Approval). Excavation shall occur no more than 14 days after completing the Pre-Activity Clearance Surveys, or surveys/flagging shall be repeated.
- **8.12.** Covered Species Exclusion Fencing. If vegetation- or ground-disturbing activities are initiated, conducted during, or may extend into the Covered Species breeding season (onset of fall/winter rains, generally November 1 through May 31), Permittee shall install temporary exclusion fencing (exclusion fence) around the perimeter of the Work Area to prevent Covered Species from migrating into the Work Area, unless otherwise approved by CDFW in writing or in the CDFW-approved Mortality Reduction and Relocation Plan (Covered Species Mortality Reduction and Relocation Plan Condition of Approval). Fencing material and design shall be reviewed and approved in writing by CDFW before exclusion fencing installation. Alternatively, Permittee may elect to provide daily monitoring for the duration of the day and/or night instead of exclusion fence installation, for certain work activities within a Work Area, when approved in writing by CDFW, or as described in the Mortality Reduction and Relocation Plan (Covered Species Mortality Reduction and Relocation Plan(s) Condition of Approval). If Permittee elects to forego exclusion fence installation, Covered Activities shall cease when a 50 percent or greater chance of rainfall is predicted within 72 hours in accordance with the Precipitation Condition of Approval. The exclusion fence shall be installed in accordance with CDFW approved Plan (Covered Species Mortality Reduction and Relocation Plan(s) Condition of Approval).
- 8.13. Covered Species Exclusion Fencing Monitoring and Inspections. The Designated Biologist(s) or Designated Monitor(s) shall inspect all fence materials prior to installation to ensure they adhere to the CDFW-approved Mortality Reduction and Relocation Plan (Covered Species Mortality Reduction and Relocation Plan(s) Condition of Approval). The Designated Biologist(s) or Designated Monitor(s) shall accompany the exclusion fence installation, repair, and removal to ensure that Covered Species are not killed or injured during those activities. Permittee shall check the exclusion fence during compliance monitoring (per Compliance Monitoring Condition of Approval) to survey for presence of Covered Species in the excluded area that may need to be relocated by a Designated Biologist according to the CDFW-approved Mortality Reduction and Relocation Plan (Covered Species Mortality Reduction and Relocation Plan(s) Condition of Approval) and to maintain and repair the fence as necessary to ensure its effectiveness.
- **8.14.** Covered Species Observations. During all Covered Activities, workers shall inform a Designated Biologist if an individual of the Covered Species is observed at the Project Area. All work in the vicinity of the observed Covered Species, which could injure or kill the animal, shall cease immediately until the Covered Species moves from the Project Area of its own accord or until the Designated Biologist(s) can relocate the Covered Species following the CDFW approved Plan (Covered Species Mortality Reduction and Relocation Plan(s) Condition of Approval). Permittee shall notify CDFW within 5 business days of discovery of a

- Covered Species within the Project Area via electronic mail to the Regional Representative and Regional Office identified in Quarterly Compliance Reports Condition of Approval.
- **8.15.** <u>Fieldwork Code of Practice</u>. To ensure that disease is not conveyed to and from the Project Area by the Designated Biologist(s) or Designated Monitors(s), the fieldwork code of practice developed by the Declining Amphibian Populations Task Force Fieldwork Code of Practice (see ATTACHMENT 3) shall be followed at all times. The Designated Biologist(s) or Designated Monitor(s) may substitute a bleach solution (0.5 to 1.0 cup of bleach to 1.0 gallon of water) for the ethanol solution. Care shall be taken so that all traces of the disinfectant are removed before entering the next aquatic habitat.
- **8.16.** Equipment Inspection. Workers shall inspect for Covered Species under vehicles and equipment before the vehicles and equipment are moved. If a Covered Species is present, the worker shall notify the Designated Biologist and wait for the Covered Species to move unimpeded to a safe location. Alternatively, the Designated Biologist(s) shall move the Covered Species out of harm's way outside of the Project Area and in compliance with the CDFW-approved Mortality Reduction and Relocation Plan (Covered Species Mortality Reduction and Relocation Plan(s) Condition of Approval).
- **8.17.** Materials Inspection. Workers shall thoroughly inspect all construction pipe, culverts, or other similar structures with a diameter of 1-inch or greater that are stored for one or more overnight periods for the Covered Species before the object is subsequently moved, buried, or capped. If during inspection, an individual of the Covered Species is discovered inside a pipe, culvert, or similar structure, the Designated Biologist shall move the Covered Species out of harm's way outside of the Project Area and in compliance with the CDFW-approved Mortality Reductin and Relocation Plan (Covered Species Mortality Reduction and Relocation Plan(s) Condition of Approval).
- **8.18.** Covered Species Injury. If an individual of the Covered Species is killed or injured because of Covered Activities, the Designated Biologist(s) shall immediately take it to the CDFW approved wildlife rehabilitation or veterinary facility that routinely evaluates and treats amphibians. As required in the Covered Species Mortality Reduction and Relocation Plan(s) Condition of Approval, Permittee shall identify the facility prior to the start of Covered Activities. Permittee shall bear any costs associated with the care or treatment of such injured Covered Species. Permittee shall notify CDFW of the injury to the Covered Species as per the Notification of Take or Injury Condition of Approval.
- 9. Habitat Management Land Acquisition and Restoration: CDFW has determined that permanent protection and perpetual management of compensatory habitat is necessary and required pursuant to CESA to fully mitigate Project-related impacts of the taking on the Covered Species that will result from implementation of the Covered Activities. This determination is based on factors including an assessment of the importance of the habitat in the Project Area, the extent to

which the Covered Activities will impact the habitat, and CDFW's estimate of the protected acreage required to provide for adequate compensation.

To meet this requirement, the Permittee shall provide for both the permanent protection and management of at least 43 acres of Habitat Management (HM) lands located at the amphibian mitigation site on North Monterey County High School property (see Project Location) pursuant to the <u>Habitat Management Lands Acquisition and Protection</u> Condition of Approval below and the calculation and deposit of the management funds pursuant to <u>Endowment Fund</u> Condition of Approval below. Permanent protection and funding for perpetual management of HM lands must be complete before starting the transportation element Component. The Permittee shall also restore approximately 31.6 acres of Covered Species habitat on-site that is temporarily impacted by the transportation element (includes utility work), build structures to accommodate amphibian passage on SR 156, restore 5 acres of Covered Species habitat off-site within the wetland restoration project, and restore 49 acres of Covered Species habitat off-site within the area of the conservation easement for the amphibian mitigation (as per <u>Habitat Restoration</u> Condition of Approval below).

In addition to satisfying the requirement to fully mitigate the impacts, the HM lands, HM lands restoration, and amphibian crossing structures also contribute to the conservation of SCLTS in several respects. First, the HM lands provide greater habitat value than the impacted habitat in the Project Area. The Amphibian Conservation Strategy for Northern Monterey County (December 2019; prepared on behalf of the U. S. Fish and Wildlife Service and the Elkhorn Slough National Estuarine Research Reserve) (hereafter, Conservation Strategy) identifies enhancement of breeding and upland habitat at the HM lands as the highest priority action in the Mojo Cojo Area of the SCLTS Elkhorn metapopulation. The HM lands also help provide an important link between protected CDFW lands on Mojo Cojo to the south, and other protected lands to the east and north such CDFW's Elkhorn Slough Ecological Reserve. The restoration actions on the HM lands, as well as HM land monitoring will help the HM lands become higher quality habitat for SCLTS, as recommended as a priority action in the Conservation Strategy. In addition, the amphibian crossing structures that are part of the Project will improve SCLTS movement and overall connectivity from one side of SR 156 to the other. Connectivity for SCLTS is currently severely constrained by SR 156 and fragmentation is called out in the Conservation Strategy as a specific threat in the vicinity of the Project and HM lands. The Permittee will also be conducting post construction effectiveness monitoring of the amphibian crossing structures. CDFW has determined that that the HM lands, HM land restoration, amphibian crossing structures, and associated monitoring and adaptive management (as per Covered Species Mortality Reduction and Relocation Plan(s), Habitat Restoration Plan(s), and Amphibian Passage Management Plan Conditions of Approval) will contribute to the conservation of the Covered Species.

- 9.1. Habitat Management Lands Acquisition and Protection. Permittee shall:
 - 9.1.1. <u>Fee Title</u>. Transfer fee title of the HM lands to CDFW pursuant to terms approved in writing by CDFW. Alternatively, CDFW, in its sole discretion, may authorize a governmental entity, special district, non-profit organization, for-profit entity, person, or another entity to hold title to and manage the property provided that the district, organization, entity, or person meets the requirements of Government Code sections 65965-65968, as amended.
 - 9.1.2. Conservation Easement. If CDFW does not hold fee title to the HM lands, CDFW shall act as grantee for a conservation easement over the HM lands or shall, in its sole discretion, approve a non-profit entity, public agency, or Native American tribe to act as grantee for a conservation easement over the HM lands provided that the entity, agency, or tribe meets the requirements of Civil Code section 815.3. If CDFW elects not to be named as the grantee for the conservation easement, CDFW shall be expressly named in the conservation easement as a third-party beneficiary. The Permittee shall obtain CDFW written approval of any conservation easement before its execution or recordation. No conservation easement shall be approved by CDFW unless it complies with Civil Code sections 815-816, as amended, and Government Code sections 65965-65968, as amended and includes provisions expressly addressing Government Code sections 65966(j) and 65967(e). Because the "doctrine of merger" could invalidate the conservation interest, under no circumstances can the fee title owner of the HM lands serve as grantee for the conservation easement.
 - 9.1.3. HM Lands Approval. Obtain CDFW written approval of the HM lands before acquisition and/or transfer of the land by submitting, at least 3 months before acquisition and/or transfer of the HM lands, documentation identifying the land to be purchased or property interest conveyed to an approved entity as mitigation for the Project's impacts on Covered Species.
 - 9.1.4. HM Lands Documentation. Provide a recent preliminary title report, Phase I Environmental Site Assessment, and other necessary documents (please contact CDFW for document list). All documents conveying the HM lands and all conditions of title are subject to the approval of CDFW, and if applicable, the Wildlife Conservation Board and the Department of General Services.
 - 9.1.5. <u>Land Manager</u>. Designate an interim and/or long-term land manager approved by CDFW. The interim and long-term land managers may, but need not, be the same. The interim and/or long-term land managers may be the landowner or another party. Documents related to land management shall identify both the interim and long-term land managers. Permittee shall notify CDFW of any subsequent changes in the land manager within 30 days of the change. If CDFW will hold fee title to the

mitigation land, CDFW will also act as both the interim and long-term land manager unless otherwise specified. The grantee for the conservation easement cannot serve as the interim or long-term manager without the express written authorization of CDFW in its sole discretion.

- 9.1.6. Start-up Activities. Provide for the implementation of start-up activities, including the initial site protection and enhancement of HM lands, once the HM lands have been approved by CDFW. Start-up activities include, at a minimum: (1) preparing a final management plan for CDFW approval (such as https://wildlife.ca.gov/Conservation/Planning/Banking/Templates (2) conducting a baseline biological assessment and land survey report within 4 months of recording or transfer; (3) developing and transferring Geographic Information Systems (GIS) data if applicable; (4) establishing initial fencing; (5) conducting litter removal; (6) conducting initial habitat restoration or enhancement, if applicable; and (7) installing signage.
- 9.1.7. Interim Management (Initial and Capital). Provide for the interim management of the HM lands. The Permittee shall ensure that the interim land manager implements the interim management of the HM lands as described in the final management plan and conservation easement approved by CDFW. The interim management period shall be a minimum of 3 years from the date of HM land acquisition and protection and full funding of the Endowment and includes expected management following start-up activities. Interim management period activities described in the final management plan shall include fence repair, continuing trash removal, site monitoring, and vegetation and invasive species management.

Permittee shall either: (1) establish an escrow account with written instructions approved in advance in writing by CDFW to pay the land manager annually in advance, or (2) establish a short-term enhancement account with CDFW or a CDFW-approved entity for payment to the land manager.

9.2. Endowment Fund. The Permittee shall ensure that the HM lands are perpetually managed, maintained, and monitored by the long-term land manager as described in this ITP, the conservation easement, and the final management plan approved by CDFW. After obtaining CDFW approval of the HM lands, Permittee shall provide long-term management funding for the perpetual management of the HM lands by establishing a long-term management fund (Endowment). The Endowment is a sum of money, held in a CDFW-approved fund that is permanently restricted to paying the costs of long-term management and stewardship of the mitigation property for which the funds were set aside, which costs include the perpetual management, maintenance, monitoring, and other activities on the HM lands consistent with this ITP, the conservation easement, and the management plan required by the Land Manager Condition of Approval, above. Endowment as used in this ITP shall refer

to the endowment deposit and all interest, dividends, other earnings, additions and appreciation thereon. The Endowment shall be governed by this ITP, Government Code sections 65965-65968, as amended, and Probate Code sections 18501-18510, as amended.

After the interim management period, Permittee shall ensure that the designated long-term land manager implements the management and monitoring of the HM lands according to the final management plan. The long-term land manager shall be obligated to manage and monitor the HM lands in perpetuity to preserve their conservation values in accordance with this ITP, the conservation easement, and the final management plan. Such activities shall be funded through the Endowment.

9.2.1. <u>Identify an Endowment Manager</u>. The Endowment shall be held by the Endowment Manager, which shall be either CDFW or another entity qualified pursuant to Government Code sections 65965-65968, as amended.

Permittee shall submit to CDFW a written proposal that includes: (i) the name of the proposed Endowment Manager; (ii) whether the proposed Endowment Manager is a governmental entity, special district, nonprofit organization, community foundation, or congressionally chartered foundation; (iii) whether the proposed Endowment Manager holds the property or an interest in the property for conservation purposes as required by Government Code section 65968(b)(1) or, in the alternative, the basis for finding that the Project qualifies for an exception pursuant to Government Code section 65968(b)(2); and (iv) a copy of the proposed Endowment Manager's certification pursuant to Government Code section 65968(e).

Within thirty days of CDFW's receipt of Permittee's written proposal, CDFW shall inform Permittee in writing if it determines the proposal does not satisfy the requirements of Fish and Game Code section 2081, subdivision (b)(3) and, if so, shall provide Permittee with a written explanation of the reasons for its determination. If CDFW does not provide Permittee with a written determination within the thirty-day period, the proposal shall be deemed consistent with Section 2081, subdivision (b)(3).

9.2.2. Calculate the Endowment Funds Deposit. After obtaining CDFW written approval of the HM lands, long-term management plan, and Endowment Manager, Permittee shall prepare an endowment assessment (equivalent to a Property Analysis Record (PAR)) to calculate the amount of funding necessary to ensure the long-term management of the HM lands (Endowment Deposit Amount). Note that the endowment for the easement holder should not be included in this calculation. The Permittee shall submit to CDFW for review and approval the results of the endowment assessment before transferring funds to the Endowment Manager.

- 9.2.2.1. <u>Capitalization Rate and Fees</u>. Permittee shall obtain the capitalization rate from the selected Endowment Manager for use in calculating the endowment assessment and adjust for any additional administrative, periodic, or annual fees.
- 9.2.2.2. <u>Endowment Buffers/Assumptions</u>. Permittee shall include in the endowment assessment assumptions the following buffers for endowment establishment and use that will substantially ensure long-term viability and security of the Endowment:
 - 9.2.2.2.1. <u>10 Percent Contingency</u>. A 10 percent contingency shall be added to each endowment calculation to hedge against underestimation of the fund, unanticipated expenditures, inflation, or catastrophic events.
 - 9.2.2.2.2. Three Years Delayed Spending. The endowment shall be established assuming spending will not occur for the first 3 years after full funding.
 - 9.2.2.2.3. Non-annualized Expenses. For all large capital expenses to occur periodically but not annually such as fence replacement or well replacement, payments shall be withheld from the annual disbursement until the year of anticipated need or upon request to Endowment Manager and CDFW.
- 9.2.3. <u>Transfer Long-term Endowment Funds</u>. Permittee shall transfer the long-term endowment funds to the Endowment Manager upon CDFW approval of the Endowment Deposit Amount identified above.
- 9.2.4. Management of the Endowment. The approved Endowment Manager may pool the Endowment with other endowments for the operation, management, and protection of HM lands for local populations of the Covered Species but shall maintain separate accounting for each Endowment. The Endowment Manager shall, at all times, hold and manage the Endowment in compliance with this ITP, Government Code sections 65965-65968, as amended, and Probate Code sections 18501-18510, as amended.

Notwithstanding Probate Code sections 18501-18510, the Endowment Manager shall not make any disbursement from the Endowment that will result in expenditure of any portion of the principal of the endowment without the prior written approval of CDFW in its sole discretion. Permittee shall ensure that this requirement is included in any agreement of any kind governing the holding, investment, management, and/or disbursement of the Endowment funds.

Notwithstanding Probate Code sections 18501-18510, if CDFW determines in its sole discretion that an expenditure needs to be made from the Endowment to preserve the conservation values of the HM lands, the Endowment Manager shall process that expenditure in accordance with directions from CDFW. The Endowment Manager shall not be liable for any shortfall in the Endowment resulting from CDFW's decision to make such an expenditure.

- **9.3.** Reimburse CDFW. Permittee shall reimburse CDFW for all reasonable costs incurred by CDFW related to issuance and monitoring of this ITP, including, but not limited to transaction fees, account set-up fees, administrative fees, title and documentation review and related title transactions, costs incurred from other state agency reviews, and overhead related to transfer of HM lands to CDFW.
- 9.4. <u>Habitat Restoration</u>. Permittee shall restore approximately 31.6 acres of Covered Species habitat on-site that is temporarily impacted by the transportation project (includes utility work), construct amphibian passage on SR 156 with the Project Area, restore 5 acres of Covered Species habitat at the wetland restoration site, and approximately 43 acres of Covered Species habitat at the amphibian mitigation site, according to the following requirements:
 - 9.4.1. Plant Palette and Timing. Permittee shall restore areas that will be temporarily disturbed by transportation and utility activities and the wetland and amphibian mitigation sites to pre-project or better conditions using a diversity of species that are locally appropriate for the Central California Foothills and Coast Mountains ecoregions. The plant palette for seeding or planting shall be weed-free and may include up to two sterile non-native grass species if the amount does not exceed 25 percent of the total palette, by count. The seeding/planting shall be completed as soon as possible after the completion of temporary impacts in the transportation element area, but not later than November 15, or as otherwise approved by CDFW with the Habitat Restoration Plan (Habitat Restoration Plan(s) Condition of Approval, below.
 - 9.4.2. <u>Habitat Restoration Plan(s)</u>. At least 60 days before completing Covered Activities within each Project Component, the Permittee shall prepare and submit a Habitat Restoration Plan to CDFW for review and written approval prior to implementing the Habitat Restoration Plan. The Habitat Restoration Plan shall include design plans, implementation schedule, site preparation, seed mixture(s), other plant materials if applicable, application methods and timing, methods to avoid impacting undisturbed areas, maintenance activities during the contract plant establishment period and monitoring period, and adaptive management. The Habitat Restoration Plan shall include design plans and specifications for reseeding and irrigation should seed germination, establishment, and plant growth and vigor fall below the initial

performance standards. The Habitat Restoration Plan shall include requirements for annual monitoring; interim and final performance criteria to track native plant cover and invasive species control (at least 3 years for the transportation element and at least 5 years for the wetland restoration and amphibian mitigation sites); and adaptive management or remedial actions to take if performance standards are not being met. If changes are needed, Permittee shall seek approval from CDFW prior to committing resources to the change and submit an updated Habitat Restoration Plan with the subsequent annual monitoring report. The Habitat Restoration Plan shall establish Year 0 (zero) as the year that plantings will occur. Any subsequent remedial plantings shall start a new 5-year monitoring and reporting period to document the successful establishment of those plantings.

- 9.4.3. Amphibian Passage Management Plan. At least 2 months before starting transportation element activities, the Permittee shall prepare and submit an Amphibian Passage Management Plan to CDFW for review and approval to facilitate Covered Species passage on SR 156. The Amphibian Passage Management Plan shall include design plans and implementation measures for improving passage for Covered Species as proposed on SR 156 at PMs 1.40 and 1.53, including final design features and goals, a plan for maintaining the key design features (including culverts, directional fencing, vegetation, substrate, and soil moisture) to ensure long-term performance. The Amphibian Passage Management Plan shall include requirements for at least 5 years of monitoring key design features and Covered Species passage; interim and final performance criteria to track structure integrity and design goals; and adaptive management or remedial actions to take if performance standards are not being met. If changes to the Amphibian Passage Management Plan or remedial design features or actions are needed that are not in the approved Plan, Permittee shall seek written approval from CDFW prior implementing the change and submit an updated Amphibian Passage Management Plan with the subsequent annual monitoring report. The Amphibian Passage Management Plan shall establish Year 0 (zero) as the year that the design features are complete. Construction of any CDFWapproved remedial features shall start a new 5-year monitoring and reporting period.
- 9.4.4. Monitoring Reports. The Permittee shall submit Monitoring reports corresponding to the Habitat Restoration and Amphibian Passage Management Plans to CDFW by January 31 of each year with the ASRs. Each Monitoring Report shall provide a summary of the previous year's monitoring, the status of performance criteria, representative photographs, and adaptive management or remedial actions to be implemented to achieve success criteria. CDFW will determine when final performance criteria have been met and provide written confirmation to the Permittee.

IX. Amendment:

This ITP may be amended as provided by California Code of Regulations, Title 14, section 783.6, subdivision (c), and other applicable law. This ITP may be amended without the concurrence of the Permittee as required by law, including if CDFW determines that continued implementation of the Project as authorized under this ITP would jeopardize the continued existence of the Covered Species or where Project changes or changed biological conditions necessitate an ITP amendment to ensure that all Project-related impacts of the taking to the Covered Species are minimized and fully mitigated.

X. Stop-Work Order:

If CDFW determines the Permittee has violated any term or condition of this ITP or has engaged in unlawful take, CDFW may issue Permittee a written stop-work order instructing the Permittee to suspend any Covered Activity for an initial period of up to 30 days or risk suspension or revocation of this ITP. CDFW can issue a stop-work order to prevent or remedy a violation of this ITP, including but not limited to the failure to comply with reporting or monitoring obligations, or to prevent the unauthorized take of any CESA endangered, threatened, or candidate species, regardless of whether that species is a Covered Species under this ITP. Permittee shall stop work immediately as directed by CDFW upon receipt of any such stop-work order. Upon written notice to Permittee, CDFW may extend any stop-work order issued to Permittee for a period not to exceed 30 additional days.

If Permittee fails to remedy the violation or to comply with a stop-work order, CDFW may proceed with suspension and revocation of this ITP. Suspension and revocation of this ITP shall be governed by California Code of Regulations, Title 14, section 783.7, and any other applicable law. Neither the Designated Biologist nor CDFW shall be liable for any costs incurred in complying with stop-work orders.

XI. Compliance with Other Laws:

This ITP sets forth CDFW's requirements for the Permittee to implement the Project pursuant to CESA. This ITP does not necessarily create an entitlement to proceed with the Project. Permittee is responsible for complying with all other applicable federal, state, and local law.

XII. Notices:

Written notices, reports and other communications relating to this ITP shall be delivered to CDFW by email or registered first class mail at the following address, or at addresses CDFW may subsequently provide the Permittee. Notices, reports, and other communications shall reference the Project name, Permittee, and ITP Number (2081-2021-068-04) in a cover letter and on any other associated documents.

Original cover with attachment(s) to:

Julie A. Vance, Regional Manager California Department of Fish and Wildlife 1234 East Shaw Avenue Fresno, California 93710 Telephone (559) 243-4014 RRR.R4@wildlife.ca.gov

and a copy to:

Habitat Conservation Planning Branch California Department of Fish and Wildlife Attention: CESA Permitting Program Post Office Box 944209 Sacramento, California 94244-2090 CESA@wildlife.ca.gov

Unless Permittee is notified otherwise, CDFW's Regional Representative for purposes of addressing issues that arise during implementation of this ITP is:

Mindy Trask
California Department of Fish and Wildlife
1234 East Shaw Avenue
Fresno, California 93710
Telephone (559) 939-0282
Mary.Trask@wildlife.ca.gov

XIII. Compliance with the California Environmental Quality Act:

CDFW's issuance of this ITP is subject to CEQA. CDFW is a responsible agency pursuant to CEQA with respect to this ITP because of prior environmental review of the Project by the lead agency, California Department of Transportation. (See generally Pub. Resources Code, §§ 21067, 21069.) The lead agency's prior environmental review of the Project is set forth in the Final Environmental Impact Report/Environmental Assessment with Finding of No Significant Impact (EIR) (SCH No. 1999111063) that the California Department of Transportation certified for Route 156 West Corridor Project on January 31, 2013, and revalidated on June 7, 2022. At the time the lead agency certified the EIR and approved the Project, it also adopted various mitigation measures for the Covered Species as conditions of Project approval.

This ITP, along with CDFW's related CEQA findings, which are available as a separate document, provide evidence of CDFW's consideration of the lead agency's EIR for the Project and the environmental effects related to issuance of this ITP (CEQA Guidelines, § 15096, subd. (f)). CDFW

finds that issuance of this ITP will not result in any previously undisclosed potentially significant effects on the environment or a substantial increase in the severity of any potentially significant environmental effects previously disclosed by the lead agency. Furthermore, to the extent the potential for such effects exists, CDFW finds adherence to and implementation of the Conditions of Project Approval adopted by the lead agency, and that adherence to and implementation of the Conditions of Approval imposed by CDFW through the issuance of this ITP, will avoid or reduce to below a level of significance any such potential effects. CDFW consequently finds that issuance of this ITP will not result in any significant, adverse impacts on the environment.

XIV. Findings Pursuant to CESA:

These findings are intended to document CDFW's compliance with the specific findings requirements set forth in CESA and related regulations. (Fish & G. Code § 2081, subs. (b)-(c); Cal. Code Regs., tit. 14, §§ 783.4, subds, (a)-(b), 783.5, subd. (c)(2); § 5050 (a)(3)(b)(1); Fish & G. Code § 2081.5, subd. (a).

CDFW finds based on substantial evidence in the ITP application, the EIR, Biological Opinion for the State Route 156 West Corridor Improvement Project, Programmatic Biological Opinion for California Red-Legged Frog, CTS, and SCLTS, the results of site visits and consultations, and the administrative record of proceedings, that issuance of this ITP complies and is consistent with the criteria governing the issuance of ITPs pursuant to CESA:

- (1) Take of Covered Species as defined in this ITP will be incidental to the otherwise lawful activities covered under this ITP;
- (2) Impacts of the taking on Covered Species will be minimized and fully mitigated through the implementation of measures required by this ITP and as described in the MMRP. Measures include: (1) permanent habitat protection and restoration; (2) establishment of avoidance zones; (3) worker education; (4) construction of Covered Species passage structures under SR156; and (4) Quarterly and Annual Compliance Reports. CDFW evaluated factors including an assessment of the importance of the habitat in the Project Area, the extent to which the Covered Activities will impact the habitat, and CDFW's estimate of the acreage required to provide for adequate compensation. Based on this evaluation, CDFW determined that the protection and management in perpetuity of 43.9 acres of compensatory habitat that is contiguous with other protected Covered Species habitat and/or is of higher quality than the habitat being destroyed by the Project, along with the minimization, monitoring, reporting, and funding requirements of this ITP minimizes and fully mitigates the impacts of the taking caused by the Project;
- (3) The take avoidance and mitigation measures required pursuant to the conditions of this ITP and its attachments are roughly proportional in extent to the impacts of the taking authorized by this ITP;

- (4) The take monitoring program (as per <u>Compliance Monitoring</u> Condition of Approval) and adaptive management as required in the CDFW-approved Covered Species Mortality Reduction and Relocation Plan(s) (as per <u>Covered Species Mortality Reduction and Relocation Plan(s)</u> Condition of Approval) required pursuant to the conditions of this ITP and its attachments satisfy the required conservation standards for monitoring the effectiveness of, and amending, as necessary, the measures to minimize and fully mitigate the impacts of the taking authorized by this ITP;
- (5) The <u>Covered Species Mortality Reduction and Relocation Plan(s)</u>, <u>Habitat Restoration Plan(s)</u>, and <u>Amphibian Passage Management Plan</u> Conditions of Approval, as well as the HM Lands and amphibian passage structures and the associated land management and monitoring activities at those locations, satisfy the requirement for additional measures to satisfy the conservation standard of subdivision (d) of Fish and Game Code section 2805.
- (6) The measures required by this ITP maintain Permittee's objectives to the greatest extent possible;
- (7) All required measures are capable of successful implementation;
- (8) This ITP is consistent with any regulations adopted pursuant to Fish and Game Code sections 2112 and 2114;
- (9) Permittee has ensured adequate funding to implement the measures required by this ITP as well as for monitoring compliance with, and the effectiveness of, those measures for the Project; and
- (10) Issuance of this ITP will not jeopardize the continued existence of the Covered Species based on the best scientific and other information reasonably available, and this finding includes consideration of the species' capability to survive and reproduce, and any adverse impacts of the taking on those abilities in light of (1) known population trends; (2) known threats to the species; and (3) reasonably foreseeable impacts on the species from other related projects and activities. Moreover, CDFW's finding is based, in part, on CDFW's express authority to amend the terms and conditions of this ITP without concurrence of the Permittee as necessary to avoid jeopardy and as required by law.

XV. Attachments:

FIGURE 1 Project Location Map
FIGURE 2 Transportation Project Area
FIGURE 3 Wetland Mitigation Project Area
FIGURE 4 Amphibian Mitigation Project Area

ATTACHMENT 1 Mitigation Monitoring and Reporting Program

ATTACHMENT 2 Biologist Resume Form

ATTACHMENT 3 Declining Amphibian Populations Task Force Fieldwork Code of

Practice

ISSUED BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

ON ______

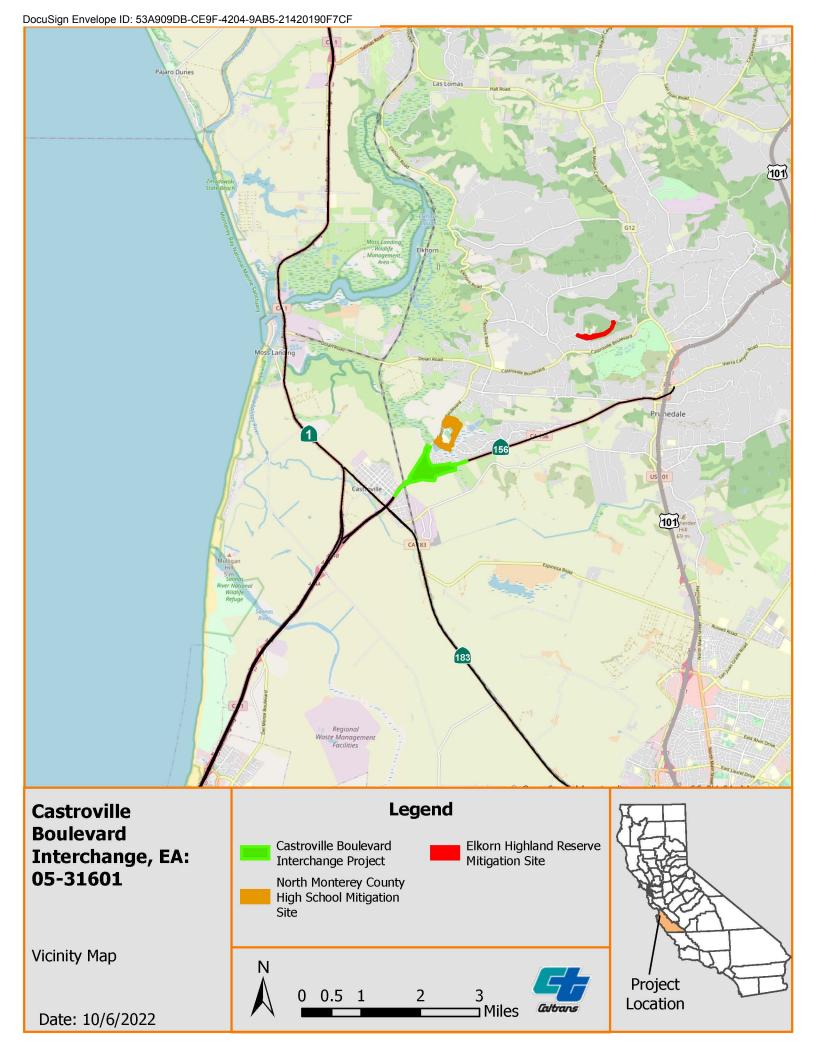
DocuSigned by:

Julie Vanes

FAR3F09FF0R945A

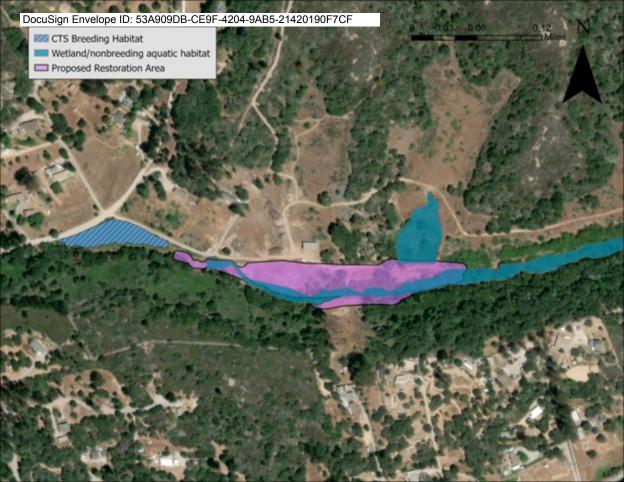
Julie A. Vance, Regional Manager Central Region















Castroville
Amphibian
Conservation Area,
North Monterey
County High School
Mitigation,

0 0.05 0.1 Miles

Conservation Easement Boundaries



CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE MITIGATION MONITORING AND REPORTING PROGRAM (MMRP) CALIFORNIA ENDANGERED SPECIES ACT

INCIDENTAL TAKE PERMIT NO. 2081-2021-068-04

PERMITTEE: California Department of Transportation

PROJECT: State Route 156 Castroville Boulevard Interchange Project (05-31601)

PURPOSE OF THIS MMRP

The purpose of this MMRP is to ensure that the impact minimization and mitigation measures required by the Department of Fish and Wildlife (CDFW) for the above-referenced Project are properly implemented, and thereby to ensure compliance with section 2081(b) of the Fish and Game Code and section 21081.6 of the Public Resources Code. A table summarizing the mitigation measures required by CDFW is attached. This table is a tool for use in monitoring and reporting on implementation of mitigation measures, but the descriptions in the table do not supersede the mitigation measures set forth in the Incidental Take Permit (ITP) and in attachments to the ITP, and the omission of a permit requirement from the attached table does not relieve the Permittee of the obligation to ensure the requirement is performed.

OBLIGATIONS OF PERMITTEE

Mitigation measures must be implemented within the time periods indicated in the table that appears below. Permittee has the primary responsibility for monitoring compliance with all mitigation measures and for reporting to CDFW on the progress in implementing those measures. These monitoring and reporting requirements are set forth in the ITP itself and are summarized at the front of the attached table.

VERIFICATION OF COMPLIANCE, EFFECTIVENESS

CDFW may, at its sole discretion, verify compliance with any mitigation measure or independently assess the effectiveness of any mitigation measure.

TABLE OF MITIGATION MEASURES

The following items are identified for each mitigation measure: ITP Condition of Approval (COA) Source, Mitigation Measure, Implementation Schedule, and Status / Date/ Responsible Parties. The Mitigation Measure column summarizes the mitigation requirements of the ITP. The Implementation Schedule column shows the phase when each mitigation measure will be implemented. The Responsible Party column identifies the person or agency that is primarily responsible for implementing the mitigation measure. The Status / Date/ Responsible Parties column shall be completed by the Permittee during preparation of each Status Report and the Final Mitigation Report and must identify the implementation status of each mitigation measure, the date that status was determined, and the person(s) or roles (e.g., construction inspector) who implemented the mitigation measure.

ITP COA		Implementation	Status / Date /
(Source)	Mitigation Measure	Schedule	Responsible Party(ies)
6.1	<u>Designated Representative</u> . Before starting Covered Activities, Permittee	Before the start of	
	shall designate a representative (Designated Representative) responsible for	Covered Activities and	
	communications with CDFW and overseeing compliance with this ITP.	any time a new	
	Permittee shall notify CDFW in writing before starting Covered Activities of	Designated	
	the Designated Representative's name, business address, and contact	Representative is	
	information, and shall notify CDFW in writing if a substitute Designated	selected	
	Representative is selected or identified at any time during the term of this ITP.		
6.2	Designated Biologists and Designated Monitors. Permittee shall submit to	Before the start of, and	
	CDFW, in writing, the name, qualifications, business address, and contact	during Covered Activities	
	information of the Designated Biologists and Designated Monitors using the	per Project component,	
	Biologist Resume Form (ATTACHMENT 2) or another format containing the	as needed	
	same information at least 30 days before starting Covered Activities at each		
	Project Component. The Designated Monitors may assist the Designated		
	Biologists in compliance monitoring under the direct supervision of the		
	Designated Biologists and as specified in the Compliance Monitoring		
	Condition of Approval below. Permittee shall ensure that the Designated		
	Biologists are knowledgeable in the biology and natural history of both		
	Covered Species and have experience with collecting and handling of the		
	Covered Species or equivalent taxa, excavating small mammal		
	burrows/crevices for the Covered Species or equivalent, enforcing no-		
	disturbance buffers, and monitoring construction activities under an ITP for		
	the Covered Species or equivalent. Equivalent experience may only be		
	substituted for SCLTS and only as approved by CDFW. Permittee shall		
	ensure that the Designated Monitors are knowledgeable and experienced in		
	the biology and natural history of the Covered Species. The Designated		
	Biologists and Designated Monitors shall be responsible for monitoring		
	Covered Activities to help minimize and fully mitigate or avoid the incidental		
	take of individual Covered Species and to minimize disturbance of Covered		
	Species' habitat. Permittee shall obtain CDFW approval of the Designated		
	Biologists and Designated Monitors in writing before starting Covered		
	Activities and shall also obtain approval in advance, in writing, if the		
	Designated Biologists and Designated Monitors must be changed.		

ITP COA (Source)	Mitigation Measure	Implementation Schedule	Status / Date / Responsible Party(ies)
6.3	Designated Biologist and Designated Monitor Authority. To ensure compliance with the Conditions of Approval of this ITP, the Designated Biologists and Designated Monitors shall immediately stop any activity that does not comply with this ITP and/or order any reasonable measure to avoid the unauthorized take of an individual of the Covered Species. Permittee shall provide unfettered access to the Project Area and otherwise facilitate the Designated Biologists and Designated Monitors in the performance of his/her duties. If the Designated Biologist is unable to comply with the ITP, then the Designated Biologist shall notify the CDFW Representative immediately. Permittee shall not enter into any agreement or contract of any kind, including but not limited to non-disclosure agreements and confidentiality agreements, with its contractors and/or the Designated Biologist that prohibit or impede open communication with CDFW, including but not limited to providing CDFW staff with the results of any surveys, reports, or studies or notifying CDFW of any non-compliance or take. Failure to notify CDFW of any non-compliance or take or injury of a Covered Species as a result of such agreement or contract may result in CDFW taking actions to prevent or remedy a violation of this ITP.	During Covered Activities	
6.4	Education Program. Permittee shall conduct an education program for all persons employed or otherwise working in the Project Area before performing any work. The program shall consist of a presentation from a Designated Biologist or Designated Monitor that includes a discussion of the biology and general behavior of the Covered Species, information about the distribution and habitat needs of the Covered Species, sensitivity of the Covered Species to human activities, its status pursuant to CESA including legal protection, recovery efforts, penalties for violations and Project-specific protective measures described in this ITP. Permittee shall prepare and distribute wallet-sized cards or a fact sheet handout containing this information for workers to carry in the Project Area. Permittee shall provide interpretation for non-English speaking workers, and the same instruction shall be provided to any new workers before they are authorized to perform work in the Project Area. Upon completion of the program, employees shall sign a form stating they attended the program and understand all protection measures. This training shall be repeated at least once annually for long-term and/or permanent employees that will be conducting work in the Project Area.	Before the start of, and during Covered Activities	

ITP COA (Source)	Mitigation Measure	Implementation Schedule	Status / Date / Responsible Party(ies)
6.5	Construction Monitoring Documentation. The Designated Biologists and Designated Monitors shall maintain construction-monitoring documentation on-site in either hard copy or digital format throughout the construction period, which shall include a copy of this ITP with attachments and a list of signatures of all personnel who have successfully completed the education program. Permittee shall ensure a copy of the construction-monitoring documentation is available for review at the Project site upon request by CDFW.	During Covered Activities	
6.6	<u>Trash Abatement</u> . Permittee shall initiate a trash abatement program before starting Covered Activities and shall continue the program for the duration of the Project. Permittee shall ensure that trash and food items are contained in animal-proof containers and removed, ideally at daily intervals but at least once a week, to avoid attracting opportunistic predators such as ravens, coyotes, and feral dogs.	During Covered Activities	
6.7	Dust Control. Permittee shall implement dust control measures during Covered Activities to facilitate visibility for monitoring of the Covered Species by the Designated Biologist. Permittee shall keep the amount of water used to the minimum amount needed and shall not allow water to form puddles. Permittee shall not apply dust suppressant, surfactant, soil binders, or stabilizer products that may be harmful to Covered Species. Permittee shall obtain written approval from CDFW before applying any dust suppressant (other than water), surfactant, soil binders, stabilizer products, hydromulch, or hydroseed. Permittee shall provide all available documentation of each product's safety or hazards to wildlife to CDFW with any such request for approval.	During Covered Activities	
6.8	Erosion Control Materials. Permittee shall prohibit use of erosion control materials potentially harmful to Covered Species and other species, such as monofilament netting (erosion control matting) or similar material, in potential Covered Species' habitat.	During Covered Activities	
6.9	Delineation of Property Boundaries. Before starting Covered Activities within each discrete part of the Project Area in active construction (Work Area), Permittee shall clearly delineate the boundaries of the Work Area with fencing, stakes, or flags and shall be maintained until the completion of Covered Activities in that area. Permittee shall restrict all Covered Activities to within the fenced, staked, or flagged Work Area.	During Covered Activities	

ITP COA (Source)	Mitigation Measure	Implementation Schedule	Status / Date / Responsible Party(ies)
6.10	Delineation of Habitat. Before starting Covered Activities at any Work Area, Permittee shall clearly delineate habitat of the Covered Species within or adjacent to the Work Area with posted signs, posting stakes, flags, and/or rope or cord, and place fencing as necessary to minimize the disturbance of Covered Species' habitat.	During Covered Activities	
6.11	Project Access. Project-related personnel shall access the Project Area using existing routes, or temporary detours in the highway construction area and shall not cross Covered Species' habitat outside of or enroute to the Project Area. Permittee shall restrict Project-related vehicle traffic to established roads, staging, and parking areas as per the Staging Areas Condition of Approval. Permittee shall ensure that construction vehicle speeds do not exceed a daytime speed limit of 20 miles per hour (mph) and a nighttime speed limit of 15 mph to avoid Covered Species on or traversing the roads. If Permittee determines construction of routes for travel is necessary outside of the Project Area, the Designated Representative shall contact CDFW for written approval before conducting such an activity. CDFW may require an amendment to this ITP, among other reasons, if additional take of Covered Species occurs because of the Project modification.	During Covered Activities	
6.12	Staging Areas. Permittee shall confine all Project-related parking, storage areas, laydown sites, equipment storage, and any other surface-disturbing activities to the Project Area using, to the extent possible, previously disturbed areas. No parking, storage, laydown, or staging areas shall be located within 50-feet of potential Covered Species burrows or breeding habitat unless they have had exclusionary fencing installed according to Covered Species Exclusion Fencing Condition of Approval, or as otherwise approved by CDFW in the Covered Species Mortality Reduction Plan (as per Covered Species Mortality Reduction and Relocation Plan(s) Condition of Approval). Additionally, Permittee shall not use or cross Covered Species' habitat outside of the marked Project Area unless provided for as described in the Project Access Condition of Approval. If Permittee determines parking, storage, laydown, or staging areas are necessary outside of the Project Area, the Designated Representative shall contact CDFW for written approval before carrying out such an activity. CDFW may require an amendment to this ITP, among other reasons, if additional take of Covered Species will occur because of the project modification.	During Covered Activities	

ITP COA	Mitigation Magazine	Implementation	Status / Date /
(Source)	Mitigation Measure	Schedule	Responsible Party(ies)
6.13	Precipitation. The Designated Biologist and Permittee shall monitor the	During Covered Activities	
	National Weather Service 72-hour forecast for the Project Area. If a 50		
	percent or greater chance of rainfall is predicted within 72 hours, or if rainfall		
	commences with a less than 50 percent chance predicted, Permittee shall		
	cease all Covered Activities in all portions of the Project Area where Burrow		
	Avoidance, Burrow and Crevice Excavation, and Covered Species Exclusion		
	Fencing Conditions of Approval have not yet been completed until a zero		
	percent chance of precipitation in the 72-hour forecast, or as otherwise		
	approved in writing by CDFW. Work may continue 24 hours after the rain		
	ceases and the forecast has the approved chance of precipitation.		
6.14	Hazardous Waste. Permittee shall immediately stop and, pursuant to	During Covered Activities	
	pertinent state and federal statutes and regulations, arrange for repair and		
	clean up by qualified individuals of any fuel or hazardous waste leaks or spills		
	at the time of occurrence, or as soon as it is safe to do so. Permittee shall		
	exclude the storage and handling of hazardous materials from the Project		
	Area and shall properly contain and dispose of any unused or leftover		
	hazardous products off-site.		
6.15	CDFW Access. Permittee shall provide CDFW staff with reasonable access to	During Covered Activities	
	the Project and mitigation lands under Permittee control and shall otherwise		
	fully cooperate with CDFW efforts to verify compliance with or effectiveness of		
	mitigation measures set forth in this ITP.		
6.16	Refuse Removal. Upon completion of Covered Activities at each Project	During Covered Activities	
	Component, Permittee shall remove from the Project Area and properly		
	dispose of all temporary fill and construction refuse, including, but not limited		
	to, broken equipment parts, wrapping material, cords, cables, wire, rope,		
	strapping, twine, buckets, metal or plastic containers, and boxes.		
6.17	Wildfire Avoidance. Permittee or Permittee's contractors shall minimize the	During Covered Activities	
	potential for human-caused wildfires by carrying water or fire extinguishers		
	and shovels in all Project-related vehicles and equipment. The use of shields,		
	protective mats, or use of other fire preventative methods shall be used		
	during grinding and welding to minimize the potential for fire. Personnel shall		
	be trained regarding the fire hazard for wildlife as part of the worker education		
	program described in the Education Program Condition of Approval above.		

ITP COA (Source)	Mitigation Measure	Implementation Schedule	Status / Date / Responsible Party(ies)
7.1	Notification Before Commencement. The Designated Representative shall notify CDFW 14 calendar days before starting Covered Activities at each Project Component and shall document compliance with all pre-Project Conditions of Approval before starting Covered Activities at each Project Component. The Designated Representative shall also notify CDFW no less than 14 calendar days before resuming Covered Activities after a lapse in project work of 60 days or longer.	Before the start of, and during Covered Activities per Project component	responsible Fairy(ies)
7.2	Design Plans. Permittee shall provide CDFW with final engineering design plans at least 30 calendar days before starting Covered Activities at each Project component and as-constructed design plans with the Final Mitigation Report (Final Mitigation Report Condition of Approval).	Before the start of Covered Activities per Project component	
7.3	Notification of Non-compliance. The Designated Representative shall immediately notify CDFW if the Permittee is not in compliance with any Condition of Approval of this ITP, including but not limited to any actual or anticipated failure to implement measures within the time periods indicated in this ITP and/or the MMRP. The Designated Representative shall follow up within 24 hours with a written report to CDFW describing, in detail, any non-compliance with this ITP and suggesting measures to remedy the situation.	During Covered Activities	
7.4	Pre-Activity Survey Report. At least 3 days prior to starting Covered Activities at each Project component, Permittee shall prepare and submit to CDFW the results of pre-activity surveys and maps of burrows and crevices (as per Pre-Activity Clearance Surveys and Reporting and Flag and Map Burrows/Crevices Conditions of Approval).	Before the start of Covered Activities	

ITP COA (Source)	Mitigation Measure	Implementation Schedule	Status / Date / Responsible Party(ies)
7.5	Covered Species Mortality Reduction and Relocation Plan(s). Permittee shall submit a Covered Species Mortality Reduction and Relocation Plan to CDFW at least 30 calendar days before starting Covered Activities. Separate Plans may be prepared for each Project Component, each provided at least 30-calendar days prior to starting Covered Activities for the applicable Project Component(s). Burrow excavation and relocation activities shall not proceed until the Mortality Reduction and Relocation Plan has been approved in writing by CDFW's Regional Representative (identified in Quarterly Compliance Reports Condition of Approval below). The Mortality Reduction and Relocation Plan shall include, but not be limited to: (1) methods to survey, identify, flag and map Covered Species burrows and/or crevices; (2) avoidance buffers per types of Work Areas; (3) techniques to excavate burrows and crevices; (4) timing activities to survey for Covered Species, excavate burrows and crevices and install exclusionary fencing; (5) techniques to capture, handle, and relocate Covered Species safely if they are encountered; (6) measures to protect Covered Species during restoration work; (7) identification of relocation areas; (8) specifications of the fencing which will be installed to exclude the Covered Species from the Project Area, including maps or plan sheets; (9) details regarding the use of coverboards which will be employed accessory to the exclusion fencing; (10) adaptive management strategies to protect Covered Species; and (11) protocols for encounters with injured Covered Species including identification of a wildlife rehabilitation center or veterinary facility where injured individuals of the Covered Species will be taken.	Before the start of Covered Activities per Project component	
	Covered Activities within the Project Area of any given Project Component may not proceed until the relevant Covered Species Mortality Reduction and Relocation Plan has been approved in writing by CDFW. The Mortality Reduction and Relocation Plan must specify that only the approved Designated Biologists are authorized to capture and handle individuals of the Covered Species. Once a Covered Species Mortality Reduction and Relocation Plan is approved in writing by CDFW, it shall be used for all Covered Species mortality reduction activities associated with the specified Project Component for the duration of this ITP. Any proposed changes to a CDFW-approved Covered Species Mortality Reduction and Relocation Plan shall be submitted in writing to CDFW and approved by CDFW in writing prior to implementation of any proposed Plan modifications.		

ITP COA		Implementation	Status / Date /
(Source)	Mitigation Measure	Schedule	Responsible Party(ies)
7.6	Compliance Monitoring. The Designated Biologist(s) shall be on-site daily during active construction work within a Project Component, for the duration of the day and/or night, until the pre-activity clearance survey (Pre-Activity Clearance Surveys Condition of Approval); burrow/crevice flagging, avoidance, or excavation (Flag and Map Burrows/Crevices, Burrow Avoidance, and Animal Burrow and Crevice Excavation Conditions of Approval); exclusion fence installation and removal (Covered Species Exclusion Fencing Condition of Approval); and initial grading activities are all complete for that Project Component. Thereafter, the Designated Biologists or Designated Monitors shall conduct compliance inspections at least once a week, including at least once during the day and once during the night when night work is occurring, during all work activities in each active Project Component. Alternatively, Permittee may elect to maintain daily monitoring for the duration of the day and/or night instead of burrow excavation and exclusion fence installation, for certain work activities within a Work Area, when approved in writing by CDFW on a case-by-case basis, or as described in the CDFW approved Mortality Reduction and Relocation Plan (Covered Species Mortality Reduction and Relocation Plan(s) Condition of Approval). Burrow flagging, monitoring during fence installation, and compliance inspections may be performed independently by specific Designated Monitors upon written approval from CDFW.	During Covered Activities	
	Designated Biologists or Designated Monitors shall conduct compliance inspections to: (1) minimize incidental take of the Covered Species; (2) prevent unlawful take of species; (3) check for compliance with all measures of this ITP; (4) check all exclusion zones and exclusionary fencing for presence of Covered Species in work areas or entrapped in the fencing; (5) ensure that signs, stakes, and fencing are intact; and (6) ensure that Covered Activities are only occurring at the Project Area.		

ITP COA (Source)	Mitigation Measure	Implementation Schedule	Status / Date / Responsible Party(ies)
7.7	Inspection Records. The Designated Biologists or Designated Monitors shall prepare written observation and inspection records for compliance monitoring as per the Compliance Monitoring Condition of Approval, summarizing: (1) name of the applicable Project Component; (2) inspection date and start/stop times; (3) weather conditions; (4) active construction activities and locations; (5) integrity of signs, stakes or protective fencing; (5) wildlife observations; (6)		
	observations of Covered Species and their sign; (7) observations of non-compliance with any Conditions in this ITP; and (8) measures implemented or anticipated to rectify or remediate any incidents of non-compliance with this ITP. The inspection records shall be submitted with the Quarterly Compliance Reports identified in the Quarterly Compliance Reports Condition of Approval.		
7.8	Quarterly Compliance Reports. The Designated Representative or a Designated Biologist shall compile the observation and inspection records identified in the Inspection Records Condition of Approval, Covered Species observation/handling/relocation information as in Covered Species Record of Observations and Handling Condition of Approval, and documentation of night work according to Lighting and Night Work Condition of Approval into a Quarterly Compliance Report (QCR) and submit it to CDFW, along with a copy of the MMRP table with notes showing the current implementation status of each mitigation measure. QCRs shall be submitted before the 15th day of the month that it is due via electronic mail to CDFW's Regional Representative, Regional Office, and Headquarters CESA Program. At the time of this ITP's approval, the CDFW Regional Representative is Mindy Trask (mary.trask@wildlife.ca.gov), the Regional Office e-mail is RRR.R4@wildlife.ca.gov, and the Headquarters CESA Program e-mail is CESA@wildlife.ca.gov. CDFW may at any time increase the timing and number of compliance inspections and reports required under this provision depending upon the results of previous compliance inspections. If CDFW determines the reporting schedule must be changed, CDFW will notify Permittee in writing of the new reporting schedule.	During Covered Activities	

ITP COA (Source)	Mitigation Measure	Implementation Schedule	Status / Date / Responsible Party(ies)
7.9	Annual Status Reports. Permittee shall provide CDFW with an Annual Status	By January 31 each year	Neapoliable Faity(les)
	Report (ASR) no later than January 31 of every year beginning with issuance of this ITP and continuing until CDFW accepts the Final Mitigation Report	during Covered Activities	
	identified below. Each ASR shall include, at a minimum: (1) a summary of all		
	QCRs for that year identified in the Quarterly Compliance Reports Condition		
	of Approval; (2) a record of the Education Program training sessions provided		
	over the reporting year; (3) a general description of the status of the Project Area and Covered Activities per Project Component, including actual or		
	projected completion dates, if known and representative photographs; (4) a		
	copy of the table in the MMRP for each Project Component with notes		
	showing the current implementation status of each mitigation measure; (5) an		
	assessment of the effectiveness of each completed or partially completed		
	mitigation measure in avoiding, minimizing and mitigating Project impacts; (6) a summary of findings from all pre-activity surveys conducted and any other		
	Covered Species observations, including but not limited to, the number of		
	times a Covered Species was encountered, location, if avoidance was		
	achieved, and if not, what measures were implemented; (7) all available		
	information about Project-related incidental take of the Covered Species; and (8) information about other Project impacts on the Covered Species. ASRs		
	shall be submitted via email to the entities identified in the Quarterly		
	Compliance Reports Condition of Approval.		
7.10	CNDDB Observations. The Designated Biologist shall submit all observations	During Covered Activities	
	of Covered Species to CDFW's California Natural Diversity Database (CNDDB) within 60 calendar days of the observation and the Designated		
	Biologist shall include copies of the submitted forms in the ASRs (per Annual		
	Status Reports Condition of Approval).		
7.11	Covered Species Record of Observations and Handling. All Covered Species	During Covered Activities	
	captures, relocations, and observations by the Designated Biologist(s) shall		
	include the following documented information: (1) the date, time, and location of each occurrence using Global Positioning System (GPS) technology; (2)		
	the name of the party that actually identified the Covered Species; (3)		
	circumstances of the incident; the general condition and health of each		
	individual; (4) any diagnostic markings, sex, age (juvenile or adult); (5) actions		
	undertaken; (6) and habitat description. Permittee shall also submit this		
	information to the CNDDB (<u>CNDDB Observations</u> Condition of Approval). This information shall also be included in the QCRs and ASRs (per Quarterly		
	Compliance Reports and Annual Status Reports Conditions of Approval).		

ITP COA		Implementation	Status / Date /
(Source)	Mitigation Measure	Schedule	Responsible Party(ies)
7.12	Final Mitigation Report. No later than 60 days after completion of all mitigation measures, Permittee shall provide CDFW with a Final Mitigation Report, submitted via email to the entities identified the Quarterly Compliance Reports Condition of Approval. The Designated Biologist shall prepare the Final Mitigation Report which shall include, at a minimum: (1) a summary of all QCRs and all ASRs; (2) a copy of the table in the MMRP for each Project Component with notes showing when each of the mitigation measures was implemented; (3) all available information about Project-related incidental take of the Covered Species; (4) information about other Project impacts on the Covered Species; (5) maps and a summary table of the actual temporary and permanent habitat impact areas authorized under this ITP; (6) beginning and ending dates of Covered Activities; (7) an assessment of the effectiveness of this ITP's Conditions of Approval in minimizing and fully mitigating Project impacts of the taking on Covered Species; (8) recommendations on how mitigation measures might be changed to more effectively minimize take and mitigate the impacts of future projects on the Covered Species; (9) representative before, during and after photographs; (9) as-constructed design plans; and (10) any other pertinent information. The Permittee shall also submit Geographic Information Systems (GIS) data files of the actual temporary and permanent habitat impact areas authorized under this ITP with the Final Mitigation Report.	Following Covered Activities and completion of all mitigation measures	

ITP COA (Source)	Mitigation Measure	Implementation Schedule	Status / Date / Responsible Party(ies)
7.13	Notification of Take or Injury. Workers shall immediately notify the Designated Biologist(s) if a Covered Species is taken or injured by a Project-related activity, or if a Covered Species is otherwise found dead or injured within the vicinity of the Project. The Designated Biologist or Designated Representative shall provide initial notification to CDFW through email to the Regional Representative and Regional Office identified in the Quarterly Compliance Report Condition of Approval, immediately unless the incident occurs outside of normal business hours. In that event, CDFW shall be notified no later than the next business day. The initial notification to CDFW shall include: (1) information regarding the location, species, and number of animals taken or injured; (2) circumstances of the incident; (3) the name of the wildlife rehabilitation center or veterinary facility where dead or injured individuals were taken or treated; and (4) the ITP Number. Following initial notification, Permittee shall send CDFW a written report within 3 calendar days. The report shall include the date and time of the finding or incident, location of the animal or carcass, and if possible, provide a photograph, explanation as to cause of take or injury, and any other pertinent information. The written report shall be submitted via email to the Regional Representative and Regional Office identified in the Quarterly Compliance Reports Condition of Approval.	During Covered Activities	
8.1	Rodenticide Use. Permittee shall prohibit the use of rodenticides in the Project Area.	During Covered Activities	
8.2	Lighting and Night Work. Permittee shall not use temporary, fixed, exterior lighting, including motion-triggered security lighting, that casts light on Covered Species habitat beyond the footprint of the Project Area or that is turned on all night between sunset and sunrise unless authorized in writing from CDFW. Permittee shall not install new permanent or upgrade existing lighting in the Project Area, except as otherwise identified in the Project Description. New permanent or upgraded lights shall be designed to avoid or minimize illuminating Covered Species habitat, such as the use of shields, warm-spectrum luminaries, or lowering the height of fixtures. The number of nights worked shall be documented in the QCR (as per Quarterly Compliance Reports Condition of Approval). The documentation shall summarize, for each Project Component, the number of nights that work occurred for the quarter that the report covers and a cumulative tabulation of the total number of nights worked since Project initiation.	During Covered Activities	

ITP COA (Source)	Mitigation Measure	Implementation Schedule	Status / Date / Responsible Party(ies)
8.3	Equipment and Vehicle Fueling. Permittee shall ensure that all equipment and vehicle fueling and maintenance occur at least 50 feet from any wetlands and Covered Species burrows unless otherwise approved in writing by CDFW. Permittee shall ensure that sufficient spill containment and cleanup equipment shall be present at all fueling locations.	During Covered Activities	receponolisie i arty(ioo)
8.4	Herbicide Use. Permittee shall ensure that all herbicide use (mixing, application, and clean-up) is done by a licensed applicator in accordance with all applicable State, federal, and local regulations. Permittee shall only apply herbicide sprays via ground application when wind speed measures less than 10 miles per hour. Permittee shall ensure that great care is taken to avoid herbicide outside the boundaries of the Project Area. All herbicide sprays utilized within the Project Area shall contain a dye to prevent overspray.	During Covered Activities	
8.5	Avoid Introduction of Herbicides into Waters. Permittee shall ensure herbicide mixing occurs within the Project Area where there is no potential of a spill reaching waters at and near the Project Area. Permittee shall not apply herbicides on or within 50 feet of known or potential Covered Species breeding habitat during the breeding season (onset of fall/winter rains, generally November 1 through May 31) unless Permittee has confirmed Covered Species are not present and approved in writing by CDFW.	During Covered Activities	
8.6	Soil Stockpiles. Permittee shall ensure that soil stockpiles are placed where soil cannot pass into "Waters of the State," including streams which traverses the Project Area, in accordance with Fish and Game Code section 5650. Permittee shall appropriately protect stockpiles to prevent soil erosion and discharge from the Project Area.	During Covered Activities	

ITP COA		Implementation	Status / Date /
(Source)	Mitigation Measure	Schedule	Responsible Party(ies)
8.7	Open Trenches and Excavations. Biological Monitor(s) shall inspect all open	During Covered Activities	
	holes, sumps, and trenches within the Project Area at the beginning, middle,		
	and end of each day (including weekends and any other non-workdays) for		
	trapped individuals of the Covered Species. To prevent inadvertent		
	entrapment of Covered Species, all open trenches, holes, sumps, and other		
	excavations with sidewalls steeper than a 1:1 (45 degree) slope shall have an		
	escape ramp of earth or a non-slip material with a less than 1:1 (45 degree)		
	slope, or all excavated, trenches, holes, sumps, or other excavations with a		
	greater than 1:1 (45 degree) slope of any depth shall be covered with barrier		
	material (such as hardware cloth) at the close of each working day such that		
	animals are unable to dig or squeeze under the barrier and become		
	entrapped. The outer 2 feet of excavation cover shall conform to solid ground		
	so that gaps do not occur between the cover and the ground, and the		
	excavation cover shall be secured with soil staples or by similar means to		
	prevent gaps. Worker(s) shall thoroughly inspect all trenches, holes, sumps,		
	or other excavations for Covered Species (or other wildlife) before they are		
	backfilled. If any Biological Monitor or worker discovers that Covered Species		
	have become trapped, Permittee shall cease all Covered Activities in the		
	vicinity and notify a Designated Biologist immediately. Biological Monitor(s),		
	Project workers and the Designated Biologist(s) shall allow Covered Species		
	to escape unimpeded if possible before Covered Activities are allowed to		
	continue, or the Designated Biologist(s) shall capture and relocate the		
	Covered Species as per the CDFW-approved Mortality Reduction and		
	Relocation Plan (Covered Species Mortality Reduction and Relocation Plan(s)		
	Condition of Approval).		

ITP COA (Source)	Mitigation Measure	Implementation Schedule	Status / Date / Responsible Party(ies)
8.8	Pre-Activity Clearance Surveys. Prior to initiating Covered Activities within a Work Area, the Designated Biologist shall survey the Work Area for individuals of the Covered Species. Pre-Activity Clearance Surveys shall be repeated if there is a disruption of work by more than 30 days or re-growth of vegetation that could obscure presence of Covered Species. These surveys shall provide 100 percent visual coverage of the Work Area including burrow and crevice openings. If individuals of the Covered Species are found, the Designated Biologist shall relocate them from the Project Area in accordance with the CDFW approved Mortality Reductin and Relocation Plan (Covered Species Mortality Reduction and Relocation Plan(s) Condition of Approval). Permittee shall provide the survey results to CDFW in a written report prior to the beginning of Covered Activities (as per Pre-Activity Survey Report Condition of Approval).	Before the start of Covered Activities per Work Area	responsible Fairly(ies)
8.9	Flag and Map Burrows/Crevices. During the Pre-Activity Clearance Surveys, Designated Biologists and CDFW-approved Designated Monitors shall flag and map locations of all animal burrows and crevices suitable for Covered Species occupancy at and within 50 feet (if adjoining lands are accessible) of the Work Area, which could potentially harbor individuals of the Covered Species. The mapped locations of all animal burrows and crevices suitable for Covered Species occupancy shall be submitted with the results of pre-activity surveys (as per Pre-Activity Survey Report Condition of Approval).	Before the start of Covered Activities per Work Area	
8.10	Burrow Avoidance. The Designated Biologist shall establish a no disturbance buffer of 50 feet or greater around suspected or known to be occupied Covered Species burrows within and adjacent to a Work Area. If a 50-foot nodisturbance buffer cannot be established, burrow excavation and temporary exclusion fencing or daily monitoring shall occur in accordance with Burrow and Crevice Excavation and Covered Species Exclusion Fencing Conditions of Approval. Alternatively, a buffer reduction may be requested to allow for burrow preservation where impacts can reasonably be avoided or otherwise minimized. Any buffer reduction strategy shall be identified in the CDFW approved Mortality Reduction and Relocation Plan (Covered Species Mortality Reduction and Relocation Plan(s) Condition of Approval) or otherwise approved in writing by CDFW prior to the implementation of a reduced buffer.	Before the start of, and during Covered Activities per Work Area	

ITP COA (Source)	Mitigation Measure	Implementation Schedule	Status / Date / Responsible Party(ies)
	Burrow and Crevice Excavation. Prior to any vegetation- or ground-disturbing activities in the transportation element or utility work areas or prior to grading activities with mechanical equipment in the mitigation areas, all small mammal burrows identified and flagged (per the Pre-Activity Clearance Surveys and Flag and Map Burrows/Crevices Conditions of Approval) that cannot be avoided by approved buffers (per Burrow Avoidance Condition of Approval) shall be fully excavated under the direct supervision of the Designated Biologist in accordance with the CDFW-approved Mortality Reduction and Relocation Plan (Covered Species Mortality Reduction and Relocation Plan(s) Condition of Approval). This excavation requirement applies regardless of whether the burrow is located within the Project Area or within 50 feet of the Project Area except those burrows outside of the Permittee's access and/or control. Individuals of the Covered Species which are found shall be relocated by the Designated Biologist in accordance with	<u> </u>	
	the CDFW approved Mortality Reduction and Relocation Plan (<u>Covered Species Mortality Reduction and Relocation Plan(s)</u> Condition of Approval). Excavation shall occur no more than 14 days after completing the Pre-Activity Clearance Surveys, or surveys/flagging shall be repeated.		

ITP COA	Mitigation Measure	Implementation	Status / Date /
8.12	Covered Species Exclusion Fencing. If vegetation- or ground-disturbing activities are initiated, conducted during, or may extend into the Covered Species breeding season (onset of fall/winter rains, generally November 1 through May 31), Permittee shall install temporary exclusion fencing (exclusion fence) around the perimeter of the Work Area to prevent Covered Species from migrating into the Work Area, unless otherwise approved by CDFW in writing or in the CDFW-approved Mortality Reduction and Relocation Plan (Covered Species Mortality Reduction and Relocation Plan Condition of Approval). Fencing material and design shall be reviewed and approved in writing by CDFW before exclusion fencing installation. Alternatively, Permittee may elect to provide daily monitoring for the duration of the day and/or night instead of exclusion fence installation, for certain work activities within a Work Area, when approved in writing by CDFW, or as described in the Mortality Reduction and Relocation Plan (Covered Species Mortality Reduction and Relocation Plan(s) Condition of Approval). If Permittee elects to forego exclusion fence installation, Covered Activities shall cease when a 50 percent or greater chance of rainfall is predicted within 72 hours in accordance with the Precipitation Condition of Approval. The exclusion fence shall be installed in accordance with CDFW approved Plan (Covered Species Mortality Reduction and Relocation Plan(s) Condition of Approval).	Before the start of, and during Covered Activities	Responsible Party(ies)
8.13	Covered Species Exclusion Fencing Monitoring and Inspections. The Designated Biologist(s) or Designated Monitor(s) shall inspect all fence materials prior to installation to ensure they adhere to the CDFW-approved Mortality Reduction and Relocation Plan (Covered Species Mortality Reduction and Relocation Plan(s) Condition of Approval). The Designated Biologist(s) or Designated Monitor(s) shall accompany the exclusion fence installation, repair, and removal to ensure that Covered Species are not killed or injured during those activities. Permittee shall check the exclusion fence during compliance monitoring (per Compliance Monitoring Condition of Approval) to survey for presence of Covered Species in the excluded area that may need to be relocated by a Designated Biologist according to the CDFW-approved Mortality Reduction and Relocation Plan (Covered Species Mortality Reduction and Relocation Plan(s) Condition of Approval) and to maintain and repair the fence as necessary to ensure its effectiveness.	During Covered Activities	

ITP COA		Implementation	Status / Date /
(Source)	Mitigation Measure	Schedule	Responsible Party(ies)
8.14	Covered Species Observations. During all Covered Activities, workers shall inform a Designated Biologist if an individual of the Covered Species is observed at the Project Area. All work in the vicinity of the observed Covered Species, which could injure or kill the animal, shall cease immediately until the Covered Species moves from the Project Area of its own accord or until the Designated Biologist(s) can relocate the Covered Species following the CDFW approved Plan (Covered Species Mortality Reduction and Relocation Plan(s) Condition of Approval). Permittee shall notify CDFW within 5 business days of discovery of a Covered Species within the Project Area via electronic mail to the Regional Representative and Regional Office identified in Quarterly Compliance Reports Condition of Approval.	During Covered Activities	
8.15	Fieldwork Code of Practice. To ensure that disease is not conveyed to and from the Project Area by the Designated Biologist(s) or Designated Monitors(s), the fieldwork code of practice developed by the Declining Amphibian Populations Task Force Fieldwork Code of Practice (see ATTACHMENT 3) shall be followed at all times. The Designated Biologist(s) or Designated Monitor(s) may substitute a bleach solution (0.5 to 1.0 cup of bleach to 1.0 gallon of water) for the ethanol solution. Care shall be taken so that all traces of the disinfectant are removed before entering the next aquatic habitat.	During Covered Activities	
8.16	Equipment Inspection. Workers shall inspect for Covered Species under vehicles and equipment before the vehicles and equipment are moved. If a Covered Species is present, the worker shall notify the Designated Biologist and wait for the Covered Species to move unimpeded to a safe location. Alternatively, the Designated Biologist(s) shall move the Covered Species out of harm's way outside of the Project Area and in compliance with the CDFW-approved Mortality Reduction and Relocation Plan (Covered Species Mortality Reduction and Relocation Plan(s) Condition of Approval).	During Covered Activities	
8.17	Materials Inspection. Workers shall thoroughly inspect all construction pipe, culverts, or other similar structures with a diameter of 1-inch or greater that are stored for one or more overnight periods for the Covered Species before the object is subsequently moved, buried, or capped. If during inspection, an individual of the Covered Species is discovered inside a pipe, culvert, or similar structure, the Designated Biologist shall move the Covered Species out of harm's way outside of the Project Area and in compliance with the CDFW-approved Mortality Reductin and Relocation Plan (Covered Species Mortality Reduction and Relocation Plan(s) Condition of Approval).	During Covered Activities	

ITP COA		Implementation	Status / Date /
(Source)	Mitigation Measure	Schedule	Responsible Party(ies)
8.18	Covered Species Injury. If an individual of the Covered Species is killed or injured because of Covered Activities, the Designated Biologist(s) shall immediately take it to the CDFW approved wildlife rehabilitation or veterinary facility that routinely evaluates and treats amphibians. As required in the Covered Species Mortality Reduction and Relocation Plan(s) Condition of Approval, Permittee shall identify the facility prior to the start of Covered Activities. Permittee shall bear any costs associated with the care or treatment of such injured Covered Species. Permittee shall notify CDFW of the injury to the Covered Species as per the Notification of Take or Injury Condition of Approval.	During Covered Activities	
9	Habitat Management Land Acquisition and Restoration: CDFW has determined that permanent protection and perpetual management of compensatory habitat is necessary and required pursuant to CESA to fully mitigate Project-related impacts of the taking on the Covered Species that will result from implementation of the Covered Activities. This determination is based on factors including an assessment of the importance of the habitat in the Project Area, the extent to which the Covered Activities will impact the habitat, and CDFW's estimate of the protected acreage required to provide for adequate compensation. To meet this requirement, the Permittee shall provide for both the permanent protection and management of at least 43 acres of Habitat Management (HM) lands located at the amphibian mitigation site on North Monterey County High School property (see Project Location) pursuant to the Habitat Management Lands Acquisition and Protection Condition of Approval below and the calculation and deposit of the management funds pursuant to Endowment Fund Condition of Approval below. Permanent protection and funding for perpetual management of HM lands must be complete before starting the transportation element Component. The Permittee shall also restore approximately 31.6 acres of Covered Species habitat on-site that is temporarily impacted by the transportation element (includes utility work), build structures to accommodate amphibian passage on SR 156, restore 5 acres of Covered Species habitat off-site within the area of the conservation easement for the amphibian mitigation (as per Habitat Restoration Condition of Approval below).	Before the start of Transportation component of Covered Activities	
9.1	Habitat Management Lands Acquisition and Protection. Permittee shall:		

ITP COA (Source)	Mitigation Measure	Implementation Schedule	Status / Date / Responsible Party(ies)
9.1.1	<u>Fee Title</u> . Transfer fee title of the HM lands to CDFW pursuant to terms approved in writing by CDFW. Alternatively, CDFW, in its sole discretion, may authorize a governmental entity, special district, non-profit organization, forprofit entity, person, or another entity to hold title to and manage the property provided that the district, organization, entity, or person meets the requirements of Government Code sections 65965-65968, as amended.	Before the start of Transportation component of Covered Activities	
9.1.2	Conservation Easement. If CDFW does not hold fee title to the HM lands, CDFW shall act as grantee for a conservation easement over the HM lands or shall, in its sole discretion, approve a non-profit entity, public agency, or Native American tribe to act as grantee for a conservation easement over the HM lands provided that the entity, agency, or tribe meets the requirements of Civil Code section 815.3. If CDFW elects not to be named as the grantee for the conservation easement, CDFW shall be expressly named in the conservation easement as a third-party beneficiary. The Permittee shall obtain CDFW written approval of any conservation easement before its execution or recordation. No conservation easement shall be approved by CDFW unless it complies with Civil Code sections 815-816, as amended, and Government Code sections 65965-65968, as amended and includes provisions expressly addressing Government Code sections 65966(j) and 65967(e). Because the "doctrine of merger" could invalidate the conservation interest, under no circumstances can the fee title owner of the HM lands serve as grantee for the conservation easement.	Before the start of Transportation component of Covered Activities	
9.1.3	HM Lands Approval. Obtain CDFW written approval of the HM lands before acquisition and/or transfer of the land by submitting, at least 3 months before acquisition and/or transfer of the HM lands, documentation identifying the land to be purchased or property interest conveyed to an approved entity as mitigation for the Project's impacts on Covered Species.	Before the start of Transportation component of Covered Activities	
9.1.4	HM Lands Documentation. Provide a recent preliminary title report, Phase I Environmental Site Assessment, and other necessary documents (please contact CDFW for document list). All documents conveying the HM lands and all conditions of title are subject to the approval of CDFW, and if applicable, the Wildlife Conservation Board and the Department of General Services.	Before the start of Transportation component of Covered Activities	

ITP COA	Mitigation Measure	Implementation	Status / Date /
(Source)	_	Schedule	Responsible Party(ies)
9.1.5	Land Manager. Designate an interim and/or long-term land manager approved by CDFW. The interim and long-term land managers may, but need not, be the same. The interim and/or long-term land managers may be the landowner or another party. Documents related to land management shall identify both the interim and long-term land managers. Permittee shall notify CDFW of any subsequent changes in the land manager within 30 days of the change. If CDFW will hold fee title to the mitigation land, CDFW will also act as both the interim and long-term land manager unless otherwise specified.		
	The grantee for the conservation easement cannot serve as the interim or long-term manager without the express written authorization of CDFW in its sole discretion.		
9.1.6	Start-up Activities. Provide for the implementation of start-up activities, including the initial site protection and enhancement of HM lands, once the HM lands have been approved by CDFW. Start-up activities include, at a minimum: (1) preparing a final management plan for CDFW approval (such as https://wildlife.ca.gov/Conservation/Planning/Banking/Templates (2) conducting a baseline biological assessment and land survey report within 4 months of recording or transfer; (3) developing and transferring Geographic Information Systems (GIS) data if applicable; (4) establishing initial fencing; (5) conducting litter removal; (6) conducting initial habitat restoration or enhancement, if applicable; and (7) installing signage.	Before the start of Transportation component of Covered Activities	
9.1.7	Interim Management (Initial and Capital). Provide for the interim management of the HM lands. The Permittee shall ensure that the interim land manager implements the interim management of the HM lands as described in the final management plan and conservation easement approved by CDFW. The interim management period shall be a minimum of 3 years from the date of HM land acquisition and protection and full funding of the Endowment and includes expected management following start-up activities. Interim management period activities described in the final management plan shall include fence repair, continuing trash removal, site monitoring, and vegetation and invasive species management. Permittee shall either: (1) establish an escrow account with written	Before the start of Transportation component of Covered Activities	
	instructions approved in advance in writing by CDFW to pay the land manager annually in advance, or (2) establish a short-term enhancement account with CDFW or a CDFW-approved entity for payment to the land manager		

9.2 Endowment Fund. The Permittee shall ensure that the HM lands are perpetually managed, maintained, and monitored by the long-term land manager as described in this ITP, the conservation easement, and the final management plan approved by CDFW. After obtaining CDFW approval of the HM lands, Permittee shall provide long-term management funding for the perpetual management of the HM lands by establishing a long-term management fund (Endowment). The Endowment is a sum of money, held in a CDFW-approved fund that is permanently restricted to paying the costs of long-term management and stewardship of the mitigation property for which the funds were set aside, which costs include the perpetual management, maintenance, monitoring, and other activities on the HM lands consistent with this ITP, the conservation easement, and the management plan required by the Land Manager Condition of Approval, above. Endowment as used in this ITP shall refer to the endowment deposit and all interest, dividends, other	ITP COA		Implementation	Status / Date /
perpetually managed, maintained, and monitored by the long-term land manager as described in this ITP, the conservation easement, and the final management plan approved by CDFW. After obtaining CDFW approval of the HM lands, Permittee shall provide long-term management funding for the perpetual management of the HM lands by establishing a long-term management fund (Endowment). The Endowment is a sum of money, held in a CDFW-approved fund that is permanently restricted to paying the costs of long-term management and stewardship of the mitigation property for which the funds were set aside, which costs include the perpetual management, maintenance, monitoring, and other activities on the HM lands consistent with this ITP, the conservation easement, and the management plan required by the Land Manager Condition of Approval, above. Endowment as used in this ITP shall refer to the endowment deposit and all interest, dividends, other	(Source)	Mitigation Measure	Schedule	Responsible Party(ies)
earnings, additions and appreciation thereon. The Endowment shall be governed by this ITP, Government Code sections 65965-65968, as amended, and Probate Code sections 18501-18510, as amended. After the interim management period, Permittee shall ensure that the designated long-term land manager implements the management and monitoring of the HM lands according to the final management plan. The long-term land manager shall be obligated to manage and monitor the HM		Endowment Fund. The Permittee shall ensure that the HM lands are perpetually managed, maintained, and monitored by the long-term land manager as described in this ITP, the conservation easement, and the final management plan approved by CDFW. After obtaining CDFW approval of the HM lands, Permittee shall provide long-term management funding for the perpetual management of the HM lands by establishing a long-term management fund (Endowment). The Endowment is a sum of money, held in a CDFW-approved fund that is permanently restricted to paying the costs of long-term management and stewardship of the mitigation property for which the funds were set aside, which costs include the perpetual management, maintenance, monitoring, and other activities on the HM lands consistent with this ITP, the conservation easement, and the management plan required by the Land Manager Condition of Approval, above. Endowment as used in this ITP shall refer to the endowment deposit and all interest, dividends, other earnings, additions and appreciation thereon. The Endowment shall be governed by this ITP, Government Code sections 65965-65968, as amended, and Probate Code sections 18501-18510, as amended. After the interim management period, Permittee shall ensure that the designated long-term land manager implements the management and monitoring of the HM lands according to the final management plan. The	Before the start of Transportation component of Covered	

ITP COA (Source)	Mitigation Measure	Implementation Schedule	Status / Date / Responsible Party(ies)
9.2.1	Identify an Endowment Manager. The Endowment shall be held by the Endowment Manager, which shall be either CDFW or another entity qualified pursuant to Government Code sections 65965-65968, as amended.	Before the start of Transportation component of Covered Activities	
	Permittee shall submit to CDFW a written proposal that includes: (i) the name of the proposed Endowment Manager; (ii) whether the proposed Endowment Manager is a governmental entity, special district, nonprofit organization, community foundation, or congressionally chartered foundation; (iii) whether the proposed Endowment Manager holds the property or an interest in the property for conservation purposes as required by Government Code section 65968(b)(1) or, in the alternative, the basis for finding that the Project qualifies for an exception pursuant to Government Code section 65968(b)(2); and (iv) a copy of the proposed Endowment Manager's certification pursuant to Government Code section 65968(e).		
	Within thirty days of CDFW's receipt of Permittee's written proposal, CDFW shall inform Permittee in writing if it determines the proposal does not satisfy the requirements of Fish and Game Code section 2081, subdivision (b)(3) and, if so, shall provide Permittee with a written explanation of the reasons for its determination. If CDFW does not provide Permittee with a written determination within the thirty-day period, the proposal shall be deemed consistent with Section 2081, subdivision (b)(3).		
9.2.2	Calculate the Endowment Funds Deposit. After obtaining CDFW written approval of the HM lands, long-term management plan, and Endowment Manager, Permittee shall prepare an endowment assessment (equivalent to a Property Analysis Record (PAR)) to calculate the amount of funding necessary to ensure the long-term management of the HM lands (Endowment Deposit Amount). Note that the endowment for the easement holder should not be included in this calculation. The Permittee shall submit to CDFW for review and approval the results of the endowment assessment before transferring funds to the Endowment Manager.	Before the start of Transportation component of Covered Activities	
9.2.2.1	<u>Capitalization Rate and Fees</u> . Permittee shall obtain the capitalization rate from the selected Endowment Manager for use in calculating the endowment assessment and adjust for any additional administrative, periodic, or annual fees.	Before the start of Transportation component of Covered Activities	

ITP COA (Source)	Mitigation Measure	Implementation Schedule	Status / Date / Responsible Party(ies)
9.2.2.2	Endowment Buffers/Assumptions. Permittee shall include in the endowment assessment assumptions the following buffers for endowment establishment and use that will substantially ensure long-term viability and security of the Endowment:	Before the start of Transportation component of Covered Activities	
9.2.2.2.1	10 Percent Contingency. A 10 percent contingency shall be added to each endowment calculation to hedge against underestimation of the fund, unanticipated expenditures, inflation, or catastrophic events.	Before the start of Transportation component of Covered Activities	
9.2.2.2.2	Three Years Delayed Spending. The endowment shall be established assuming spending will not occur for the first 3 years after full funding.	Before the start of Transportation component of Covered Activities	
9.2.2.2.3	Non-annualized Expenses. For all large capital expenses to occur periodically but not annually such as fence replacement or well replacement, payments shall be withheld from the annual disbursement until the year of anticipated need or upon request to Endowment Manager and CDFW.	Before the start of Transportation component of Covered Activities	
9.2.3	<u>Transfer Long-term Endowment Funds</u> . Permittee shall transfer the long-term endowment funds to the Endowment Manager upon CDFW approval of the Endowment Deposit Amount identified above.	Before the start of Transportation component of Covered Activities	

ITP COA (Source)	Mitigation Measure	Implementation Schedule	Status / Date / Responsible Party(ies)
9.2.4	Management of the Endowment. The approved Endowment Manager may pool the Endowment with other endowments for the operation, management, and protection of HM lands for local populations of the Covered Species but shall maintain separate accounting for each Endowment. The Endowment Manager shall, at all times, hold and manage the Endowment in compliance with this ITP, Government Code sections 65965-65968, as amended, and Probate Code sections 18501-18510, as amended.	Before the start of Transportation component of Covered Activities	
	Notwithstanding Probate Code sections 18501-18510, the Endowment Manager shall not make any disbursement from the Endowment that will result in expenditure of any portion of the principal of the endowment without the prior written approval of CDFW in its sole discretion. Permittee shall ensure that this requirement is included in any agreement of any kind governing the holding, investment, management, and/or disbursement of the Endowment funds.		
	Notwithstanding Probate Code sections 18501-18510, if CDFW determines in its sole discretion that an expenditure needs to be made from the Endowment to preserve the conservation values of the HM lands, the Endowment Manager shall process that expenditure in accordance with directions from CDFW. The Endowment Manager shall not be liable for any shortfall in the Endowment resulting from CDFW's decision to make such an expenditure.		
9.3	Reimburse CDFW. Permittee shall reimburse CDFW for all reasonable costs incurred by CDFW related to issuance and monitoring of this ITP, including, but not limited to transaction fees, account set-up fees, administrative fees, title and documentation review and related title transactions, costs incurred from other state agency reviews, and overhead related to transfer of HM lands to CDFW.	Before the start of Transportation component of Covered Activities	
9.4	Habitat Restoration. Permittee shall restore approximately 31.6 acres of Covered Species habitat on-site that is temporarily impacted by the transportation project (includes utility work), construct amphibian passage on SR 156 with the Project Area, restore 5 acres of Covered Species habitat at the wetland restoration site, and approximately 43 acres of Covered Species habitat at the amphibian mitigation site, according to the following requirements:	Before the start of Covered Activities per Project component	

ITP COA (Source)	Mitigation Measure	Implementation Schedule	Status / Date / Responsible Party(ies)
9.4.1	Plant Palette and Timing. Permittee shall restore areas that will be temporarily disturbed by transportation and utility activities and the wetland and amphibian mitigation sites to pre-project or better conditions using a diversity of species that are locally appropriate for the Central California Foothills and Coast Mountains ecoregions. The plant palette for seeding or planting shall be weed-free and may include up to two sterile non-native grass species if the amount does not exceed 25 percent of the total palette, by count. The seeding/planting shall be completed as soon as possible after the completion of temporary impacts in the transportation element area, but not later than November 15, or as otherwise approved by CDFW with the Habitat Restoration Plan(s) Condition of Approval, below.	Before the start of Covered Activities per Project component	
9.4.2	Habitat Restoration Plan(s). At least 60 days before completing Covered Activities within each Project Component, the Permittee shall prepare and submit a Habitat Restoration Plan to CDFW for review and written approval prior to implementing the Habitat Restoration Plan. The Habitat Restoration Plan shall include design plans, implementation schedule, site preparation, seed mixture(s), other plant materials if applicable, application methods and timing, methods to avoid impacting undisturbed areas, maintenance activities during the contract plant establishment period and monitoring period, and adaptive management. The Habitat Restoration Plan shall include design plans and specifications for reseeding and irrigation should seed germination, establishment, and plant growth and vigor fall below the initial performance standards. The Habitat Restoration Plan shall include requirements for annual monitoring; interim and final performance criteria to track native plant cover and invasive species control (at least 3 years for the transportation element and at least 5 years for the wetland restoration and amphibian mitigation sites); and adaptive management or remedial actions to take if performance standards are not being met. If changes are needed, Permittee shall seek approval from CDFW prior to committing resources to the change and submit an updated Habitat Restoration Plan with the subsequent annual monitoring report. The Habitat Restoration Plan shall establish Year 0 (zero) as the year that plantings will occur. Any subsequent remedial plantings shall start a new 5-year monitoring and reporting period to document the successful establishment of those plantings.	Before completing Covered Activities per Project component	

ITP COA (Source)	Mitigation Measure	Implementation Schedule	Status / Date / Responsible Party(ies)
9.4.3	Amphibian Passage Management Plan. At least 2 months before starting transportation element activities, the Permittee shall prepare and submit an Amphibian Passage Management Plan to CDFW for review and approval to facilitate Covered Species passage on SR 156. The Amphibian Passage Management Plan shall include design plans and implementation measures for improving passage for Covered Species as proposed on SR 156 at PMs 1.40 and 1.53, including final design features and goals, a plan for maintaining the key design features (including culverts, directional fencing, vegetation, substrate, and soil moisture) to ensure long-term performance. The Amphibian Passage Management Plan shall include requirements for at least 5 years of monitoring key design features and Covered Species passage; interim and final performance criteria to track structure integrity and design goals; and adaptive management or remedial actions to take if performance standards are not being met. If changes to the Amphibian Passage Management Plan or remedial design features or actions are needed that are not in the approved Plan, Permittee shall seek written approval from CDFW prior implementing the change and submit an updated Amphibian Passage Management Plan with the subsequent annual monitoring report. The Amphibian Passage Management Plan shall establish Year 0 (zero) as the year that the design features are complete. Construction of any CDFW-approved remedial features shall start a new 5-year monitoring and reporting period.	Before the start of Transportation component of Covered Activities	
9.4.4	Monitoring Reports. The Permittee shall submit Monitoring reports corresponding to the Habitat Restoration and Amphibian Passage Management Plans to CDFW by January 31 of each year with the ASRs. Each Monitoring Report shall provide a summary of the previous year's monitoring, the status of performance criteria, representative photographs, and adaptive management or remedial actions to be implemented to achieve success criteria. CDFW will determine when final performance criteria have been met and provide written confirmation to the Permittee.	By January 31 each year of monitoring	



Department of Fish and Wildlife

BIOLOGIST RESUME COVER SHEET

SUBMIT EACH RESUME AS A SEPARATE DOCUMENT

Name	Requested Role(s) ¹	Species/Resource(s)

¹ Requested roles correspond to the biological staffing requirements indicated in the Lake and Streambed Alteration (LSA) Agreement or California Endangered Species Act Incidental Take Permit (ITP). Roles may include a "Qualified Biologist" or "Designated Biologist" with the necessary experience to survey for special status species, or a "Biological Monitor" with the necessary experience to monitor construction activities for special status species. An individual may request more than one role.



This form requests information about the qualifications of the Qualified Biologist, Designated Biologist and Biological Monitor specified in California Endangered Species Act Incidental Take Permits (ITP) and Lake or Streambed Alteration (LSA) Agreements issued by California Department of Fish and Wildlife (CDFW).

Completing this form will ensure the receipt of adequate information and expedite CDFW review of qualifications.

SECTION I. NAME AND CONTACT INFORMATION

Name:		Title:	
Company Name &		Phone:	
Address:		Email:	
SECTION II. EDUCAT	ION		
College/University & Related to Natural Re	~		
Other Relevant Workshops & Training:			
SECTION III. ROLE(S)	AND PERMIT RE	ENTS	
Requested Role(s):			
Relevant LSA Agreement Measures or ITP Conditions ² :			

This section summarizes experience by special status species and other resource. Use one row for each species or other resource where surveys or special protections are required in the CESA ITP or LSA Agreement <u>for which biologist approval is requested</u>. ³ If more space is needed, add rows to this table. Provide details in Section 5.

Species or Resource	Number of Field Seasons & Hours, Life Stages Observed Provide project details in Section 5	Life History Knowledge Describe formal workshops & training with dates, or informal training details	CDFW SCP, MOU, & USFWS 10a1a Authorization Number & Authorized Activities This form does not fulfill SCP, MOU, & USFWS 10a1a reporting requirements	
Insert Species or Resource 1	Field seasons: Hours: Life Stages:			Issued to: Expiration: Agency contact:
Insert Species or Resource 2	Field seasons: Hours: Life Stages:			Issued to: Expiration: Agency contact:
Insert Species or Resource 3	Field seasons: Hours: Life Stages:			Issued to: Expiration: Agency contact:

² List all measures and conditions from the LSA Agreement or ITP requiring biological staff (i.e., Qualified Biologist, Designated Biologist, or Biological Monitor).

³ Often LSA Agreements/ITPs require surveys and other protections for multiple species and other resources. Include only those for which the biologist has experience and is requesting approval.

SECTION V. SPECIES AND RESOURCE EXPERIENCE - DETAILS

This section details experience from the <u>three</u> most recent and relevant projects for each species and resource identified in Section 4. If more space is needed, attach additional pages in the same table format (i.e., copy/paste format).

A. Species or Resource:			
Project 1 Name & Location:		Project Start & End Dates:	
LSA Agreement, ITP, or Other Agency Permit Number:		Role(s) ⁴ :	
Survey Type(s) ⁵ :		Construction Monitoring ⁶ :	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Life Stage: Number Observed: Number Handled: Reported to CNDDB ⁷ (Y/N):	Company Name, Professional Reference Name, Phone, Email:	
If <u>not</u> reported to CNDDB, why:			
CDFW and Other Agency Email:			
Project 2 Name & Location:		Project Start & End Dates:	
LSA Agreement, ITP, or Other Agency Permit Number:		Role(s):	
Survey Type(s):		Construction Monitoring:	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Life Stage: Number Observed: Number Handled: Reported to CNDDB (Y/N):	Company Name, Professional Reference Name, Phone, Email:	
If <u>not</u> reported to CNDDB, why:			
CDFW and Other Agency Email:			
Project 3 Name & Location:		Project Start & End Dates:	
LSA Agreement, ITP, or Other Agency Permit Number:		Role(s):	
Survey Type(s):		Construction Monitoring:	Days: Activities:

⁴ Insert the role as described in the associated LSA Agreement, ITP or other agency permit. If these permits were not issued, describe the role based on the duties, e.g., "lead biologist with handling authorization" or "biological monitor."

⁵ For example, pre-construction survey or description of the protocol or guideline followed.

⁶ Include the number of days and describe the types of activities monitored (e.g., heavy equipment operation).

⁷ CNDDB is the abbreviation for California Natural Diversity Database.

Species Life Stages Observed & Handled, Number of Each:	Life Stage: Number Observed: Number Handled: Reported to CNDDB (Y/N):	Company Name, Professional Reference Name, Phone, Email:	
If <u>not</u> reported to CNDDB, why:			
CDFW and Other Agency Email:			
Additional Information:			

	Г		
B. Species or Resource:			
Project 1 Name & Location:		Project Start & End Dates:	
LSA Agreement, ITP, or Other Agency Permit Number:		Role(s):	
Survey Type(s):		Construction Monitoring:	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Life Stage: Number Observed: Number Handled: Reported to CNDDB (Y/N):	Company Name, Professional Reference Name, Phone, Email:	
If <u>not</u> reported to CNDDB, why:			
CDFW and Other Agency Email:			
Project 2 Name & Location:		Project Start & End Dates:	
LSA Agreement, ITP, or Other Agency Permit Number:		Role(s):	
Survey Type(s):		Construction Monitoring:	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Life Stage: Number Observed: Number Handled: Reported to CNDDB (Y/N):	Company Name, Professional Reference Name, Phone, Email:	
If <u>not</u> reported to CNDDB, why:			
CDFW and Other Agency Email:			
Project 3 Name & Location:		Project Start & End Dates:	
LSA Agreement, ITP, or Other Agency Permit Number:		Role(s):	
Survey Type(s):		Construction Monitoring:	Days: Activities:

Species Life Stages Observed & Handled, Number of Each:	Life Stage: Number Observed: Number Handled: Reported to CNDDB (Y/N):	Company Name, Professional Reference Name, Phone, Email:	
If <u>not</u> reported to CNDDB, why:			
CDFW and Other Agency Email:			
Additional Information:			

C. Species or Resource:			
Project 1 Name & Location:		Project Start & End Dates:	
LSA Agreement, ITP, or Other Agency Permit Number:		Role(s):	
Survey Type(s):		Construction Monitoring:	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Life Stage: Number Observed: Number Handled: Reported to CNDDB (Y/N):	Company Name, Professional Reference Name, Phone, Email:	
If <u>not</u> reported to CNDDB, why:			
CDFW and Other Agency Email:			
Project 2 Name & Location:		Project Start & End Dates:	
LSA Agreement, ITP, or Other Agency Permit Number:		Role(s):	
Survey Type(s):		Construction Monitoring:	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Life Stage: Number Observed: Number Handled: Reported to CNDDB (Y/N):	Company Name, Professional Reference Name, Phone, Email:	
If <u>not</u> reported to CNDDB, why:			
CDFW and Other Agency Email:			
Project 3 Name & Location:		Project Start & End Dates:	
LSA Agreement, ITP, or Other Agency Permit Number:		Role(s):	
Survey Type(s):		Construction Monitoring:	Days: Activities:

DocuSign Envelope ID: 53A909DB-CE9F-4204-9AB5-21420190F7CF

Project Name: LSA Agreement/ITP Number(s):

Species Life Stages Observed & Handled, Number of Each:	Life Stage: Number Observed: Number Handled: Reported to CNDDB (Y/N):	Company Name, Professional Reference Name, Phone, Email:	
If <u>not</u> reported to CNDDB, why:			
CDFW and Other Agency Email:			
Additional Information:			

The Declining Amphibian Task Force Fieldwork Code of Practice

A code of practice, prepared by the Declining Amphibian Task Force (DAPTF) to provide guidelines for use by anyone conducting field work at amphibian breeding sites or in other aquatic habitats. Observations of diseased and parasite-infected amphibians are now being frequently reported from sites all over the world. This has given rise to concerns that releasing amphibians following a period of captivity, during which time they can pick up unapparent infections of novel disease agents, may cause an increased risk of mortality in wild populations. Amphibian pathogens and parasites can also be carried in a variety of ways between habitats on the hands, footwear, or equipment of fieldworkers, which can spread them to novel localities containing species which have had little or no prior contact with such pathogens or parasites. Such occurrences may be implicated in some instances where amphibian populations have declined. Therefore, it is vitally important for those involved in amphibian research (and other wetland/pond studies including those on fish, invertebrates and plants) to take steps to minimize the spread of disease and parasites between study sites.

- 1. Remove mud, snails, algae, and other debris from nets, traps, boots, vehicle tires and all other surfaces. Rinse cleaned items with sterilized (e.g. boiled or treated) water before leaving each study site.
- 2. Boots, nets, traps, etc., should then be scrubbed with 70% ethanol solution (or sodium hypochlorite 3 to 6%) and rinsed clean with sterilized water between study sites. Avoid cleaning equipment in the immediate vicinity of a pond or wetland.
- In remote locations, clean all equipment as described above upon return to the lab or "base camp". Elsewhere, when washing machine facilities are available, remove nets from poles and wash with bleach on a "delicates" cycle, contained in a protective mesh laundry bag.
- 4. When working at sites with known or suspected disease problems, or when sampling populations of rare or isolates species, wear disposable gloves and change them between handling each animal. Dedicate sets of nets, boots, traps, and other equipment to each site being visited. Clean and store them separately and the end of each field day.
- 5. When amphibians are collected, ensure the separation of animals from different sites and take great care to avoid indirect contact between them (e.g. via handling, reuse of containers) or with other captive animals. Isolation from un-sterilized plants or soils which have been taken from other sites is also essential. Always use disinfected/disposable husbandry equipment.
- Examine collected amphibians for the presence of diseases and parasites soon after capture. Prior to their release or the release of any progeny, amphibians should be quarantined for a period and thoroughly screened for the presence of any potential disease agents.
- 7. Used cleaning materials (liquids, etc.) should be disposed of safely and if necessary taken back to the lab for proper disposal. Used disposable gloves should be retained for safe disposal in sealed bags.