INFORMATION HANDOUT

For Contract No. 06-0G9004
At 06-Mad-41-11.7/13.4

Identified by
Project ID 0600000112

PERMITS

1- California Department of Fish and Wildlife

2- U.S. Fish and Wildlife Service

3- United States Army Corps of Engineers

Non-Reporting Nationwide 404

WATER QUALITY

1- California Regional Water Quality Control Board

Central Valley Region
Board Order No. 2003-0017-DWQ

MATERIALS INFORMATION

1- Geotechnical Design Report

2- Water Source Information

PERMITS

California Department of Fish and Wildlife
Central Region (4)
1234 East Shaw Avenue
Fresno, California 93710

California Endangered Species Act
Incidental Take Permit No. 2081-2014-038-04

State Route 41 Madera Passing Lanes Project

Authority: This California Endangered Species Act (CESA) incidental take permit (ITP) is issued by the 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 take[1] of any species of wildlife designated by the California Fish and Game Commission as an endangered, threatened, or candidate species.[2] CDFW may authorize the take of any such species by permit if the conditions set forth in Fish and Game Code section 2081, subdivisions (b) and (c) are met. (See Cal. Code Regs., tit. 14, § 783.4).

Permittee:	**California Department of Transportation (Caltrans)**
Principal Officer:	**Javier Almaguer, Branch Chief, (559) 445-6456**
Contact Person:	**Andrew Domingos, (559) 445-6457**
Mailing Address:	**Department of Transportation, District 6** **855 M Street, Suite 200** **Fresno, California 93721**

Effective Date and Expiration Date of this ITP:
This ITP shall be executed in duplicate original form and shall become effective once a duplicate original is acknowledged by signature of the Permittee on the last page of this ITP and returned to CDFW's Habitat Conservation Planning Branch at the address listed in the Notices section of this ITP. Unless renewed by CDFW, this ITP's authorization to take the Covered Species shall expire on **October 31, 2016**.

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 7.10 of this ITP.

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[1]Pursuant 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").

[2]"The 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.

Project Location:
The State Route 41 Madera Passing Lanes Project (Project) is located on State Route (SR) 41, approximately 10 miles northeast of the City of Madera in Madera County, California. Project construction will occur between Post Mile (PM) 11.7 and PM 13.6, which are located within portions of Sections 10, 15, and 22, Township 10 South, Range 20 East of the Mt. Diablo Meridian. (See Figure 1)

Project Description:
Caltrans proposes to construct staggered northbound and southbound passing lanes on SR 41 to improve safety. The northbound passing lane will be constructed from PM 11.7 to PM 13.2; while the southbound passing lane will be constructed from PM 12.0 to 13.6. Construction will include a 12-foot median on the existing alignment and 8-foot outside shoulders on both north- and south-bound directions. Rumble strips will be located on outside shoulders and on the centerline of the 12-foot median. Guardrails will be installed along the edges of SR 41. New road and shoulder construction will entail decommissioning of the existing road surface; grading; excavation and stockpiling of material; deposition of new fill or back-fill; ground compaction; and installation of the base layer and paving. The entire Project site will be overlaid with 0.2 feet of Type G, rubber hot-mix asphalt (RHMA).

Rock outcroppings line the shoulder in 4 separate locations (PM 12.28-12.40, 12.48-12.55, 12.72-12.97, and 13.07-13.20), and will need to be removed to accommodate the new passing lanes. Blasting is the proposed method for rock removal in these locations; the contractor would draw a line, and determine the drilling locations for holes 10-15 feet deep, to which the charges will be added. Detonation of the explosive will crack the rocks and loaders will remove the rock fragments. Prior to detonation, the contractor will cover the blast areas with netting to minimize airborne rock debris. Noise generated by rock blasting varies from 130-140 decibels and will be temporary construction impact. Geophones will be used to monitor the vibrations within and outside of our right of way. Blasting, hauling and rock removal would be scheduled from Monday through Thursday, from 9:00 am until 2:00 pm. The California Highway Patrol would close the subject sections of SR 41 when blasting is scheduled. During these days and times the road may be closed and traffic stopped for up to 20 minutes at a time. After one closure is made, all accumulated traffic must pass through the work zone before another closure is permitted.

Nighttime construction is anticipated for this Project and it may consist of any type of Project work except for rock blasting. Alternate one-way (reversing) traffic control would also be implemented during Project construction. Additional improvements will include the extension of one existing cattle crossing (located at PM 12.05), as well as the abandonment of existing Corrugated Metal Pipe (CMP) culverts and the subsequent relocation/installation of new Reinforced Concrete Pipe (RCP) culverts at the locations listed in Tables 1 and 2, below.

Erosion control including fiber rolls, silt fence, hydro-seeding, and other blown fiber soil stabilizing products; temporary sheet plastic installation for soil stabilization during storm events and landscaping including oak replanting will be implemented, and traffic signs (placed in new locations) will also be updated within the Project limits.

Table 1: Culverts to be Abandoned

Number	Location	Linear Feet of Culvert Abandon	Cubic Yards of Sand Backfill	Remove Headwall	DESCRIPTION
	Station	LF	CY	Number	
1	118+87.30	74.0	17.2	1	ABANDON 24" CULVERT and SAND BACKFILL
3	123+43.00	70.3	16.4	1	ABANDON 24" CULVERT and SAND BACKFILL
4	129+53.15	48.3	11.2	1	ABANDON 24" CULVERT and SAND BACKFILL
5	135+88.74	87.0	15.2	1	ABANDON 18" CULVERT and SAND BACKFILL
6	143+52.70	63.0	11.0	1	ABANDON 18" CULVERT and SAND BACKFILL
7	149+23.00	68.4	11.9	1	ABANDON 18" CULVERT and SAND BACKFILL
8	152+01.92	86.6	20.2	1	ABANDON 24" CULVERT and SAND BACKFILL
9	164+27.07	90.1	15.7	1	ABANDON 18" CULVERT and SAND BACKFILL
10	170+87.27	80.0	18.6	1	ABANDON 24" CULVERT and SAND BACKFILL
11	175+27.30	61.6	10.8	0	ABANDON 18" CULVERT and SAND BACKFILL
12	179+02.00	48.3	8.4	1	ABANDON 18" CULVERT and SAND BACKFILL
13	182+71.47	84.8	19.7	1	ABANDON 24" CULVERT and SAND BACKFILL

Table 2: New Culverts to be Installed

Number	Pipe Diameter (Inches)	Headwall (side of SR 41)	LOCATION STATION		PIPE SLOPE	PIPE LENGTH	
			WEST (LEFT)	EAST (RIGHT)		Existing CMP	New RCP
1	24	East (right)	118+50.00	118+50.00	0.500%		175.30
2	102	N/A	119+28.53	119+27.83	0.080%	54.99 + 71.00	
3	48	East (right)	123+00.00	124+00.00	2.260%		183.80
4	24	East (right)	130+00.00	130+00.00	1.040%		129.10
5	24	East (right)	136+00.00	136+00.00	3.200%		241.40
6	24	N/A	144+00.00	144+00.00	3.820%		144.00
7	24	West (left)	149+00.00	149+00.00	7.380%		192.30
8	24	West (left)	152+50.00	152+50.00	0.500%		185.80
9	24	East (right)	164+00.00	164+00.00	4.790%		257.10
10	24	West (left)	171+50.00	171+50.00	2.740%		224.20
11	24	N/A	175+50.00	175+50.00	2.720%		135.40
12	24	West (left)	179+50.00	179+50.00	8.730%		161.60
13	24	West (left)	182+50.00	182+50.00	2.380%		100.30

NOTES:

102 inch diameter **C**orrugated **M**etal **P**ipe culvert for cattle crossing will be extended by 71 feet.
All measurements shown in feet unless noted otherwise. RCP = **R**einforced **C**oncrete **P**ipe

Permanent impacts to 27.42 acres of currently undeveloped land is needed to accommodate the Project. Project activities include tree removal, grubbing and grading of the entire Project site, blasting to remove rocks, the removal and installation of barbed wire fence; installation and removal of Environmentally Sensitive Area (ESA) designation fences; installation of erosion control materials including fiber rolls, silt fence, hydro-seeding, and other blown fiber soil stabilizing products; temporary sheet plastic installation for soil stabilization during storm events; extension of the cattle crossing; abandonment of existing RCP culverts and installation of new RCP culverts; installation of guard rails; decommissioning of the existing road surface; grading; excavation and stockpiling of material; deposition of new fill or back-fill; compaction; road and shoulder construction and paving; use of equipment staging and storage areas; and ground disturbance associated with oak tree revegetation and follow-up maintenance. Equipment likely to be used to accomplish Project activities includes but is not limited to the following: asphalt paver/rollers, backhoes, bidwell and roller screeds, bobcats, bulldozer/loaders, chainsaws, compressors, concrete pumps, concrete truck mixers, cranes, dump trucks, excavators, flatbed trucks, fork lifts, front-end loaders, genie man lifts, graders, haul trucks, paint/striping trucks, pavement rollers, pile drivers/drills, pump trucks, redi-mix trucks, roller/compactors, roller screeds, scrapers, shoulder pavers, striping equipment, trucks with seed sprayers, and water trucks.

Covered Species Subject to Take Authorization Provided by this ITP:

This ITP covers the following species:

Name	CESA Status
1. California tiger salamander (*Ambystoma californiense*) (CTS)	Threatened[3]

This species and only this species is the "Covered Species" for the purposes of this ITP.

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 ground disturbance associated with tree removal and habitat clearing, grubbing, tree removal, grubbing and grading of the entire Project site, rock blasting, the removal and installation of barbed wire fence; installation and removal of Environmentally Sensitive Area (ESA) designation fences; installation of erosion control materials including fiber rolls, silt fence, hydro-seeding, and other blown fiber soil stabilizing products; temporary sheet plastic installation for soil stabilization during storm events; extension of the cattle crossing; abandonment of existing RCP culverts and installation of new RCP culverts; installation of guard rails; decommissioning of the existing road surface; grading; excavation and stockpiling of material; deposition of new fill or back-fill; compaction from heavy equipment operations; road and shoulder construction and paving;

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

use of equipment staging and storage areas; and ground disturbance associated with the oak tree revegetation and follow-up maintenance (Covered Activities).

Incidental take of individuals of the Covered Species in the form of mortality ("kill") may occur as a result of Covered Activities such as vehicle/equipment strikes during site preparation and hauling of materials and spoils; collapse or excavation of occupied burrows during vegetation removal, grubbing, cut/fill, grading, compaction, and trenching that results in crushing or suffocation of individuals residing underground; entombment of individuals from deposition of stockpiled material or spoils over occupied burrows; entombment of individuals during vegetation removal, compaction, and grading activities; entrapment and burial within uncovered excavations; crushing by equipment; and vehicle strikes on access roads from Project-related traffic. Incidental take of individuals of the Covered Species may also occur from the Covered Activities in the form of pursue, catch, capture or attempt to do so via entrapment in equipment or in holes, as well as during intentional burrow excavation and relocation (salvage) activities required by this ITP as a mechanism to minimize mortality of the Covered Species. The areas where authorized take of the Covered Species is expected to occur include: the area of cut and fill to be graded for the new road (which is all calculated as permanent impacts), and the area between the permanent impact footprint and the new Right of Way (ROW) which will be temporarily impacted by Project staging and access (collectively, the Project Area). (See Figures 2a and 2b)

The Project is expected to cause the permanent loss of 27.37 acres of upland habitat and 0.05 acres of aquatic habitat for the Covered Species and the temporary loss of 14.77 acres of upland habitat for the Covered Species. Impacts of the authorized taking also include adverse impacts to the Covered Species related to temporal losses, increased habitat fragmentation and edge effects, and the Project's incremental contribution to cumulative impacts (indirect impacts). These impacts include: stress resulting from noise and vibrations, from burrow excavation and capture and relocation, and long-term effects due to increased pollution, displacement from preferred habitat, increased competition for food and space, and increased vulnerability to predation.

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.

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/will 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 Mitigated Negative Declaration and Initial Study (SCH No.: 2011041084) adopted by the California Department of Transportation on September 28, 2011 as 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 Lake and Streambed Alteration Agreement (LSAA) (Notification No. 1600-2014-0207-R4) for the Project 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 Biological Opinion for the Madera 41 Passing Lane Project (81420-2010-F-0642-1) and the Amendment to the Biological Opinion for the Madera 41 Passing Lane Project (81420-2010-F-0642-2) 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 authorization 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. Designated Representative. 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 Biologist. Permittee shall submit to CDFW in writing the name, qualifications, business address, and contact information of a biological monitor (Designated Biologist) at least 14 days before starting Covered Activities. Permittee shall ensure that the Designated Biologist is knowledgeable and experienced in the biology, natural history, collecting and handling of the Covered Species. The Designated Biologist 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 Biologist in writing before starting Covered Activities, and shall also obtain approval in advance in writing if the Designated Biologist must be changed.

6.3. Designated Biologist Authority. To ensure compliance with the Conditions of Approval of this ITP, the Designated Biologist shall have authority to immediately stop any activity that does not comply with this ITP, and/or to order any reasonable measure to avoid the unauthorized take of an individual of the Covered Species.

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 the Designated Biologist 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 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. Permittee shall prepare and distribute wallet-sized cards or a fact sheet handout containing this information for workers to carry in the Project Area. Upon completion of the program, employees shall sign a form stating they attended the program and understand all protection measures.

6.5. Construction Monitoring Notebook. The Designated Biologist shall maintain a construction-monitoring notebook on-site 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 notebook is available for review at the Project site upon request by CDFW.

6.6. Trash Abatement. 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 at least once a week to avoid attracting opportunistic predators such as ravens, coyotes, and feral dogs.

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.

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.

6.9. Delineation of Property Boundaries. Before starting Covered Activities Permittee shall clearly delineate the boundaries of the Project Area with fencing, stakes, or flags. Permittee shall restrict all Covered Activities to within the fenced, staked, or flagged areas. Permittee shall maintain all fencing, stakes, and flags until the completion of Covered Activities.

6.10. Delineation of Habitat. Permittee shall clearly delineate habitat of the Covered Species within the Project 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, and shall not cross Covered Species' habitat outside of or en route to the Project Area. Permittee shall restrict Project-related vehicle traffic to established roads, staging, and parking areas. If Permittee determines construction of routes for travel 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 as a result 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. Additionally, Permittee shall not use or cross Covered Species' habitat outside of the marked Project Area unless provided for as described in Condition of Approval 6.11 of this ITP.

6.13. Hazardous Waste. 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.

6.14. CDFW Access. Permittee shall provide CDFW staff with reasonable access to the Project, and shall otherwise fully cooperate with CDFW efforts to verify compliance with or effectiveness of mitigation measures set forth in this ITP.

6.15. Refuse Removal. Upon completion of Covered Activities, Permittee shall remove from the Project Area and properly dispose of all 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.

7. Monitoring, Notification and Reporting Provisions:

7.1. Notification Before Commencement. The Designated Representative shall notify CDFW 14 calendar days before starting Covered Activities and shall document compliance with all pre-Project Conditions of Approval before starting Covered Activities.

7.2. Notification of Non-compliance. The Designated Representative shall immediately notify CDFW in writing if it determines that 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 report any non-compliance with this ITP to CDFW in writing (email acceptable) within 24 hours.

7.3. California Tiger Salamander Relocation Plan. The Designated Biologist shall prepare a California tiger salamander relocation plan (Relocation Plan) and submit it to CDFW for written approval prior to beginning Covered Activities. The Relocation Plan shall include, but not be limited to, identification of capture methods, burrow excavation methods, handling methods, relocation methods, identification of relocation areas, and identification of a wildlife rehabilitation center or veterinary facility. Only approved Designated Biologist(s) are authorized to capture and handle Covered Species.

7.4. Pre-construction Survey Report. The Designated Biologist shall submit a report documenting the results of the pre-construction survey to CDFW within 5 days after performing the survey described in in Condition of Approval 8.1.

7.5. Compliance Monitoring. The Designated Biologist shall be on-site daily during all initial surface-disturbing activities and shall conduct compliance inspections a minimum of once per week during periods of inactivity and after clearing, grubbing, and grading are completed. The Designated Biologist 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 (5) ensure that signs, stakes, and fencing are intact, and that Covered Activities are only occurring in the Project Area. The Designated Representative or Designated Biologist shall prepare written observation and inspection records for each inspection day summarizing: oversight activities and compliance inspections, observations of Covered Species and their sign, survey results, and monitoring activities required by this ITP.

7.6. Monthly Compliance Report. The Designated Representative or Designated Biologist shall compile the observation and inspection records identified in Condition of Approval 7.5 into a Monthly Compliance Report and submit it to CDFW along with a copy of the MMRP table with notes showing the current implementation status of each mitigation measure. Monthly Compliance Reports shall be submitted to CDFW's Regional Office at the office listed in the Notices section of this ITP and via e-mail to CDFW's Regional Representative. At the time of this ITP's approval, the CDFW Regional Representative is Laura Peterson-Diaz (laura.peterson-diaz@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.

7.7. Annual Status Report. 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 Monthly Compliance Reports for that year identified in Condition of Approval 7.6; (2) a general description of the status of the Project Area and Covered Activities, including actual or projected completion dates, if known; (3) a copy of the table in the MMRP with notes showing the current implementation status of each mitigation measure; (4) an assessment of the effectiveness of each completed or partially completed mitigation measure in avoiding, minimizing and mitigating Project impacts; (5) all available information about Project-related incidental take of the Covered Species; and (6) information about other Project impacts on the Covered Species.

7.8. CNDDB Observations. 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 with the next Monthly Compliance Report or ASR, whichever is submitted first relative to the observation.

7.9. Vegetation Restoration Plan. The Permittee shall prepare a Vegetation Restoration Plan within six (6) months of issuance of this ITP as described in Condition of Approval 9.5.

7.10. Final Mitigation Report. No later than 45 days after completion of all mitigation measures, Permittee shall provide CDFW with a Final Mitigation Report. The Designated Biologist shall prepare the Final Mitigation Report which shall include, at a minimum: (1) a summary of all Monthly Compliance Reports and all ASRs; (2) a copy of the table in the MMRP 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) beginning and ending dates of Covered Activities; (6) 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; (7) recommendations on how mitigation measures might be changed to more effectively minimize take and mitigate the impacts of future projects on the Covered Species; and (8) any other pertinent information.

7.11. Notification of Take or Injury. Permittee shall immediately notify the Designated Biologist 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 by calling the Regional Office at (559) 243-4005. The initial notification to CDFW shall include information regarding the location, species, and number of animals taken or injured and the ITP Number. Following initial notification, Permittee shall send CDFW a written report within two 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.

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. Pre-Construction Surveys. Prior to any ground disturbance within the Project Area, the Designated Biologist(s) shall examine the portions of the Project Area to be disturbed and within a 50-foot buffer area for small mammal burrows and Covered

Species. The survey shall provide 100 percent coverage of the Project limits and the 50-foot buffer area. All small mammal burrows within the survey area shall be marked with flagging. Any Covered Species detected within the Project Area shall be relocated as per an approved Relocation Plan prepared pursuant to Condition of Approval 7.3. The Permittee shall also identify all potential Covered Species breeding locations within 0.25 miles and submit a map of the potential Covered Species breeding locations to CDFW for written approval prior to the start of any ground disturbing activities.

8.2. Burrow Avoidance. Where feasible, the Permittee shall establish a no-disturbance buffer of 50 feet or greater around small mammal burrows. If small mammal burrows cannot be avoided by 50 feet and are within 0.25 miles of a potential Covered Species breeding location, the Permittee shall excavate burrows as described in Condition of Approval 8.4.

8.3. Temporary Exclusion Fencing. Prior to any surface disturbance, Permittee shall install temporary exclusion fencing (exclusion fence) around the perimeter of all the Project work area(s). Permittee shall install exclusion fencing to avoid Covered Species burrows, so that the burrows are isolated from the active work area when possible. The Designated Biologist shall accompany the exclusion fence construction crew to ensure that Covered Species are not killed or injured during fence installation. An alternative exclusion fence design may be used if CDFW has provided written approval in advance of fence installation. The exclusion fence shall be supported sufficiently to maintain its integrity under all conditions such as wind and heavy rain for the duration of the active construction period. Silt fencing shall not be used as exclusion fencing under this requirement. Permittee shall check the exclusion fence at least once weekly and maintain/repair the fence when necessary.

8.4. Burrow Excavation. All small mammal burrows within 0.25 miles of a Covered Species potential breeding location shall be fully excavated by the Designated Biologist or under the direct supervision of the Designated Biologist as described in the Relocation Plan required by Condition of Approval 7.3. Any live Covered Species salvaged during burrow excavation shall be relocated as per approved Relocation Plan prepared pursuant to Condition of Approval 7.3.

8.5. Covered Species Observation and Relocation. If any Covered Species are found in the Project Area during construction, all work that could potentially harm the Covered Species shall stop immediately until the Covered Species leaves the Project Area on its own or the Designated Biologist(s) relocates the Covered Species as approved in the Relocation Plan prepared required by Condition of Approval 7.3.

8.6. Record of Handling. All Covered Species captures and sightings confirmed by the Designated Biologist(s) shall include the following documented information: the date, time, and location of each occurrence using Global Positioning System (GPS) technology, the name of the party that actually identified the animal, circumstances of the incident, the general condition and health of each individual, any diagnostic markings, sex, age (juvenile or adult), and actions undertaken and habitat description. Permittee shall submit this information to the CNDDB as per Condition of Approval 7.8. This information shall also be included in the Monthly Compliance Report.

8.7. Field Work Code of Practice. To ensure that the Designated Biologist(s) do not convey disease between work sites, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force Fieldwork Code of Practice (see Attachment 2) shall be followed at all times. The Designated Biologist(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.

8.8. Covered Species in the Project Area. If any Covered Species are found in the Project Area during any Covered Activities, all work that could potentially harm the Covered Species shall stop immediately until the Designated Biologist can relocate the Covered Species following the CDFW approved Relocation Plan prepared pursuant to Condition of Approval 7.3 or it leaves the Project Area on its own accord.

8.9. Daily Entrapment Inspections. The Designated Biologist shall inspect all open holes, trenches, and excavations within the Project Area at the beginning, middle, and end of each day for trapped animals. The Designated Biologist shall inspect all covered holes and trenches at least once daily. To prevent inadvertent entrapment of Covered Species or any other animals, all trenches, holes or other excavations with sidewalls steeper than a 1:1 slope shall be covered when not actively being worked on, or shall have an escape ramp of earth of a non-slip material with a less than 1:1 slope. The Designated Biologist shall also oversee the covering of all excavated, steep-walled holes or trenches more than two feet deep, or of any depth if they contain water or other material, at the close of each working day by plywood or other barrier materials such that animals are unable to burrow under or enter and become entrapped. The outer two feet of excavation cover shall conform to solid ground so that gaps do not occur between the cover and the ground and secured with soil staples or similar means to prevent gaps. Holes or trenches that are covered shall be inspected at the beginning of each working day to ensure inadvertent entrapment has not occurred. Before holes or trenches are filled, the Designated Biologist shall thoroughly inspect them for trapped animals. If any worker discovers that Covered Species have become trapped, they shall halt Project-related activities and notify the Designated Biologist immediately. Project workers and the Designated Biologist shall allow the Covered

Species to escape unimpeded or the Designated Biologist shall capture and relocate the Covered Species as per the Relocation Plans described in Condition of Approval 7.3 before allowing work to continue. The Designated Biologist shall inspect all open trenches, auger holes, and other excavations that may trap Covered Species prior to any work in or around them and immediately prior to being backfilled. If, at any time, a trapped or injured Covered Species is discovered, Permittee shall contact CDFW's Regional Representative within one (1) working day of the incident.

8.10. Precipitation. Covered activities shall be restricted to periods of low rainfall (less than 1/2 inch precipitation per 24-hour period). Permittee shall monitor the National Weather Service (NWS) 72-hour forecast for the Project area.

8.10.1. If a 70 percent or greater chance of rainfall is predicted within 24 hours of Project activity, a Designated Biologist shall survey the Project site before construction begins EACH day rain is forecast. If Permittee uses a Designated Monitor to conduct surveys, a Designated Biologist must still be available to capture and relocate any Covered Species discovered during the surveys.

8.10.2. If precipitation begins, then a Designated Biologist shall be at the Project site for the duration of the rain event in order for work to continue. If a Designated Monitor is used, then a Designated Biologist must still be on call and available to relocate any Covered Species discovered.

8.10.3. If rain exceeds 1/2 inch during a 24-hour period, all covered work activities shall cease until it is no longer raining and no further rain is forecast.

8.11. Night work. If night work occurs between November 1 and June 14, a Designated Biologist shall survey the Project site before construction begins each night. If Permittee uses a Designated Monitor to conduct surveys, a Designated Biologist must still be available to capture and relocate any Covered Species discovered during the surveys as required in the Relocation Plan described in Condition of Approval 7.3. Permittee shall prohibit all night work within potential Covered Species upland habitat when a 70 percent or greater chance of rainfall is predicted within 24 hours of Project activity, until no further rain is forecast.

8.12. 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 or the Designated Biologist shall move the Covered Species out of harm's way outside of the Project Area and in compliance with the approved Relocation Plan required in Condition of Approval 7.3.

8.13. Equipment Fluids and Refueling. Equipment refueling and/or fluid changes shall occur outside wetland areas and at least 300 feet from any potential Covered Species breeding location. For activities occurring in wetland areas, Permittee shall ensure that equipment is inspected prior to operation for fuel and/or fluid leaks.

8.14. Pesticides. Use of herbicides and rodenticides are prohibited in the Project Area, unless approved in advance in writing by CDFW. If written approval is obtained, the Permittee shall observe all label and other restrictions mandated by the US Environmental Protection Agency, California Department of Pesticide Regulations and other appropriate State and Federal regulations, as well as additional project-related restrictions deemed necessary by CDFW to prevent primary or secondary poisoning of Covered Species.

8.15. Stockpiles. Permittee shall place soil stockpiles where soil shall not pass into potential Covered Species breeding pools; nor shall it pass into any other "waters of the state," in accordance with Fish and Game Code 5650. Permittee shall appropriately protect stockpiles to prevent soil erosion.

8.16. Covered Species Injury. If a Covered Species is injured as a result of Project-related activities, the Designated Biologist shall immediately take it to a CDFW-approved wildlife rehabilitation or veterinary facility. Permittee shall identify the facility before starting Covered Activities. Permittee shall bear any costs associated with the care or treatment of such injured Covered Species. The Permittee shall notify CDFW of the injury to the Covered Species immediately by telephone and e-mail followed by a written incident report as described in Condition of Approval 7.11. Notification shall include the name of the facility where the animal was taken.

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 with 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 acreage required to provide for adequate compensation.

To meet this requirement, the Permittee shall either purchase 98.51 acres of Covered Species credits from a CDFW-approved mitigation or conservation bank (Condition of Approval 9.2) OR shall provide for both the permanent protection and management of 98.51 acres of Habitat Management (HM) lands pursuant to Condition of Approval 9.2 below and the calculation and deposit of the management funds pursuant to Condition of Approval 9.3 below. Permanent protection and funding for perpetual management of compensatory

habitat must be complete before starting Covered Activities or within 18 months of the effective date of this ITP if Security is provided pursuant to Condition of Approval 9 below for all uncompleted obligations. The Permittee shall also restore on-site 14.77 acres of temporarily impacted Covered Species habitat pursuant to Condition of Approval 9.5 below.

9.1. Cost Estimates. CDFW has estimated the cost of acquisition, protection, and perpetual management of the HM lands and restoration of temporarily disturbed habitat as follows:

9.1.1. Conservation Easement acquisition costs for HM lands identified in Condition of Approval 9.3 below, estimated at $1,500.00/acre for 98.51 acres: **$197,020.00**. Land acquisition costs are estimated using local fair market current value for lands with habitat values meeting mitigation requirements;

9.1.2. Start-up costs for HM lands, including initial site protection and enhancement costs as described in Condition of Approval 9.3.5 below, estimated at **$50,147.87**;

9.1.3. Interim management period funding as described in Condition of Approval 9.3.6 below, estimated at **$86,953.35**;

9.1.4. Long-term management funding as described in Condition of Approval 9.4 below, estimated at $11,329.26/acre for 98.51 acres: **$1,116,045.14**. Long-term management funding is estimated initially for the purpose of providing Security to ensure implementation of HM lands management;

9.1.5. Related transaction fees including but not limited to account set-up fees, administrative fees, title and documentation review and related title transactions, expenses incurred from other state agency reviews, and overhead related to transfer of HM lands to CDFW as described in Condition of Approval 9.5, estimated at **$3,000.00**;

9.1.6. Restoration of on-site temporary effects to Covered Species habitat as described in Condition of Approval 9.6, calculated at $20,000.00/acre for 14.77 acres: **$295,400.00**.

9.2. Covered Species Credits. Permittee shall purchase 98.51 acres of Covered Species credits from a CDFW-approved mitigation or conservation bank prior to initiating Covered Activities, or no later than 18 months from the issuance of this ITP if Security is provided pursuant to Condition of Approval 10 below.

OR:

9.3. Habitat Acquisition and Protection. To provide for the acquisition and perpetual protection and management of the HM lands, the Permittee shall:

9.3.1. Fee Title/Conservation Easement. Transfer fee title to 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. 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 does not hold 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 Government Code sections 65965-65968, as amended and includes provisions expressly addressing Government Code sections 65966(j) and 65967(e);

9.3.2. HM Lands Approval. Obtain CDFW written approval of the HM lands before acquisition and/or transfer of the land by submitting, at least three months before acquisition and/or transfer of the HM lands, a formal Proposed Lands for Acquisition Form (see Attachment 3B) identifying the land to be purchased or property interest conveyed to an approved entity as mitigation for the Project's impacts on Covered Species;

9.3.3. HM Lands Documentation. Provide a recent preliminary title report, initial hazardous materials survey report, and other necessary documents (see Attachment 3A). 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;

9.3.4. Land Manager. Designate both an interim and 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.

9.3.5. 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 (see http://www.dfg.ca.gov/habcon/conplan/mitbank/); (2) conducting a baseline biological assessment and land survey report within four 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;

9.3.6. 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 three 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, grazing management to insure adequate vegetative cover for the Covered Species. Permittee shall either (1) provide a security to CDFW for the minimum of three years of interim management that the land owner, Permittee, or land manager agrees to manage and pay for at their own expense, (2) establish an escrow account with written instructions approved in advance in writing by CDFW to pay the land manager annually in advance, or (3) establish a short-term enhancement account with CDFW or a CDFW-approved entity for payment to the land manager.

9.4. Endowment Fund. If the Permittee will permanently protect and perpetually manage compensatory habitat as described in Condition of Approval 9.2, 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 provides funds for the perpetual management, maintenance, monitoring, and other activities on the HM lands consistent with the management plan(s) required by Condition of Approval 9.2.5. 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.

9.4.1. 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. 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(b)(4) 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(b)(4).;

9.4.2. Calculate the Endowment Funds Deposit. After obtaining CDFW written approval of the HM lands, long-term management plan, and Endowment Manager, Permittee shall prepare a Property Analysis Record (PAR) or PAR-equivalent analysis to calculate the amount of funding necessary to ensure the long-term management of the HM lands (Endowment Deposit Amount). The Permittee shall submit to CDFW for review and approval the results of the PAR before transferring funds to the Endowment Manager.

9.4.2.1. Capitalization Rate and Fees. Permittee shall obtain the capitalization rate from the selected Endowment Manager for use in calculating the PAR and adjust for any additional administrative, periodic, or annual fees.

9.4.2.2. Endowment Buffers/Assumptions. Permittee shall include in PAR assumptions the following buffers for endowment establishment and use that will substantially ensure long-term viability and security of the Endowment:

9.4.2.2.1. 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.

9.4.2.2.2. Three Years Delayed Spending. The endowment shall be established assuming spending will not occur for the first three years after full funding.

9.4.2.2.3. 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.

9.4.3. Transfer Long-term Endowment Funds. Permittee shall transfer the long-term endowment funds to the Endowment Manager upon CDFW approval of the Endowment Deposit Amount identified above. 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.

9.5. Reimburse CDFW. Permittee shall reimburse CDFW for all reasonable expenses incurred by CDFW such as transaction fees, account set-up fees, administrative fees, title and documentation review and related title transactions, expenses incurred from other state agency reviews, and overhead related to transfer of HM lands to CDFW.

9.6. Habitat Restoration. Permittee shall restore on-site the 14.77 acres of Covered Species habitat that will be temporarily disturbed during construction to pre-project or better conditions. Within 6 months of issuance of this ITP, the Permittee shall prepare a Vegetation Restoration Plan and submit it to CDFW and obtain written approval prior to implementation. The Plan shall include detailed specifications for restoring all temporarily disturbed areas, such as seed mixes and application methods. The plan shall also indicate the best time of year for seeding to occur. Plantings shall include regular watering to ensure adequate growth. Permittee shall ensure that the Plan is successfully implemented by the contractor.

10. Performance Security

The Permittee may proceed with Covered Activities only after the Permittee has ensured funding (Security) to complete any activity required by Condition of Approval 9 that has not been completed before Covered Activities begin. Permittee shall provide Security as follows:

10.1. Security Amount. The Security shall be in the amount of **$1,748,566.36**. This amount is based on the cost estimates identified in Condition of Approval 8.1 above.

10.2. Security Form. The Permittee shall submit the form of security to CDFW to be approved in writing by CDFW's Office of the General Counsel.

10.3. Security Timeline. The Security shall be provided to CDFW before Covered Activities begin or within 30 days after the effective date of this ITP, whichever occurs first.

10.4. Security Holder. The Security shall be held by CDFW or in a manner approved in advance in writing by CDFW.

10.5. Security Transmittal. If CDFW holds the Security, Permittee shall transmit it to CDFW with a completed Mitigation Payment Transmittal Form (see Attachment 4) or by way of an approved instrument such as escrow, irrevocable letter of credit, or other.

10.6. Security Drawing. The Security shall allow CDFW to draw on the principal sum if CDFW, in its sole discretion, determines that the Permittee has failed to comply with the Conditions of Approval of this ITP.

10.7. Security Release. The Security (or any portion of the Security then remaining) shall be released to the Permittee after CDFW has conducted an on-site inspection and received confirmation that all secured requirements have been satisfied, as evidenced by:

- Written documentation of the acquisition of the HM lands;
- Copies of all executed and recorded conservation easements;
- Written confirmation from the approved Endowment Manager of its receipt of the full Endowment; and
- Timely submission of all required reports.

Even if Security is provided, the Permittee must complete the required acquisition, protection and transfer of all HM lands and record any required conservation easements no later than 18 months from the effective date of this ITP. CDFW may require the Permittee to provide additional HM lands and/or additional funding to ensure the impacts of the taking are minimized and fully mitigated, as required by law,

if the Permittee does not complete these requirements within the specified timeframe.

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.

Stop-Work Order:
CDFW may issue Permittee a written stop-work order requiring Permittee to suspend any Covered Activity for an initial period of up to 25 days 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. 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 25 additional days. 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.

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.

Notices:
The Permittee shall deliver a fully executed duplicate original ITP by registered first class mail or overnight delivery to the following address:

Habitat Conservation Planning Branch
California Department of Fish and Wildlife
Attention: CESA Permitting Program
1416 Ninth Street, Suite 1260
Sacramento, CA 95814

Written notices, reports and other communications relating to this ITP shall be delivered to CDFW by 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 (2081-2014-038-04) in a cover letter

and on any other associated documents.

Original cover with attachment(s) to:

Jeffrey R. Single, Ph.D., Regional Manager
California Department of Fish and Wildlife
Region 4 - Central Region
1234 East Shaw Avenue
Fresno, California 93710
Phone: (559) 243-4005
Fax: (559) 243-4022

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

Laura Peterson-Diaz
California Department of Fish and Wildlife
Region 4 - Central Region
1234 East Shaw Avenue
Fresno, California 93710
Phone: (559) 243-4017, extension 225
Fax: (559) 243-4020
Laura.Peterson-Diaz@wildlife.ca.gov

Compliance with CEQA:
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 State Route 41 Passing Lanes Mitigated Negative Declaration and Initial Study, (State Clearinghouse No. 2011041084) dated March 2011 that the California Department of Transportation adopted for State Route 41 Passing Lanes on September 28, 2011. At the time the lead agency adopted the Mitigated Negative Declaration 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 Mitigated Negative Declaration 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.

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).)

CDFW finds based on substantial evidence in the ITP application, the State Route 41 Passing Lanes Mitigated Negative Declaration, the Madera 41 Passing Lane Project Biological Opinion, 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; (2) establishment of avoidance zones; (3) worker education; and (4) Monthly 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 98.51 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 measures required by this ITP maintain Permittee's objectives to the greatest extent possible;

(5) All required measures are capable of successful implementation;

(6) This ITP is consistent with any regulations adopted pursuant to Fish and Game Code sections 2112 and 2114;

(7) 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

(8) 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.

Attachments:

FIGURE 1	Map of Project Location
FIGURE 2a	Map of Project Area (north half)
FIGURE 2b	Map of Project Area (south half)
ATTACHMENT 1	Mitigation Monitoring and Reporting Program
ATTACHMENT 2	Declining Amphibian Populations Task Force Fieldwork Code of Practice
ATTACHMENT 3A	Habitat Management Lands Checklist
ATTACHMENT 3B	Proposed Lands for Acquisition Form
ATTACHMENT 4	Mitigation Payment Transmittal Form

ISSUED BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

on 1-23-15

Jeffrey R. Single, Ph.D.,
Regional Manager
CENTRAL REGION

ACKNOWLEDGMENT

The undersigned: (1) warrants that he or she is acting as a duly authorized representative of the Permittee, (2) acknowledges receipt of this ITP, and (3) agrees on behalf of the Permittee to comply with all terms and conditions

By: Javier Almaguer Date: 1-23-2015

Printed Name: Javier Almaguer Title: Biology Branch Chief

FIGURE 1

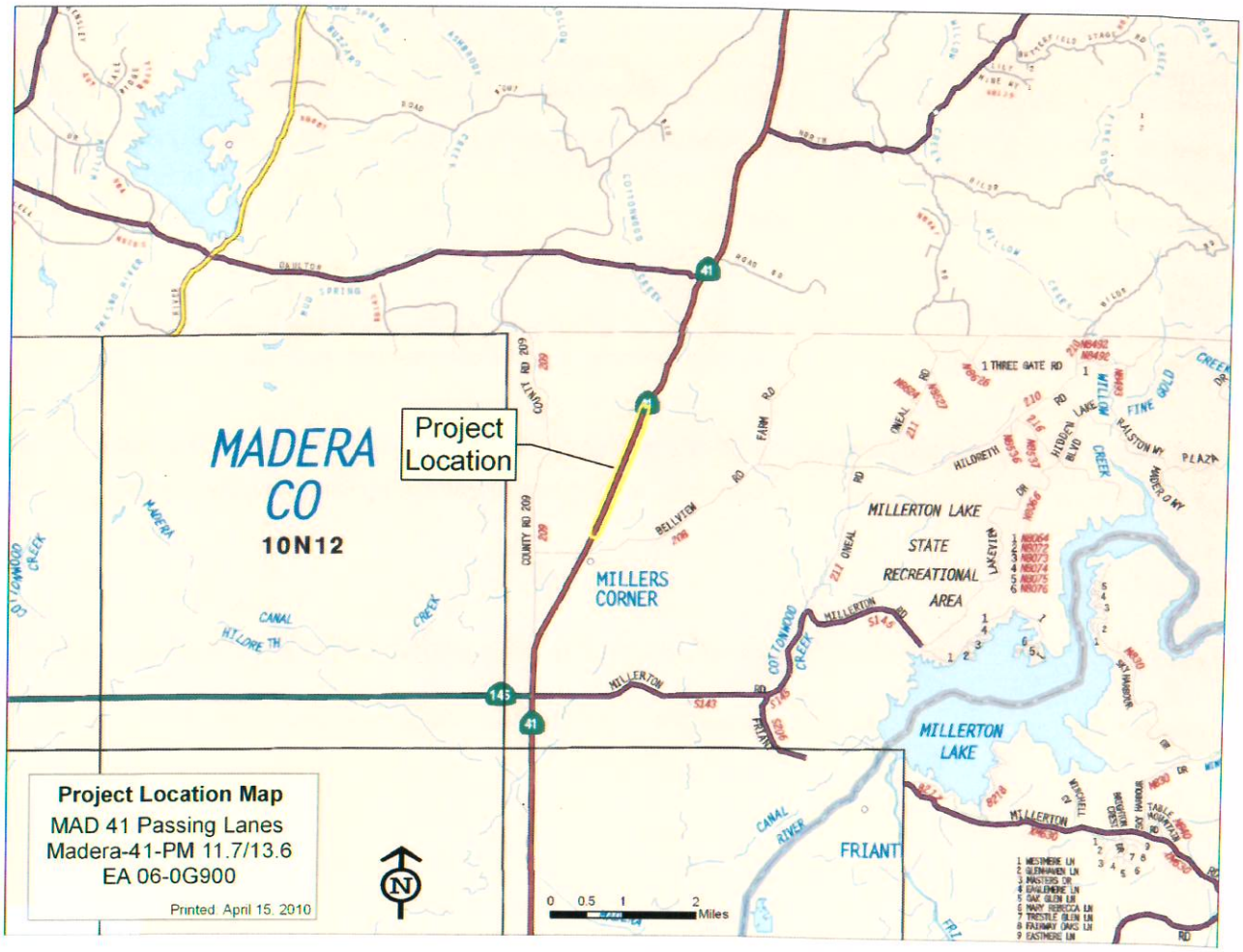
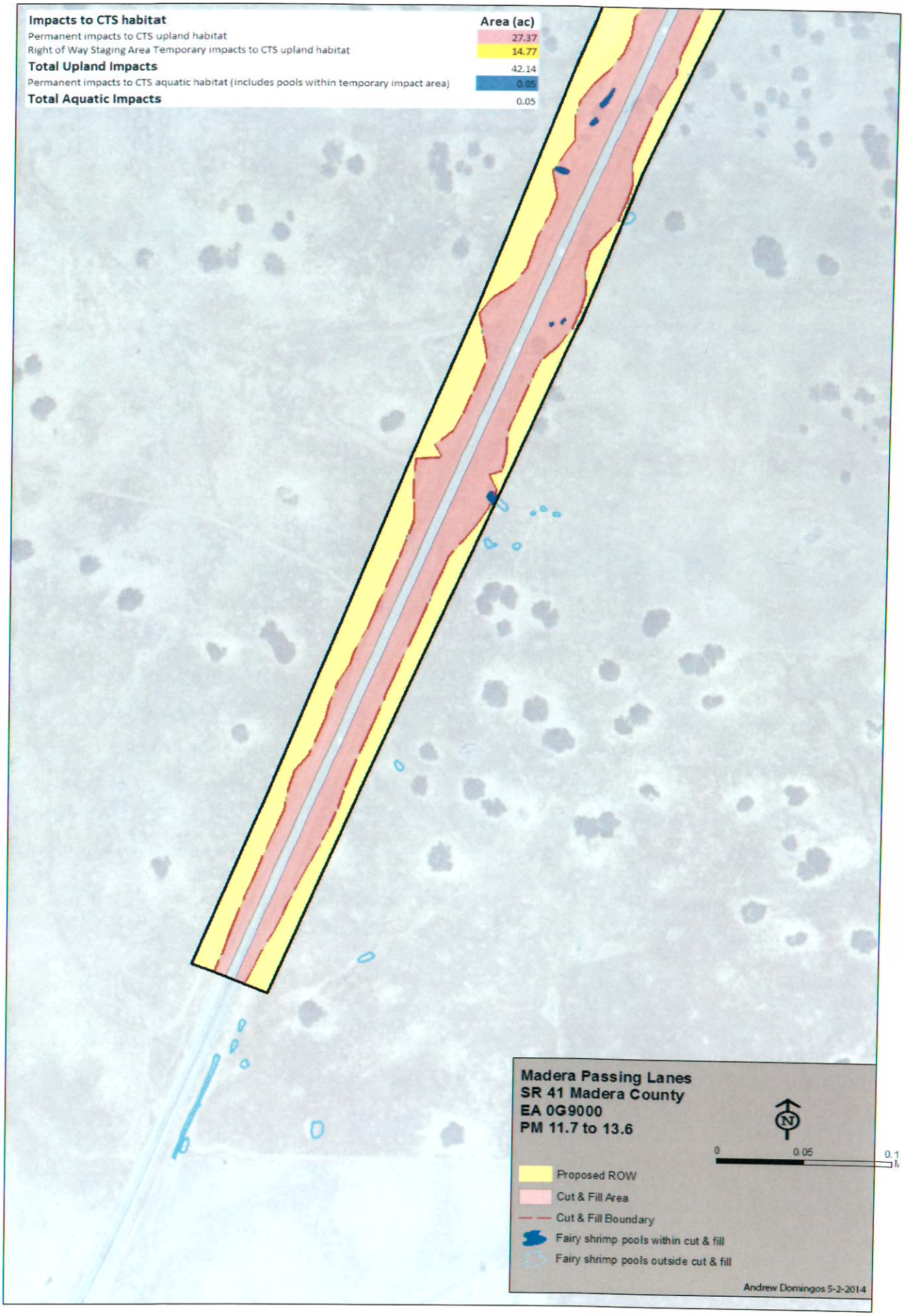

MADERA
CO
10N12
Project
Location
MILLERS
CORNER
MILLERTON LAKE
STATE
RECREATIONAL
AREA
MILLERTON
LAKE
FRIANT
Project Location Map
MAD 41 Passing Lanes
Madera-41-PM 11.7/13.6
EA 06-0G900
Printed: April 15, 2010
0 0.5 1 2 Miles

FIGURE 2A

Impacts to CTS habitat	Area (ac)
Permanent impacts to CTS upland habitat	27.37
Right of Way Staging Area Temporary impacts to CTS upland habitat	14.77
Total Upland Impacts	42.14
Permanent impacts to CTS aquatic habitat (includes pools within temporary impact area)	0.05
Total Aquatic Impacts	0.05

FIGURE 2B


Impacts to CTS habitat
Area (ac)
Permanent impacts to CTS upland habitat
27.37
Right of Way Staging Area Temporary impacts to CTS upland habitat
14.77
Total Upland Impacts
42.14
Permanent impacts to CTS aquatic habitat (includes pools within temporary impact area)
0.05
Total Aquatic Impacts
0.05
Madera Passing Lanes
SR 41 Madera County
EA 0G9000
PM 11.7 to 13.6
N
0
0.05
Proposed ROW
Cut & Fill Area
Cut & Fill Boundary
Fairy shrimp pools within cut & fill
Fairy shrimp pools outside cut & fill
Andrew Domingos 5-2-2014

Attachment 1

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

INCIDENTAL TAKE PERMIT NO. 2081-2014-038-04

PERMITTEE: **California Department of Transportation (Caltrans)**

PROJECT: **State Route 41 Madera Passing Lanes**

PURPOSE OF THE MMRP

The purpose of the 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 California 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 of 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: Mitigation Measure, Source, Implementation Schedule, Responsible Party, and Status/Date/Initials. The Mitigation Measure column summarizes the mitigation requirements of the ITP. The Source column identifies the ITP condition that sets forth the mitigation measure. The Implementation Schedule column shows the date or 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/Initials 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 initials of the person determining the status.

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
BEFORE DISTURBING SOIL OR VEGETATION					
1	Designated Representative. 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.	ITP Condition # 6.1	Before commencing ground- or vegetation-disturbing activities	Permittee	
2	Designated Biologist. Permittee shall submit to CDFW in writing the name, qualifications, business address, and contact information of a biological monitor (Designated Biologist) at least 14 days before starting Covered Activities. Permittee shall ensure that the Designated Biologist is knowledgeable and experienced in the biology, natural history, collecting and handling of the Covered Species. The Designated Biologist 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 Biologist in writing before starting Covered Activities, and shall also obtain approval in advance in writing if the Designated Biologist must be changed.	ITP Condition # 6.2	Before commencing ground- or vegetation-disturbing activities	Permittee	
3	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 the Designated Biologist 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 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. Permittee shall prepare and distribute wallet-sized cards or a fact sheet handout containing this information for workers to carry in the Project Area. Upon completion of the program, employees shall sign a form stating they attended the program and understand all protection measures.	ITP Condition # 6.4	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
4	Trash Abatement. 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 at least once a week to avoid attracting opportunistic predators such as ravens, coyotes, and feral dogs.	ITP Condition # 6.6	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
5	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.	ITP Condition # 6.7	Before commencing ground- or vegetation-disturbing activities/ Entire Project	Permittee	
6	Delineation of Property Boundaries. Before starting Covered Activities Permittee shall clearly delineate the boundaries of the Project Area with fencing, stakes, or flags. Permittee shall restrict all Covered Activities to within the fenced, staked, or flagged areas. Permittee shall maintain all fencing, stakes, and flags until the completion of Covered Activities.	ITP Condition # 6.9	Before commencing ground- or vegetation-disturbing activities	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
7	Delineation of Habitat. Permittee shall clearly delineate habitat of the Covered Species within the Project 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.	ITP Condition # 6.10	Before commencing ground- or vegetation-disturbing activities	Permittee	
8	Project Access. Project-related personnel shall access the Project Area using existing routes, and shall not cross Covered Species' habitat outside of or on route to the Project Area. Permittee shall restrict Project-related vehicle traffic to established roads, staging, and parking areas. If Permittee determines construction of routes for travel 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 as a result of the Project modification.	ITP Condition # 6.11	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
9	Notification Before Commencement. The Designated Representative shall notify CDFW 14 calendar days before starting Covered Activities and shall document compliance with all pre-Project Conditions of Approval before starting Covered Activities.	ITP Condition # 7.1	Before commencing ground- or vegetation-disturbing activities	Permittee	
10	California Tiger Salamander Relocation Plan. The Designated Biologist shall prepare a California tiger salamander relocation plan (Relocation Plan) and submit it to CDFW for written approval prior to beginning Covered Activities. The Relocation Plan shall include, but not be limited to, identification of capture methods, burrow excavation methods, handling methods, relocation methods, identification of relocation areas, and identification of a wildlife rehabilitation center or veterinary facility. Only approved Designated Biologist(s) are authorized to capture and handle Covered Species.	ITP Condition # 7.3	Before commencing ground- or vegetation-disturbing activities	Permittee	
11	Pre-construction Survey Report. The Designated Biologist shall submit a report documenting the results of the pre-construction survey to CDFW within 5 days after performing the survey described in in Condition of Approval 8.1.	ITP Condition # 7.4	Before commencing ground- or vegetation-disturbing activities	Permittee	
12	Cost Estimates. CDFW has estimated the cost of acquisition, protection, and perpetual management of the HM lands and restoration of temporarily disturbed habitat as follows: Conservation Easement acquisition costs for HM lands identified in Condition of Approval 9.3 below, estimated at $1,500.00/acre for 98.51 acres: **$197,020.00**; Start-up costs for HM lands, including initial site protection and enhancement costs as described in Condition of Approval 9.3.5 below, estimated at **$50,147.87**; Interim management period funding as described in Condition of Approval 9.3.6 below, estimated at **$86,953.35;** Long-term management funding as described in Condition of Approval 9.4 below, estimated at $11,329.26/acre for 98.51 acres: **$1,116,045.14;** Restoration of on-site temporary effects to Covered Species habitat as described in [Condition of Approval 9.6, calculated at $20,000.00/acre for 14.77 acres: **$295,400.00**.	ITP Condition # 9.1	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
13	Covered Species Credits. Permittee shall purchase 98.51 acres of Covered Species credits from a CDFW-approved mitigation or conservation bank prior to initiating Covered Activities, or no later than 18 months from the issuance of this ITP if Security is provided pursuant to Condition of Approval 10 below:	ITP Condition # 9.2	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	
14	**Habitat Acquisition and Protection**. To provide for the acquisition and perpetual protection and management of the HM lands, the Permittee shall: Fee Title/Conservation Easement. Transfer fee title or Conservation Easement to the HM lands pursuant to Condition of Approval 9.3.1 of this ITP; HM Lands Approval. Obtain CDFW written approval of the HM lands before acquisition and/or transfer of the land pursuant to Condition of Approval 9.3.2 of this ITP; HM Lands Documentation. Provide a recent preliminary title report, initial hazardous materials survey report, and other necessary documents pursuant to Condition of Approval 9.3.3 of this ITP; Land Manager. Designate both an interim and long-term land manager approved by CDFW pursuant to Condition of Approval 9.3.4 of this ITP; 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 pursuant to Condition of Approval 9.3.5 of this ITP; Interim Management (Initial and Capital). Provide for the interim management of the HM lands pursuant to Condition of Approval 9.3.6 of this ITP;	ITP Condition # 9.3	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	
15	Endowment Fund. If the Permittee will permanently protect and perpetually manage compensatory habitat as described in Condition of Approval 9.2, 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 provides funds for the perpetual management, maintenance, monitoring, and other activities on the HM lands consistent with the management plan(s) required by Condition of Approval 9.2.5.	ITP Condition # 9.4	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
16	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.	ITP Condition # 9.4.1	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	
17	Calculate the Endowment Funds Deposit. After obtaining CDFW written approval of the HM lands, long-term management plan, and Endowment Manager, Permittee shall prepare a Property Analysis Record (PAR) or PAR-equivalent analysis to calculate the amount of funding necessary to ensure the long-term management of the HM lands (Endowment Deposit Amount). The Permittee shall submit to CDFW for review and approval the results of the PAR before transferring funds to the Endowment Manager:	ITP Condition # 9.4.2	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	
18	Transfer Long-term Endowment Funds. Permittee shall transfer the long-term endowment funds to the Endowment Manager upon CDFW approval of the Endowment Deposit Amount identified above. 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.	ITP Condition # 9.4.3	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	
19	Reimburse CDFW. Permittee shall reimburse CDFW for all reasonable expenses incurred by CDFW such as transaction fees, account set-up fees, administrative fees, title and documentation review and related title transactions, expenses incurred from other state agency reviews, and overhead related to transfer of HM lands to CDFW.	ITP Condition # 9.5	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	
20 a	**Performance Security** The Permittee may proceed with Covered Activities only after the Permittee has ensured funding (Security) to complete any activity required by Condition of Approval 8 that has not been completed before Covered Activities begin. Permittee shall provide Security as follows: Security Amount. The Security shall be in the amount of **$1,748,566.36**. This amount is based on the cost estimates identified in Condition of Approval 8.1 above. Security Form. The Permittee shall submit the form of security to CDFW to be approved in writing by CDFW's Office of the General Counsel.	ITP Condition # 10 inc. 10.1-10.2	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
20 b	**Performance Security (continued)** Security Timeline. The Security shall be provided to CDFW before Covered Activities begin or within 30 days after the effective date of this ITP, whichever occurs first. Security Holder. The Security shall be held by CDFW or in a manner approved in advance in writing by CDFW. Security Transmittal. If CDFW holds the Security, Permittee shall transmit it to CDFW with a completed Mitigation Payment Transmittal Form (see Attachment 2) or by way of an approved instrument such as escrow, irrevocable letter of credit, or other. Security Drawing. The Security shall allow CDFW to draw on the principal sum if CDFW, in its sole discretion, determines that the Permittee has failed to comply with the Conditions of Approval of this ITP. Security Release. The Security (or any portion of the Security then remaining) shall be released to the Permittee after CDFW has conducted an on-site inspection and received confirmation that all secured requirements have been satisfied, as evidenced by: • Written documentation of the acquisition of the HM lands; • Copies of all executed and recorded conservation easements; • Written confirmation from the approved Endowment Manager of its receipt of the full Endowment; and • Timely submission of all required reports. Even if Security is provided, the Permittee must complete the required acquisition, protection and transfer of all HM lands and record any required conservation easements no later than 18 months from the effective date of this ITP. CDFW may require the Permittee to provide additional HM lands and/or additional funding to ensure the impacts of the taking are minimized and fully mitigated, as required by law, if the Permittee does not complete these requirements within the specified timeframe.	ITP Condition # 10 inc. 10.3-10.7	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	
DURING CONSTRUCTION					
14	Designated Biologist Authority. To ensure compliance with the Conditions of Approval of this ITP, the Designated Biologist shall have authority to immediately stop any activity that does not comply with this ITP, and/or to order any reasonable measure to avoid the unauthorized take of an individual of the Covered Species.	ITP Condition # 6.3	Entire Project	CDFW	
15	Construction Monitoring Notebook. The Designated Biologist shall maintain a construction-monitoring notebook on-site 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 notebook is available for review at the Project site upon request by CDFW.	ITP Condition # 6.5	Entire Project	Permittee	
16	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.	ITP Condition # 6.8	Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
17	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. Additionally, Permittee shall not use or cross Covered Species' habitat outside of the marked Project Area unless provided for as described in Condition of Approval 6.11 of this ITP.	ITP Condition # 6.12	Entire Project	Permittee	
18	Hazardous Waste. 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.	ITP Condition # 6.13	Entire Project	Permittee	
19	CDFW Access. Permittee shall provide CDFW staff with reasonable access to the Project, and shall otherwise fully cooperate with CDFW efforts to verify compliance with or effectiveness of mitigation measures set forth in this ITP.	ITP Condition # 6.14	Entire Project	Permittee	
20	Notification of Non-compliance. The Designated Representative shall immediately notify CDFW in writing if it determines that 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 report any non-compliance with this ITP to CDFW in writing (email acceptable) within 24 hours.	ITP Condition # 7.2	Entire Project	Permittee	
21	Compliance Monitoring. The Designated Biologist shall be on-site daily during all initial surface-disturbing activities and shall conduct compliance inspections a minimum of once per week during periods of inactivity and after clearing, grubbing, and grading are completed. The Designated Biologist 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 (5) ensure that signs, stakes, and fencing are intact, and that Covered Activities are only occurring in the Project Area. The Designated Representative or Designated Biologist shall prepare written observation and inspection records for each inspection day summarizing: oversight activities and compliance inspections, observations of Covered Species and their sign, survey results, and monitoring activities required by this ITP.	ITP Condition # 7.5	Entire Project	Permittee	
22	Monthly Compliance Report. The Designated Representative or Designated Biologist shall compile the observation and inspection records identified in Condition of Approval 7.5 into a Monthly Compliance Report and submit it to CDFW along with a copy of the MMRP table with notes showing the current implementation status of each mitigation measure. Monthly Compliance Reports shall be submitted to CDFW's Regional Office at the office listed in the Notices section of this ITP and via e-mail to CDFW's Regional Representative. At the time of this ITP's approval, the CDFW Regional Representative is Laura Peterson-Diaz (laura.peterson-diaz@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.	ITP Condition # 7.6	Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
23	Annual Status Report. 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 Monthly Compliance Reports for that year identified in Condition of Approval 7.6; (2) a general description of the status of the Project Area and Covered Activities, including actual or projected completion dates, if known; (3) a copy of the table in the MMRP with notes showing the current implementation status of each mitigation measure; (4) an assessment of the effectiveness of each completed or partially completed mitigation measure in avoiding, minimizing and mitigating Project impacts; (5) all available information about Project-related incidental take of the Covered Species; and (6) information about other Project impacts on the Covered Species.	ITP Condition # 7.7	Entire Project	Permittee	
24	CNDDB Observations. 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 with the next Monthly Compliance Report or ASR, whichever is submitted first relative to the observation.	ITP Condition # 7.8	Entire Project	Permittee	
25	Vegetation Restoration Plan. The Permittee shall prepare a Vegetation Restoration Plan within six (6) months of issuance of this ITP as described in Condition of Approval 9.5.	ITP Condition # 7.9	Entire Project	Permittee	
26	Notification of Take or Injury. Permittee shall immediately notify the Designated Biologist 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 by calling the Regional Office at (559) 243-4005. The initial notification to CDFW shall include information regarding the location, species, and number of animals taken or injured and the ITP Number. Following initial notification, Permittee shall send CDFW a written report within two 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.	ITP Condition # 7.11	Entire Project	Permittee	
27	Pre-Construction Surveys. Prior to any ground disturbance within the Project Area, the Designated Biologist(s) shall examine the portions of the Project Area to be disturbed and within a 50-foot buffer area for small mammal burrows and Covered Species. The survey shall provide 100 percent coverage of the Project limits and the 50-foot buffer area. All small mammal burrows within the survey area shall be marked with flagging. Any Covered Species detected within the Project Area shall be relocated as per an approved Relocation Plan prepared pursuant to Condition of Approval 7.3. The Permittee shall also identify all potential Covered Species breeding locations within 0.25 miles and submit a map of the potential Covered Species breeding locations to CDFW for written approval prior to the start of any ground disturbing activities.	ITP Condition # 8.1	Entire Project	Permittee	
28	Burrow Avoidance. Where feasible, the Permittee shall establish a no-disturbance buffer of 50 feet or greater around small mammal burrows. If small mammal burrows cannot be avoided by 50 feet and are within 0.25 miles of a potential Covered Species breeding location, the Permittee shall excavate burrows as described in Condition of Approval 8.4.	ITP Condition # 8.2	Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
29	Temporary Exclusion Fencing. Prior to any surface disturbance, Permittee shall install temporary exclusion fencing (exclusion fence) around the perimeter of all the Project work area(s). Permittee shall install exclusion fencing to avoid Covered Species burrows, so that the burrows are isolated from the active work area when possible. The Designated Biologist shall accompany the exclusion fence construction crew to ensure that Covered Species are not killed or injured during fence installation. An alternative exclusion fence design may be used if CDFW has provided written approval in advance of fence installation. The exclusion fence shall be supported sufficiently to maintain its integrity under all conditions such as wind and heavy rain for the duration of the active construction period. Silt fencing shall not be used as exclusion fencing under this requirement. Permittee shall check the exclusion fence at least once weekly and maintain/repair the fence when necessary.	ITP Condition # 8.3	Entire Project	Permittee	
30	Burrow Excavation. All small mammal burrows within 0.25 miles of a Covered Species potential breeding location shall be fully excavated by the Designated Biologist or under the direct supervision of the Designated Biologist as described in the Relocation Plan required by Condition of Approval 7.3. Any live Covered Species salvaged during burrow excavation shall be relocated as per approved Relocation Plan prepared pursuant to Condition of Approval 7.3.	ITP Condition # 8.4	Entire Project	Permittee	
31	Covered Species Observation and Relocation. If any Covered Species are found in the Project Area during construction, all work that could potentially harm the Covered Species shall stop immediately until the Covered Species leaves the Project Area on its own or the Designated Biologist(s) relocates the Covered Species as approved in the Relocation Plan prepared required by Condition of Approval 7.3.	ITP Condition # 8.5	Entire Project	Permittee	
32	Record of Handling. All Covered Species captures and sightings confirmed by the Designated Biologist(s) shall include the following documented information: the date, time, and location of each occurrence using Global Positioning System (GPS) technology, the name of the party that actually identified the animal, circumstances of the incident, the general condition and health of each individual, any diagnostic markings, sex, age (juvenile or adult), and actions undertaken and habitat description. Permittee shall submit this information to the CNDDB as per Condition of Approval 7.8. This information shall also be included in the Monthly Compliance Report.	ITP Condition # 8.6	Entire Project	Permittee	
33	Field Work Code of Practice. To ensure that the Designated Biologist(s) do not convey disease between work sites, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force Fieldwork Code of Practice (see Attachment 2) shall be followed at all times. The Designated Biologist(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.	ITP Condition # 8.7	Entire Project	Permittee	
34	Covered Species in the Project Area. If any Covered Species are found in the Project Area during any Covered Activities, all work that could potentially harm the Covered Species shall stop immediately until the Designated Biologist can relocate the Covered Species following the CDFW approved Relocation Plan prepared pursuant to Condition of Approval 7.3 or it leaves the Project Area on its own accord.	ITP Condition # 8.8	Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
35	Daily Entrapment Inspections. The Designated Biologist shall inspect all open holes, trenches, and excavations within the Project Area at the beginning, middle, and end of each day for trapped animals. The Designated Biologist shall inspect all covered holes and trenches at least once daily. To prevent inadvertent entrapment of Covered Species or any other animals, all trenches, holes or other excavations with sidewalls steeper than a 1:1 slope shall be covered when not actively being worked on, or shall have an escape ramp of earth of a non-slip material with a less than 1:1 slope. The Designated Biologist shall also oversee the covering of all excavated, steep-walled holes or trenches more than two feet deep or of any depth if they contain water or other material, at the close of each working day by plywood or other barrier materials such that animals are unable to burrow under or enter and become entrapped. The outer two feet of excavation cover shall conform to solid ground so that gaps do not occur between the cover and the ground and secured with soil staples or similar means to prevent gaps. Holes or trenches that are covered shall be inspected at the beginning of each working day to ensure inadvertent entrapment has not occurred. Before holes or trenches are filled, the Designated Biologist shall thoroughly inspect them for trapped animals. If any worker discovers that Covered Species have become trapped, they shall halt Project-related activities and notify the Designated Biologist immediately. Project workers and the Designated Biologist shall allow the Covered Species to escape unimpeded or the Designated Biologist shall capture and relocate the Covered Species as per the Relocation Plans described in Condition of Approval 7.3 before allowing work to continue. The Designated Biologist shall inspect all open trenches, auger holes, and other excavations that may trap Covered Species prior to any work in or around them and immediately prior to being backfilled. If, at any time, a trapped or injured Covered Species is discovered, Permittee shall contact CDFW's Regional Representative within one (1) working day of the incident.	ITP Condition # 8.9	Entire Project	Permittee	
36	Equipment Inspection. Precipitation. Covered activities shall be restricted to periods of low rainfall (less than 1/2 inch precipitation per 24-hour period). Permittee shall monitor the National Weather Service (NWS) 72-hour forecast for the Project area. If a 70 percent or greater chance of rainfall is predicted within 24 hours of Project activity, a Designated Biologist shall survey the Project site before construction begins EACH day rain is forecast. If Permittee uses a Designated Monitor to conduct surveys, a Designated Biologist must still be available to capture and relocate any Covered Species discovered during the surveys. If precipitation begins, then a Designated Biologist shall be at the Project site for the duration of the rain event in order for work to continue. If a Designated Monitor is used, then a Designated Biologist must still be on call and available to relocate any Covered Species discovered. If rain exceeds 1/2 inch during a 24-hour period, all covered work activities shall cease until it is no longer raining and no further rain is forecast.	ITP Condition # 8.10	Entire Project	Permittee	
37	Night work. If night work occurs between November 1 and June 14, a Designated Biologist shall survey the Project site before construction begins each night. If Permittee uses a Designated Monitor to conduct surveys, a Designated Biologist must still be available to capture and relocate any Covered Species discovered during the surveys as required in the Relocation Plan described in Condition of Approval 7.3. Permittee shall prohibit all night work within potential Covered Species upland habitat when a 70 percent or greater chance of rainfall is predicted within 24 hours of Project activity, until no further rain is forecast.	ITP Condition # 8.11	Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
38	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 or the Designated Biologist shall move the Covered Species out of harm's way outside of the Project Area and in compliance with the approved Relocation Plan required in Condition of Approval 7.3.	ITP Condition # 8.12	Entire Project	Permittee	
39	Equipment Fluids and Refueling. Equipment refueling and/or fluid changes shall occur outside wetland areas and at least 300 feet from any potential Covered Species breeding location. For activities occurring in wetland areas, Permittee shall ensure that equipment is inspected prior to operation for fuel and/or fluid leaks.	ITP Condition # 8.13	Entire Project	Permittee	
40	Pesticides. Use of herbicides and rodenticides are prohibited in the Project Area, unless approved in advance in writing by CDFW. If written approval is obtained, the Permittee shall observe all label and other restrictions mandated by the US Environmental Protection Agency, California Department of Pesticide Regulations and other appropriate State and Federal regulations, as well as additional project-related restrictions deemed necessary by CDFW to prevent primary or secondary poisoning of Covered Species.	ITP Condition # 8.14	Entire Project	Permittee	
41	Stockpiles. Permittee shall place soil stockpiles where soil shall not pass into potential Covered Species breeding pools; nor shall it pass into any other "waters of the state," in accordance with Fish and Game Code 5650. Permittee shall appropriately protect stockpiles to prevent soil erosion.	ITP Condition # 8.15	Entire Project	Permittee	
42	Covered Species Injury. If a Covered Species is injured as a result of Project-related activities, the Designated Biologist shall immediately take it to a CDFW-approved wildlife rehabilitation or veterinary facility. Permittee shall identify the facility before starting Covered Activities. Permittee shall bear any costs associated with the care or treatment of such injured Covered Species. The Permittee shall notify CDFW of the injury to the Covered Species immediately by telephone and e-mail followed by a written incident report as described in Condition of Approval 7.11. Notification shall include the name of the facility where the animal was taken.	ITP Condition # 8.16	Entire Project	Permittee	
POST-CONSTRUCTION					
43	Refuse Removal. Upon completion of Covered Activities, Permittee shall remove from the Project Area and properly dispose of all 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.	ITP Condition # 6.15	Post-construction	Permittee	
44	Habitat Restoration. Permittee shall restore on-site the 14.77 acres of Covered Species habitat that will be temporarily disturbed during construction to pre-project or better conditions. Within 6 months of issuance of this ITP, the Permittee shall prepare a Vegetation Restoration Plan and submit it to CDFW and obtain written approval prior to implementation. The Plan shall include detailed specifications for restoring all temporarily disturbed areas, such as seed mixes and application methods. The plan shall also indicate the best time of year for seeding to occur. Plantings shall include regular watering to ensure adequate growth. Permittee shall ensure that the Plan is successfully implemented by the contractor.	ITP Condition # 9.6	Post-construction	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
45	Final Mitigation Report. No later than 45 days after completion of all mitigation measures, Permittee shall provide CDFW with a Final Mitigation Report. The Designated Biologist shall prepare the Final Mitigation Report which shall include, at a minimum: (1) a summary of all Monthly Compliance Reports and all ASRs; (2) a copy of the table in the MMRP 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) beginning and ending dates of Covered Activities; (6) 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; (7) recommendations on how mitigation measures might be changed to more effectively minimize take and mitigate the impacts of future projects on the Covered Species; and (8) any other pertinent information.	ITP Condition # 7.10	Post-construction and after completion of mitigation	Permittee	

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.

3. 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.

6. 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.

ATTACHMENT 3A

DEPARTMENT OF FISH AND GAME
HABITAT MANAGEMENT LAND ACQUISITION PACKAGE CHECKLIST
FOR PROJECT APPLICANTS

The following checklist is provided to inform you of what documents are necessary to expedite Department processing of your Habitat Management Land acquisition proposal. Any land acquisition processing requests which are incomplete when received, will be returned. The Region contact will review and approve the document package and forward it to the Lands and Facilities Branch (LFB) Realty Services Coordinator with a request to process the land acquisition for formal acceptance.

To: _____
Regional Manager, Region Name

From: _____
Project Applicant

Phone: _____

Tracking #: _____
CDFG assigned permit or agreement #

Project Name: _____

Enclosed is the complete package for the ☐ Conservation Easement OR ☐ Grant Deed

Documents in this package include:

- ☐ Fully executed, approved as to form Conservation Easement Deed or Grant Deed.
  Date executed: _____
- ☐ Proposed Lands for Acquisition Form (PLFAF)
- ☐ Phase I Environmental Site Assessment Report Date on report: _____
  (An existing report may be used, but it must be less than two years old.)
- ☐ Preliminary Title Report(s) for subject property is enclosed and has been reviewed for encumbrances and other easements. The title report must be less than six months old when final processing is conducted.
  Included are additional documents:
  - ☐ document(s) to support title exceptions
  - ☐ document(s) to explain title encumbrances
  - ☐ a plot or map of easements/encumbrances on the property
- ☐ Policy of Title Insurance (an existing title policy is not acceptable)
- ☐ County Assessor Parcel Map(s) for subject property
- ☐ Site Location Map (Site location with property boundaries outline on a USGS 1:24,000 scale topo)
- ☐ Final Permit or Agreement (or other appropriate instrument)
  Type of agreement: ☐ Bank Agreement ☐ Mitigation Agreement
  ☐ Permit _____ Other: _____
  (Write in type of permit)
- ☐ Biological Resources Survey (may be an attachment to Permit or Agreement or a separate document)
- ☐ Final Management Plan (if required prior to finalizing permit or agreement or if this package is for a Grant Deed)
- ☐ Draft Summary of Transactions ☐ hard copy ☐ electronic copy (both are required)

Attachment 3B

PROPOSED LANDS FOR ACQUISITION FORM ("PLFAF")

Date: _____

TO: Regional Representative

_____

_____

_____

Facsimile:

FROM:_____

_____

_____

_____

Applicant proposes that the following parcel of land be considered for approval by the Department as suitable for purposes of habitat management lands to replace the adverse environmental impacts of the Project:

Section(s)	Township	Range	County	Acres

Current Legal Owner(s) including Assessor Parcel Number(s) (APN):

_____

_____

General Description of the location of the parcel(s):

_____
_____
_____
_____
_____

Land Value: $_____

For Regional Use Only:

APPROVED ___ By:_____ DATE:_____

REJECTED ___ _____

Region

Explanation:_____

_____

California Department of Fish and Game

Mitigation Payment Transmittal Form

Project Applicant Instructions: Please fill out and attach this form to payment. For conservation banks, also attach the Bill(s) of Sale for credits sold. One form may be used for multiple transactions, **BUT YOU MUST USE A SEPARATE FORM FOR EACH CHECK YOU TRANSMIT**. Make sure to include Project Name, Project Tracking Number, and FASB Mitigation Tracking Number (if available) on the attached payment type.

(1) **DATE:** _____

TO: _____
[CDFG Regional Manager]

_____
[CDFG Region Office Address]

(2) **FROM:** _____
Name

_____
Mailing Address

_____
City, State, Zip

_____
Telephone Number/FAX Number

(3) **RE:** _____
[Project Name as appears on permit/agreement]

(4) **AGREEMENT/ACCOUNT INFORMATION:**
(Check the applicable type)

□ 2081 Permit □ Conservation Bank □ 1802 Agreement

□ 2835 NCCP □ Other _____

_____
[Project Tracking Number]

_____
[FASB Mitigation Tracking Number (if available)]

Index _____ PCA _____

(5) PAYMENT TYPE (One check per form only): The following funds are being remitted in connection with the above referenced project:

Check information:

Total $_____ Check No. _____

Account No. _____ Bank Routing No. _____

a. Endowment: for Long-Term Management Subtotal $_____

b. Habitat Enhancement Subtotal $_____

c. Security:

1. Cash Refundable Security Deposit Subtotal $_____

2. Letter of Credit Subtotal $_____

1. Financial Institution: _____

2. Letter of Credit Number: _____

3. Date of Expiration: _____

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
REGION 4 - CENTRAL REGION
1234 EAST SHAW AVENUE
FRESNO, CALIFORNIA 93710

STREAMBED ALTERATION AGREEMENT
NOTIFICATION NO. 1600-2014-0207-R4
TWELVE UNNAMED DRAINAGES - MADERA COUNTY

CALIFORNIA DEPARTMENT OF TRANSPORTATION
CALTRANS DISTRICT 6
JAVIER ALMAGUER
855 M STREET, SUITE 200
FRESNO, CALIFORNIA 93721

MAD-41 PASSING LANES EA 06-0G900 (PROJECT)

This Streambed Alteration Agreement (Agreement) is entered into between the California Department of Fish and Wildlife (CDFW) and California Department of Transportation (referred to as Permittee), represented by Javier Almaguer.

RECITALS

WHEREAS, pursuant to Fish and Game Code (FGC) Section 1602, Permittee notified CDFW on October 27, 2014, that Permittee intends to complete the Project described herein.

WHEREAS, pursuant to FGC Section 1603, CDFW has determined that the Project could substantially adversely affect existing fish or wildlife resources and has included Protective Measures in this Agreement necessary to protect those resources.

WHEREAS, Permittee has reviewed this Agreement and accepts its terms and conditions, including the Protective Measures to protect fish and wildlife resources.

NOW THEREFORE, Permittee agrees to complete the Project in accordance with this Agreement.

PROJECT LOCATION

The Project is generally located along State Route (SR) 41 approximately 10 miles northeast of the City of Madera in Madera County, California. Project construction will occur at twelve locations between Post Mile (PM) 11.7 and PM 13.6, which are located within Township 10 South, Range 20 East, Sections 15 and 22 United States Geologic Survey (USGS) of the Mt. Diablo Meridian. (Figure 1). Specific details for each location follow:

Location 1 System #1: Unnamed ephemeral stream - SR 41 PM 12.03, Township 10 South, Range 20 East, Section 22 USGS map Little Table Mountain, MDB&M; Latitude 37.0478 N, Longitude -119.7763 W.

Location 2 System #3: Unnamed ephemeral stream - SR 41 PM 12.12, Township 10 South, Range 20 East, Section 22 USGS map Little Table Mountain, MDB&M; Latitude 37.0489 N, Longitude -119.7757 W.

Location 3 System #4: Unnamed ephemeral stream - SR 41 PM 12.23, Township 10 South, Range 20 East, Section 22 USGS map Little Table Mountain, MDB&M; Latitude 37.0505 N, Longitude -119.7749 W.

Location 4 System #5: Unnamed ephemeral stream - SR 41 PM 12.34, Township 10 South, Range 20 East, Section 22 USGS map Little Table Mountain, MDB&M; Latitude 37.0521 N, Longitude -119.7741 W.

Location 5 System #6: Unnamed ephemeral stream - SR 41 PM 12.49, Township 10 South, Range 20 East, Section 22 USGS map Little Table Mountain, MDB&M; Latitude 37.0541 N, Longitude -119.7731 W.

Location 6 System #7: Unnamed ephemeral stream - SR 41 PM 12.58, Township 10 South, Range 20 East, Section 22 USGS map Little Table Mountain, MDB&M; Latitude 37.0554 N, Longitude -119.7724 W.

Location 7 System #8: Unnamed ephemeral stream - SR 41 PM 12.65, Township 10 South, Range 20 East, Section 15 USGS map Little Table Mountain, MDB&M; Latitude 37.0563 N, Longitude -119.7720 W.

Location 8 System #9: Unnamed ephemeral stream - SR 41 PM 12.87, Township 10 South, Range 20 East, Section 15 USGS map Little Table Mountain, MDB&M; Latitude 37.0592 N, Longitude -119.7705 W.

Location 9 System #10: Unnamed ephemeral stream - SR 41 PM 13.01, Township 10 South, Range 20 East, Section 15 USGS map Little Table Mountain, MDB&M; Latitude 37.0610 N, Longitude -119.7695 W.

Location 10 System #11: Unnamed ephemeral stream - SR 41 PM 13.09, Township 10 South, Range 20 East, Section 36 USGS map Little Table Mountain, MDB&M; Latitude 37.0621 N, Longitude -119.7691 W.

Location 11 System #12: Unnamed ephemeral stream - SR 41 PM 13.16, Township 10 South, Range 20 East, Section 15 USGS map Little Table Mountain, MDB&M; Latitude 37.0630 N, Longitude -119.7687 W.

Location 12 System #13: Unnamed ephemeral stream - SR 41 PM 13.22, Township 10 South, Range 20 East, Section 15 USGS map Little Table Mountain, MDB&M; Latitude 37.0640 N, Longitude -119.7682 W.

PROJECT DESCRIPTION

The purpose of the proposed Project is to replace and extend twelve culverts to accommodate the widening of SR 41 for the staggered passing lanes to be added. The alignment of each stream will be *moved* to guide flows to the new culverts and back to the existing stream alignment downstream of the new crossings. System 2 is a cattle crossing that is not within CDFW jurisdiction and is therefore not included in this Agreement.

The Project is limited to:

At each location the existing Corrugated Metal Pipe culvert will be abandoned in place according to the following procedure: Where the culverts intersect side slopes of the fill material under the road, the culvert ends will be removed at least 3 feet below/inside the plane of the finished side slope, requiring the displacement of approximately 0.5 cubic yards of soil. Associated headwalls will also be removed. The culverts will be filled with sand that is clean, free draining, and free from roots and other deleterious substances. The ends of each culvert will then be securely sealed with a tight fitting plug of concrete at least 6 inches thick. Soil excavated at each site will be used to backfill each respective site to grade (see Table 1 for details relevant to each location).

Table 1: Culverts to be Abandoned and Backfilled with Sand

System Number	Station Location	Remove Headwall	Corrugated Metal Pipe Culvert		Cubic Yards of Sand
			Diameter (inches)	Length (Feet)	
1	118+87.30	East side	24	74.0	17.2
3	123+43.00	East side	24	70.3	16.4
4	129+53.15	East side	24	48.3	11.2
5	135+88.74	East side	24	87.0	15.2
6	143+52.70	NA	24	63.0	11.0
7	149+23.00	West side	24	68.4	11.9
8	152+01.92	East side	24	86.6	20.2
9	164+27.07	East side	24	90.1	15.7
10	170+87.27	West side	24	80.0	18.6
11	175+27.30	NA	24	61.6	10.8
12	179+02.00	West side	24	48.3	8.4
13	182+71.47	West side	24	84.8	19.7

A new Reinforced Concrete Pipe (RCP) culvert will be installed at each location with a headwall at the inlet and a steel Flared End Section (FES) with Rock Slope Protection (ASP) at the outlet. The length of the RCP and the direction of flow vary depending on the location (see Table 2). The RCP will be installed via trenching through the fill material used previously to construct SR 41. A cast-in-place Straight Headwall will be installed at the inlet of each culvert. Each headwall will be 3 feet 8 inches high, 8 feet

6 inches across, and 9 inches thick, and will require approximately 1.75 cubic yards of concrete to construct. At System 3, a 48-inch diameter steel FES will be installed at the outlet with 30 cubic yards of Rock Slope Protection (RSP) No. 2 installed in an area 15.5 feet wide by 24 feet long. At all the other locations the outlet will have a 24-inch diameter steel FES installed with 7.7 cubic yards of RSP No. 2 installed in an area 8 feet wide by 12 feet long.

Table 2: New Culvert Installation

System Number	Station Location	West side of SR 41	Reinforced Concrete Pipe Culvert			East side of SR 41
			Diameter (Inches)	SLOPE	Length (Feet)	
1	118+50.00	FES/RSP	24	0.500%	175.30	Headwall
3	124+00.00	Headwa ll	48	2.260%	183.80	FES/RSP
4	130+00.00	FES/RSP	24	1.040%	129.10	Headwall
5	136+00.00	FES/RSP	24	3.200%	241.40	Headwall
6	144+00.00	Headwall	24	3.820%	144.00	FES/RSP
7	149+00.00	Headwall	24	7.380%	192.30	FES/RSP
8	152+50.00	FES/RSP	24	0.500%	185.80	Headwall
9	164+00.00	FES/RSP	24	4.790%	257.10	Headwall
10	171+50.00	Headwall	24	2.740%	224.20	FES/RSP
11	175+50.00	Headwall	24	2.720%	135.40	FES/RSP
12	179+50.00	Headwall	24	8.730%	161.60	FES/RSP
13	182+50.00	Headwall	24	2.380%	100.30	FES/RSP

All RSP will be installed by excavating and backfilling the footing trench, placing RSP fabric as a base layer, and then placing revetment type rock courses on the slope. Selected rocks will provide a stable structure. If the slope is steeper than 2:1, rounded boulders or cobble will not be used; angular shaped rock will be used on planned slopes to facilitate properly anchoring the geotextile fabric. Rock grading for the Method "B" placement is determined by the percentage of rock smaller than the smallest rock size and is determined by weight. Backing No. 2 uses rocks O to 5 percent larger than 75 pounds, 25 to 75 percent larger than 25 pounds, and 90 to 100 percent larger than 5 pounds.

The existing streams are approximately 3 inches deep and do not have steep or strongly discernable banks. Once the new culverts are in place a maximum total area of 1500 square feet at the inlet and outlet at each site will be graded to a depth of 3 inches to fill the existing stream courses under the road and to create new channels that direct existing drainages into the new culverts. Water passing through the new pipes from one side of the highway to the other side will therefore be returned to their original channels in order to maintain the overall drainage patterns in each area. Approximately 5 cubic yards of soil will be removed from each location to create the new stream alignment. The new culvert location and alignment of the stream where it is crossed by SR41 will be between 13 feet and 48 feet from its existing location.

Heavy equipment likely to be used includes a backhoe, bobcat, bulldozer/loader, compressor, concrete pump, concrete mixer trucks, crane, dump truck, excavator, flatbed truck, fork lift, front-end loader, haul truck, grader, and water truck.

Work will be done when the ephemeral drainages are naturally dry so no diversion or dewatering will be required. No trees will be cut or removed as a result of Project implementation.

PROJECT IMPACTS

The Project will temporarily impact 0.826 acres of ephemeral swale drainage channels including wetland vegetation. There will also be 0.116 acres of permanent impacts to the drainage channel. A total of 214.8 linear feet of streams will be impacted. Other potential impacts related to disturbance during Project implementation include but are not limited to those resulting from noise, vibration, trampling/crushing, erosion, and surface water contact with construction-related materials.

This Agreement is intended to avoid, minimize, and mitigate adverse impacts to the fish and wildlife resources that may occupy the Project area and the adjacent habitat. Absent implementation of the Protective Measures required by this Agreement, the following species and their habitat types could potentially be impacted: Federally and State threatened California tiger salamander *(Ambystoma californiense)*, Federally threatened vernal pool fairy shrimp *(Branchinecta lynch1)*, State threatened Swainson's hawk *(Buteo swainsom)*, State species of special concern California linderiella fairy shrimp *(Linderiella occcidentalis)* and Western spadefoot *(Spea hammondil)*, and CNPS List 1B.2 spiny-sepaled button-celery *(Eryngium spinosepalum)*, as well other as birds, mammals, fish, reptiles, amphibians, invertebrates, and plants that compose the local riparian ecosystem.

MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES

1. Administrative Measures

Permittee shall meet each administrative Protctive Measure described below.

Documentation at Project Site. Permittee shall make this Agreement, any extensions and amendments to this Agreement, and all related notification materials and California Environmental Quality Act (CEQA) documents, readily available at the Project site at all times and shall be presented to CDFW personnel or personnel from another State, Federal, or local agency upon request.

Providing Agreement to Persons at Project Site. Permittee shall provide copies of this Agreement and any extensions and amendments to this Agreement to all persons who will be working on the Project at the Project site on behalf of Permittee, including but not limited to contractors, subcontractors, inspectors, and monitors.

Notification of Conflicting Provisions. Permittee shall notify CDFW if Permittee determines or learns that a provision in this Agreement might conflict with a Protective Measure imposed on the Project by another local, State, or Federal agency. In that event, CDFW shall contact Permittee to resolve any conflict.

Project Site Entry. Permittee agrees that CDFW personnel may enter the Project site at any time to verify compliance with this Agreement.

Legal Obligations. This Agreement does not exempt Permittee from complying with all other applicable local, State, and Federal law, or other legal obligations.

Unauthorized Take. This Agreement does not authorize the "take" (defined in Fish and Game Code §86 as to hunt, pursue, catch, capture, or kill; or attempt to hunt, pursue, catch, capture, or kill) of State- or Federally-listed threatened or endangered species. Any such take shall require separate permitting as may be required.

Property Not Owned by Permittee. To the extent that the Protective Measures of this Agreement provide for activities that require Permittee to enter on another owner's property, they are agreed to with the understanding that Permittee possesses the legal right to so enter.

Work Schedule. Permittee shall submit a **work schedule** to CDFW (Laura.Peterson-Diaz@wildlife.ca.gov with reference to Agreement No. 1600-2014-0207-R4) prior to beginning any activities covered by this Agreement. Permittee shall also notify CDFW upon the completion of the activities covered by this Agreement.

Training. Prior to starting any Project activity, all employees, contractors, and visitors who will be present during Project activities shall receive training from a qualified individual on the contents of this Agreement, the resources at stake, and the legal consequences of non-compliance. A **training sign-in sheet** for the employees and contractors, including the date of the training and who gave the training shall be provided to CDFW (Laura.Peterson-Diaz@wildlife.ca.gov with reference to Agreement No. 1600-2014-0207-R4) prior to beginning any activities covered by this Agreement.

2. Avoidance and Minimization Measures

To avoid or minimize adverse impacts to fish and wildlife resources identified above, Permittee shall implement each Protective Measure listed below.

Construction/Work Hours. All work activities shall be confined to daylight hours. For purposes of this Agreement, "daylight hours" are defined as that daytime period between sunrise and sunset.

Flagging/Fencing. Prior to any activity within the channel, Permittee shall identify the limits of the Project within CDFW jurisdiction. These "work area" limits shall be identified with brightly-colored flagging. Work completed under this Agreement shall be limited to this defined area only. Flagging shall be maintained in good repair for the duration of the Project. All CDFW jurisdictional areas beyond the identified work area limits shall be considered Environmentally Sensitive Areas (ESA) and shall not be disturbed.

Listed Species.

(a) This Agreement does not allow for the take of any State- or Federally-listed threatened or endangered species. Liability for any take of such listed species remains the separate responsibility of Permittee for the duration of the Project.

(b) Permittee has applied for an Incidental Take Permit (No. 2081-2014-038-04) to authorize the take of California tiger salamander resulting from the Project. Permittee affirms that absent issuance and execution of the Incidental Take Permit, no take of California tiger salamander may occur, and that upon Incidental Take Permit issuance, no take of listed species beyond that described in Incidental Take Permit No. 2081-2014-038-04 for California tiger salamander shall occur as a result of this Project. Permittee shall take prudent measures to ensure that all unpermitted take is avoided. Permittee shall take prudent measures to ensure that all unpermitted take is avoided. Permittee is responsible for obtaining and complying with required State and Federally threatened and endangered species permits or other written authorization before proceeding with this Project.

(c) Permittee shall immediately notify CDFW of the discovery of any such threatened or endangered species prior to and/or during Project implementation.

(d) **Pre-activity surveys** for potential rare, listed, or other sensitive species shall be conducted by a qualified biologist within 30 days prior to commencement of Project activities unless otherwise specified in species-specific measures below. Surveys shall be conducted within the work area and all access routes to avoid and minimize incidental take, confirm previous observations, identify any areas occupied by listed or sensitive species, and clearly mark all resources to be avoided by Project activities. If any State- or Federally-listed threatened or endangered species are found or could be impacted by the work proposed, Permittee shall notify CDFW of the discovery prior to commencement of Project activity. An amended Agreement and/or Incidental Take Permit may be necessary and a new CEQA analysis may need to be conducted, before work can begin.

(e) California Tiger Salamander (CTS): Permittee has applied for an Incidental Take Permit (No. 2081-2014-038-04) to authorize Project-related take of

CTS. If the Incidental Take Permit for CTS has not been issued prior to Project initiation, the following avoidance measures shall be implemented: Within all Project areas and including a 50 foot radius of each Project site, a qualified biologist shall flag all rodent burrows, and Project activity shall avoid these burrows by a minimum 50-foot no-disturbance buffer. Permittee shall provide a map of all flagged rodent burrows to CDFW prior to commencing Project activity. A qualified biologist shall be present during all ground disturbing activities during the active season of the species (November through May). In the *event* that CTS is detected on or adjacent to the Project site by the qualified biologist or any Project worker, Project activity shall cease immediately and Permittee shall notify CDFW immediately of the detection. Project activity shall not resume until the Incidental Take Permit for the Project has been issued. Upon issuance of an Incidental Take Permit for CTS, Permittee shall comply with the terms and conditions of the Incidental Take Permit; unauthorized take of CTS would result in violation and potential nullification of this Agreement.

(f) Vernal pool fairy shrimp: The Project site provides habitat vernal pool fairy shrimp. A Biological Opinion has been issued by the United States Fish and Wildlife Service (USFWS), authorizing take of the species during Project implementation. Permittee shall comply wth the terms of the Biological Opinion for Madera 41 Passing Lane Project (81420-201O-F-0642-1); unauthorized take of vernal pool fairy shrimp would result in a violation of and potential revocation of this Agreement.

(g) Swainson's Hawk: No Project-related activities at Locations, **1**, 2, and 3 shall be completed from March 1 through August 31 unless a qualified biologist conducts **Swainson's hawk nesting surveys** following the survey methodology developed by the Swainson's Hawk Technical Advisory Committee (http://www.dfg.ca.gov/wildlife/nongame/docs/swain_proto.pdf) prior to commencing Project-related activities. Additional pre-Project surveys for active nests within a %-mile radius of the Project site shall be conducted by a qualified biologist no more than 1O days prior to the start of Project activities and during the appropriate time of day to maximize detectability. A minimum no disturbance buffer of % mile shall be delineated around active nests until the breeding season has ended or until a qualified biologist has determined and CDFW has confirmed in writing that the birds have fledged and are no longer reliant upon the nest or parental care for survival. Alternately, Permittee may apply for and acquire an Incidental Take Permit for Swainson's hawk prior to initiating Project activities.

(g) Western Spadefoot: Any western spadefoot discovered at the site immediately prior to or during Project activities shall be allowed to *move* out of the area on their own volition. If this is not feasible, they shall be captured by a qualified biologist who holds a Scientific Collecting Permit for the species, and relocated out of harm's way to the nearest suitable habitat immediately upstream or downstream from the Project site.

(h) Sensitive Status Plant Species: Sensitive plants (including, but not limited to, spiny-sepaled button celery) have the potential to exist in the vicinity of the proposed Project footprint; therefore, if suitable habitat is present within the project area, Permittee shall conduct focused Plant Surveys on the Project site in advance of any planned ground disturbing activities. Repeated floristic surveys shall be conducted by a qualified botanist multiple times during the appropriate floristic period(s) in order to adequately assess the potential Project-related impacts to listed plant species. If sensitive plant species are found, Permittee shall identify them with flagging and avoid with a 25-foot no disturbance buffer during Project activities, or take alternative protective action proposed by the Permittee and approved by CDFW in writing in advance of Project activity. Such alternative action may include salvaging topsoil and replacing it in areas of temporary disturbance to the affected species. If any State-listed threatened or endangered plant species are found within the work area or could be impacted by the work proposed, an amended Agreement and/or Incidental Take Permit may be necessary and a new CEQA analysis may need to be conducted, before work can begin.

General Wildlife.

(a) If any fish or wildlife is encountered during the course of Project implementation, said fish or wildlife shall be allowed to leave the Project area unharmed.

(b) Pursuant to FGC Sections 3503 and 3503.5, it is unlawful to take, possess, or destroy the nest or eggs of any bird or bird-of-prey. To protect nesting birds, no Project activity shall be completed from March 1 through August 31 unless the following surveys are completed by a qualified biologist within 30 days prior to Project activity.

Raptor Species: Survey for nesting raptors within a 500-foot radius of the Project area. If any active nests are observed, these nests shall be designated an ESA and protected by a minimum 500-foot avoidance buffer until the breeding season has ended or until a qualified biologist has determined that the young have fledged and are no longer reliant upon the nest or parental care for survival.

Other Avian Species: Survey for nesting activity within a 250-foot radius of the defined work area. If any nesting activity is found, Permittee shall designate nests and nest substrate (trees, shrubs, ground, or burrows) as an ESA protected with a minimum 250-foot buffer until the young have fledged and are no longer reliant upon the nest or parental care for survival.

CDFW may consider variances from these buffers when there is a compelling biological or ecological reason to do so, such as when the Project area would be concealed from a nest site by topography.

Vegetation.

(a) Trimming and removal of vegetation shall be limited to the minimal amount necessary to complete the Project. No trees shall be trimmed, cut, or removed

(b) Vegetation or material removed from the Project site shall be disposed of at an appropriate and legal off-site location where the material cannot enter the stream channel. No such material shall be stockpiled in the streambed, banks, or channel.

(c) All invasive, exotic plant species disturbed by Project activities shall be bagged, removed from the Project site, and appropriately disposed of. Non-native species shall not be used in mulching, composting, or otherwise placed in or around the Project site.

(d) All equipment, including but not limited to vehicles, heavy equipment and other construction machinery shall be inspected for the presence of soil, seeds, vegetative matter, or other debris that could contain seeds and cleaned prior to on-site use to reduce the risk of introducing exotic, invasive plant species into the Project site.

Vehicles and Equipment.

(a) Vehicles and equipment shall not be operated in areas where surface water is present. Vehicles and equipment shall only operate in the channel during naturally dry conditions.

(b) Vehicle and equipment access to the channel's banks and bed shall be limited to predetermined ingress and egress corridors on existing roads. All other areas adjacent to the work site shall be considered an ESA and shall remain off-limits to construction equipment.

(c) Vehicles shall not be driven where wetland vegetation, riparian vegetation, or aquatic organisms may be destroyed, except as otherwise provided for in this Agreement and as necessary to complete the authorized work.

(d) Any equipment or vehicles driven and/or operated within or adjacent to the channel shall be checked and maintained daily to prevent leaks of materials that, if introduced to water, could be deleterious to aquatic and terrestrial life.

(e) Staging and storage areas for equipment, materials, fuels, lubricants, and solvents shall be located outside of the channel and banks. Stationary equipment such as motors, pumps, generators, compressors and welders,

located within or adjacent to the channel, shall be positioned *over* drip-pans. Vehicles shall be *moved* away from the channel prior to refueling and lubrication.

Engineered Features.

(a) Permittee confirms that all structures are designed (i.e., size and alignment), constructed, and maintained such that they will not fail, will accommodate high flows, and will not cause long- term changes in water flows that adversely modify the existing upstream or downstream channel bed/bank contours, increase sediment deposition, or cause significant new erosion.

(b) Prior to commencing the Project, Permittee shall submit for CDFW written approval the final engineered plans for each location, showing at a minimum the existing and new alignment of each stream, the volumes of cut and fill required at each location to realign the streams, and the construction details related to the new culvert crossings.

(c) Permittee confirms that the new constructed stream channels shall be properly aligned and otherwise engineered and created to assure resistance to erosion of the stream bed, stream banks, and/or fill and that the Project shall not cause long-term changes in water flows that adversely modify the existing upstream or downstream stream bed/bank contours or increase sediment deposition.

Fill/Spoil.

(a) Spoil storage sites shall not be located within the channel, where spoil could be washed into the channel, or where it will *cover* aquatic or riparian vegetation. Rock, gravel, and/or other materials shall not be imported into or *moved* within the bed or banks of the channel, except as otherwise addressed in this Agreement.

(b) Fill shall be limited to the minimal amount necessary to accomplish Project activities. Excess fill material shall be *moved* off-site at Project completion.

Erosion.

(a) No work within the banks of the channel will be conducted during or immediately following large rainfall *events* (defined as % inch of rain in any 24-hour period).

(b) All disturbed soils within the Project site shall be stabilized to reduce erosion potential during and following Project activities. Temporary erosion control devices, such as straw bales, silt fencing, and sand bags, may be used, as appropriate, to prevent siltation of the channel. Any installation of

non-erodible materials not described in the original Project description shall be coordinated with CDFW. Coordination may include the negotiation of additional Protective Measures for this activity.

O Pollution.

(a) During Project implementation, Permittee shall not dump any litter or debris within the stream. All such debris and waste shall be picked up daily and properly disposed of at an appropriate site.

(b) Raw cement, concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to fish or wildlife resulting from Project-related activities, shall be prevented from contaminating the soil and/or entering the "Waters of the State".

(c) Permittee shall install the necessary containment structures to control the placement of any wet concrete/cement and to prevent it from entering into the channel outside of those structures. No concrete/cement shall be poured or applied below the top of bank if the 5-day weather forecast indicates any chance of rain. At all times when Permittee is pouring or working with wet concrete/cement there shall be a designated monitor to inspect the containment structures and ensure that no concrete or other debris enters into the channel outside of those structures. Poured concrete/cement shall remain isolated from flowing waters and soils that could become saturated, and allowed to cure for a minimum of 15 days. CDFW may approve a variance to this measure if Permittee proposes a plan to collect surface water (including rain) that comes in contact with concrete/cement and dispose of the water in a lawful manner at an off-site location. No variance shall be implemented unless CDFW has provided approval in writing and in advance.

(d) Permittee and all contractors shall be subject to the water pollution regulations found in FGC Sections 5650 and 12015.

(e) An **Emergency Response Plan** shall be prepared and submitted to CDFW prior to the start of Project activities, and kept on-site during all phases of the Project. The Plan shall identify the actions that shall be taken in the event of a spill of petroleum products, concrete, contaminated soil, or other material harmful to fish, plants, or aquatic life. Emergency response materials shall be kept at the site and readily available to allow rapid containment and cleanup of any spilled material. In the event that a spill occurs, all Project activities shall immediately cease until cleanup of the spilled materials is completed. CDFW shall be notified immediately by Permittee of any spills. The Emergency Response Plan may be part of a document required by another permitting agency, such as a Water Pollution Control Program; however, the Emergency Response Plan shall be clearly identified and readily available to

staff in the event of an emergency situation, and accessible during inspection of the site by CDFW personnel.

(f) All Project-generated debris, building materials, and rubbish shall be removed from the stream bed and banks, and from areas where such materials could be washed into the stream bed and banks.

3. Compensatory Measures

To compensate for adverse impacts to fish and wildlife resources identified above that cannot be avoided or minimized, Permittee shall implement each Protective Measure listed below.

Revegetation/Restoration.

(a) If the Project creates any exposed slopes within CDFW jurisdiction, these areas shall be seeded (with weed-free straw or mulch) with the seed mix provided to CDFW, identified as "Mix 1" within the Erosion Control Plan Legend. The seeding shall be completed as soon as possible, but no later than November 15 of the year Project activity ends in any location. At the discretion of CDFW, all exposed areas where seeding is considered unsuccessful after 90 days shall receive appropriate soil preparation and a second application of seeding, straw, or mulch as soon as is practical on a date mutually agreed upon.

(b) Where suitable vegetation cannot be reasonably expected to become established, non-erodible materials shall be used for such stabilization. Any installation of non-erodible materials not described in the original Project description shall be coordinated with CDFW. Coordination may include the negotiation of additional Protective Measures for this activity.

4. Reporting Measures

Permittee shall meet each reporting requirement described below.

Obligations of Permittee.

(a) Permittee shall have primary responsibility for monitoring compliance with all Protective Measures in this Agreement. Protective Measures must be implemented within the time periods indicated in this Agreement and the reporting program described below.

(b) Permittee (or Permittee's designee) shall ensure the implementation of the Protective Measures of this Agreement, and shall monitor the effectiveness of the Protective Measures.

Reports. Permittee shall submit the following Reports to CDFW:

- Work schedule, submitted to CDFW prior to commencing Project activities (Administrative Measure 1.8).

- Training sign-in sheet, submitted to CDFW within one (1) week of the training (Administrative Measure 1.9).

- Results of the pre-activity surveys for special status species, submitted to CDFW at least one (1) week prior to commencement of Project activity (Avoidance and Minimization Measure 2.3(d)).

- A map of burrow locations within and including a 50 foot radius of Project sites, if Project activity will commence prior to issuance of the Incidental Take Permit for California tiger salamander, submitted to CDFW at least one (1) week prior to the start of Project activities (Avoidance and Minimization Measure 2.3(e)).

- Swainson's hawk nesting surveys, if Project activity at Locations 1, 2, or 3 will be conducted during the nesting period of the species, submitted to CDFW at least one (1) week prior to commencement of Project activity (Avoidance and Minimization Measure 2.3(g)).

- Results of surveys for nesting birds if any Project activities are scheduled during the avian nesting season, submitted to CDFW at least one (1) week prior to commencement of Project activity (Avoidance and Minimization Measure 2.4(b)).

- Final engineered drawings of each location, submitted to CDFW for written approval at least two (2) weeks prior to Project commencement (Avoidance and Minimization Measure 2.7(b)).

- An Emergency Response Plan, submitted to CDFW for written approval at least two (2) weeks prior to Project commencement (Avoidance and Minimization Measure 2.10(e)).

- A Final Project Report to be submitted within 30 days after work covered by this Agreement is completed. The final report shall summarize the Project, and address the implementation of each Protective Measure included in this Agreement. "Before and after" photo documentation of the Project site shall be included in the report.

CONTACT INFORMATION

Any communication that Permittee or CDFW submits to the other shall be in writing and any communication or documentation shall be delivered to the address below by U.S. mail, fax, or email, or to such other address as Permittee or CDFW specifies by written notice to the other.

To Permittee:

California Department of Transportation (Caltrans)
Keri O'Connor
855 M Street, Suite 200
Fresno, California 93721
(559) 445-6459
Fax: (559) 445-6260
keri.o'connor@dot.ca.gov

To CDFW:

California Department of Fish and Wildlife
Region 4 - Central Region
1234 East Shaw Avenue
Fresno, California 93710
Attn: Lake and Streambed Alteration Program - Laura Peterson-Diaz
Notification No. 1600-2014-0207-R4
Phone: (559) 243-4017 extension 225
Fax: (559) 243-4020
laura.peterson-diaz@wildlife.ca.gov

LIABILITY

Permittee shall be solely liable for any violations of this Agreement, whether committed by Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents or contractors and subcontractors, to complete the Project or any activity related to it that this Agreement authorizes.

This Agreement does not constitute CDFW's endorsement of, or require Permittee to proceed with the Project. The decision to proceed with the Project is Permittee's alone.

SUSPENSION AND REVOCATION

CDFW may suspend or revoke in its entirety this Agreement if it determines that Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, is not in compliance with this Agreement.

Before CDFW suspends or revokes this Agreement, it shall provide Permittee written notice by certified or registered mail that it intends to suspend or revoke. The notice shall state the reason(s) for the proposed suspension or revocation, provide Permittee an opportunity to correct any deficiency before CDFW suspends or revokes this Agreement, and include instructions to Permittee, if necessary, including but not limited to a directive to immediately cease the specific activity or activities that caused CDFW to issue the notice.

ENFORCEMENT

Nothing in this Agreement precludes CDFW from pursuing an enforcement action against Permittee instead of, or in addition to, suspending or revoking this Agreement.

Nothing in this Agreement limits or otherwise affects CDFW's enforcement authority or that of its enforcement personnel.

OTHER LEGAL OBLIGATIONS

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from obtaining any other permits or authorizations that might be required under other Federal, State, or local laws or regulations before beginning the Project or an activity related to it.

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from complying with other applicable statutes in the FGC including, but not limited to, FGC sections 2050 et seq. (threatened and endangered species), 3503 (bird nests and eggs), 3503.5 (birds of prey), 5650 (water pollution), 5652 (refuse disposal into water), 5901 (fish passage), 5937 (sufficient water for fish), and 5948 (obstruction of stream).

Nothing in this Agreement authorizes Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, to trespass.

AMENDMENT

CDFW may amend this Agreement at any time during its term if CDFW determines the amendment is necessary to protect an existing fish or wildlife resource.

Permittee may amend this Agreement at any time during its term, provided the amendment is mutually agreed to in writing by CDFW and Permittee. To request an amendment, Permittee shall submit to CDFW a completed CDFW "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the

corresponding amendment fee identified in CDFW's fee schedule at the time of the request (see Cal. Code Regs., Title 14, § 699.5).

TRANSFER AND ASSIGNMENT

This Agreement may not be transferred or assigned to another entity, and any purported transfer or assignment of this Agreement to another entity shall not be valid or effective, unless the transfer or assignment is requested by Permittee in writing, as specified below, and thereafter CDFW approves the transfer or assignment in writing.
The transfer or assignment of this Agreement to another entity shall constitute a minor amendment, and therefore to request a transfer or assignment, Permittee shall submit to CDFW a completed CDFW "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the minor amendment fee identified in CDFW's fee schedule at the time of the request (see Cal. Code Reg., Title 14, § 699.5).

EXTENSIONS

In accordance with FGC section 1605(b), Permittee may request one (1) extension of this Agreement, provided the request is made prior to the expiration of this Agreement's term. To request an extension, Permittee shall submit to CDFW a completed CDFW "Request to Extend Lake or Streambed Alteration" form and include with the completed form payment of the extension fee identified in CDFW's fee schedule at the time of the request (see Cal. Code Reg., Title 14, § 699.5). CDFW shall process the extension request in accordance with FGC 1605(b) through (e).

If Permittee fails to submit a request to extend this Agreement prior to its expiration, Permittee shall submit a new notification and notification fee before beginning or continuing the Project this Agreement covers (FGC § 1605, subd. (f)).

EFFECTIVE DATE

This Agreement becomes effective on the date of CDFW's signature, which shall be: 1) after Permittee's signature; 2) after CDFW complies with all applicable requirements under the California Environmental Quality Act (CEQA); and 3) after payment of the applicable FGC section 711.4 filing fee listed at http://www.wildlife.ca.gov/habcon/ceqa/ceqa_changes.html.

TERM

This Agreement shall remain in effect for three (3) years beginning on the date signed by CDFW, unless it is terminated or extended before then. All provisions in this Agreement shall remain in force throughout its term. Permittee shall remain responsible for implementing any provisions specified herein to protect fish and wildlife resources after this Agreement expires or is terminated, as FGC section 1605(a) (2) requires.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) COMPLIANCE

In approving this Agreement, CDFW is independently required to assess the applicability of CEQA. The features of this Agreement shall be considered as part of the overall Project description.

Permittee's concurrence signature on this Agreement serves as confirmation to CDFW that the activities conducted under the terms of this Agreement are consistent with the Project as described in the CEQA Mitigated Negative Declaration prepared by California Department of Transportation as the Lead Agency for the State Route 41 Madera Passing Lanes Project (State Clearinghouse No. 2011041084), approved on September 28, 2011. A copy of the Mitigated Negative Declaration was provided to CDFW by Permittee.

CDFW, as a CEQA Responsible Agency, shall submit a Notice of Determination to the State Clearinghouse upon signing this Agreement.

EXHIBITS

The document listed below is included as an exhibit to this Agreement and is incorporated herein by reference.

Figure 1. Project Location USGS Quad Map.

AUTHORITY

If the person signing this Agreement (signatory) is doing so as a representative of Permittee, the signatory hereby acknowledges that he or she is doing so on Permittee's behalf and represents and warrants that he or she has the authority to legally bind Permittee to the provisions herein.

AUTHORIZATION

This Agreement authorizes only the Project described herein. If Permittee begins or completes a Project different from the Project this Agreement authorizes, Permittee may be subject to civil or criminal prosecution for failing to notify CDFW in accordance with FGC section 1602.

CONCURRENCE

The undersigned accepts and agrees to comply with all the provisions of this Agreement.

FOR CALIFORNIA DEPARTMENT OF TRANSPORTATION

_____ 1/26/15

Imagu r
Branch Chief - Caltrans Central Region Biology South

Date

FOR CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

_____ _____

Jeffrey R. Single, Ph.D.
Regional Manager - Central Region

Date

Prepared by: Laura Peterson-Diaz
Environmental Scientist

Figure 1

Exhibit A

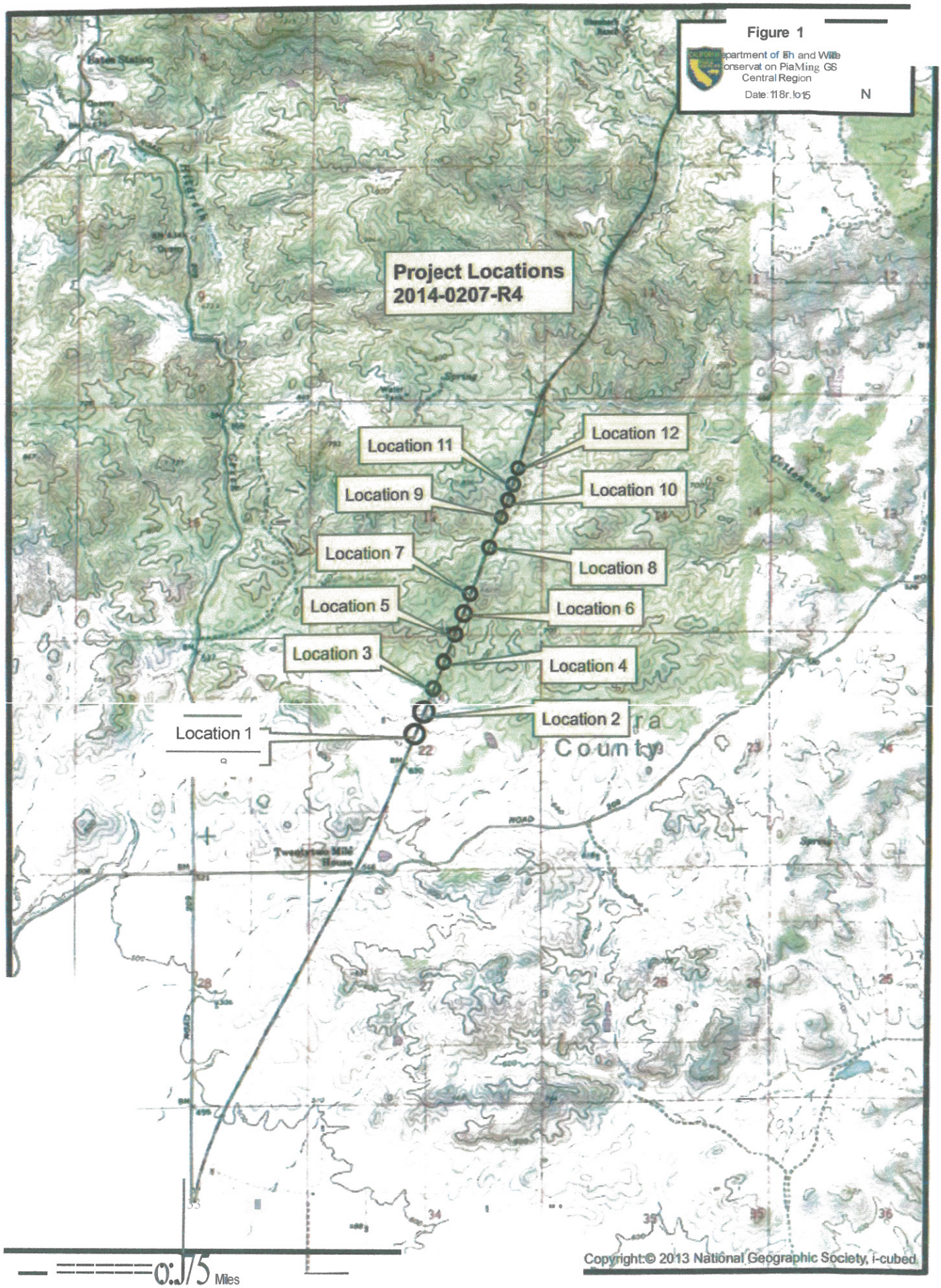


Figure 1
Department of Fish and Wildlife
Conservation Planning GIS
Central Region
Date: 11/8/2015
N
Project Locations
2014-0207-R4
Location 1
Location 2
Location 3
Location 4
Location 5
Location 6
Location 7
Location 8
Location 9
Location 10
Location 11
Location 12
Copyright:© 2013 National Geographic Society, i-cubed
0.175 Miles

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825-1846

In Reply Refer To:
81420-2010-F-0642-2

MAY 14 2012

Ms. Carrie Swanberg
Interim Branch Chief, Southern Central Region Biology
California Department of Transportation, District 6
855 M Street Suite 200
Fresno, California 93721

Subject: Amendment to the Biological Opinion for the Madera 41 Passing Lane Project, Madera County, California (California Department of Transportation EA 06-0G900; 06-MAD-PM 11.7/13.6)

Dear Ms. Swanberg:

This is the U.S. Fish and Wildlife Service's (Service) response to the California Department of Transportation's (Caltrans) request to amend the biological opinion for the proposed Madera 41 Passing Lane Project (project) in Madera County, California (Service file number 81420-2010-F-0642-1), issued on August 19, 2011. Under the provisions of the July 1, 2007, Pilot Program Memorandum of Understanding between the Federal Highway Administration (FHWA) and Caltrans, FHWA assigned, and Caltrans assumed, FHWA's responsibilities under the National Environmental Policy Act as well as its responsibilities for environmental review, consultation, and coordination under other Federal environmental laws.

Your request, dated September 19, 2011, was received in this office on September 23, 2011. Under consideration is Caltrans' request to change the language in various sections of the biological opinion, specifically under the *Proposed Avoidance and Minimization Measures* heading of the *Project Description*, and under the headings of *Reasonable and Prudent Measures*, *Terms and Conditions*, and *Disposition of Individuals Taken* in order to better clarify and implement measures. This response was prepared in accordance with section 7(a)(2) of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act).

In reviewing the request, the Service has relied upon: (1) the Service's August 19, 2011, biological opinion; (2) Caltrans' September 19, 2011, amendment request letter to the Service; and (3) other information available to the Service.

The following changes are made to the August 19, 2011, biological opinion. Segments of removed text are delineated by a strike-through line and new segments of text are highlighted by an underline.

Page 4, #1 under Proposed Avoidance and Minimization Measures: Clarify locations and usage of the proposed fencing, as requested by Caltrans. The measure is now amended to read:

1. Prior to construction, Caltrans will install high visibility fencing and/or new ROW fencing ~~around all ephemeral pools and upland habitat that are to be avoided during construction in order~~ along the edge of the newly acquired Caltrans ROW to avoid unplanned, accidental, or construction-related impacts~~.~~ to all ephemeral pools and upland habitat that are located outside of the project area. ~~Caltrans will also install fencing at a distance of 130 ft. from an elderberry shrub located outside the project area for the same purpose.~~ The installation of this high visibility fencing and/or new ROW fencing along the edge of the newly acquired Caltrans ROW will also serve to protect the elderberry shrub located at a distance of approximately 130 feet outside the project area. These will be established as environmentally sensitive areas (ESA).

Page 19, #3 under **Reasonable and Prudent Measures**: Add 'on-call monitoring' to the reasonable and prudent measure in order to remain consistent with the associated Term and Condition. The measure is now amended to read:

3. On-site or on-call monitoring by a Service-approved biologist must be conducted to minimize the potential for take of the California tiger salamander and vernal pool fairy shrimp.

Page 20, #3.1, under **Terms and Conditions**: Decrease the number of days in which qualifications for potential Service-approved biologists shall be submitted to the Service prior to project groundbreaking. The measure is now amended to read:

1. A Service-approved biologist shall be on-site or on-call during all activities that could result in the take of listed species. The qualifications of the biologist(s) shall be presented to the Service for review and approval at least ~~60~~ seven calendar days prior to any groundbreaking at the project site. The biologist shall have oversight of implementation of all the measures described in the *Proposed Avoidance and Minimization Measures* and *Terms and Conditions* of this biological opinion, and if any of the requirements associated with these measures are not being fulfilled, he/she shall have the authority to stop project activities through communication with the Resident Engineer, who shall be responsible for implementing these measures.

Page 21, first paragraph under **Disposition of Individuals Taken**: Remove the reference to the vernal pool fairy shrimp from the first sentence. Clarify the preservation method Caltrans shall follow in the event of the discovery of a dead California tiger salamander. This is now amended to read:

In the case of injured and/or dead California tiger salamanders ~~and vernal pool fairy shrimp~~, the Service shall be notified within one day and the animals shall only be handled by a Service-approved, permitted biologist. Injured California tiger salamanders shall be cared for by a licensed veterinarian or other qualified person. In the case of a dead animal, the individual animal shall be preserved, as appropriate; the animal shall be bagged, labeled (i.e. species type; who found or reported the incident; when the report was made; when and where the incident occurred; and if possible, cause of death). Individuals shall be ~~and~~ held in a secure location, such as a freezer or cooler, until instructions are received from the Service regarding the disposition of the specimen or until the Service, or another appropriate agency or qualified person, takes custody of the specimen. Caltrans must report to the Service within one calendar day any information about take or suspected take of federally-listed species not authorized in this opinion. Notification must include the date, time, and location of the incident or of the finding of a dead or injured animal. The Service contacts are Mr. Daniel Russell, Deputy Assistant Field Supervisor, Endangered Species Program, Sacramento, at (916) 414-6600 and Mr. Daniel Crum, the Resident Agent-in-Charge of the Service's Law Enforcement Division at (916) 414-6660. The CDFG contact is the Fresno Office at (559) 243-4017.

The remainder of the August 19, 2011, biological opinion is unchanged. This concludes the amending of the biological opinion for the Madera 41 Passing Lane Project. As provided in 50 CFR § 402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been maintained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action.

Please contact Jen Schofield, Fish and Wildlife Biologist, or Thomas Leeman, San Joaquin Valley Division Chief, at the letterhead address or at (916) 414-6600 if you have any questions regarding this letter.

Sincerely,

Kenneth Sanchez
Assistant Field Supervisor

cc:
Ms. Annee Ferranti, California Department of Fish and Game, Fresno, California

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825-1846

In Reply Refer To:
81420-2010-F-0642-1

19 Aug 2011

Mr. Zachary Parker
Biology Branch Chief
California Department of Transportation, District 6
855 M Street, Suite 200
Fresno, California 93721

Subject: Biological Opinion for the Madera 41 Passing Lane Project, Madera County, California (California Department of Transportation EA 06-0G9000; 06-MAD-PM 11.7/13.6)

Dear Mr. Parker:

This is the U.S. Fish and Wildlife Service's (Service) response to the California Department of Transportation's (Caltrans) request for formal consultation on the Madera 41 Passing Lane Project (project) in Madera County, California. Your letter requesting consultation, dated April 26, 2011, was received in this office on April 28, 2011. At issue are the effects of this proposed project on the central population of the federally-threatened California tiger salamander (*Ambystoma californiense*) and the federally-threatened vernal pool fairy shrimp (*Branchinecta lynchi*). This document has been prepared in accordance with section 7(a)(2) of the Endangered Species Act of 1973, as amended (16 U.S.C. § 1531 *et seq.*) (Act).

The findings and recommendations of this biological opinion are based on: (1) the April 26, 2011, Request to Initiate Formal Consultation letter; (2) the *Biological Assessment for the Madera 41 Passing lane Project, on State Route 41, north of Bellview Road, approximately 22 miles north of Fresno, California*, dated March 2011 (BA), and prepared by Caltrans, District 6; (3) electronic mail (e-mail) exchanges between the Service and Caltrans between October 2009 and June 2011; and (4) other information available to the Service.

Caltrans has determined that the proposed project is likely to adversely affect the California tiger salamander and the vernal pool fairy shrimp. The Service concurs with this determination.

Consultation History

October 19, 2009. Caltrans e-mailed the Service to request authorization to conduct vernal pool surveys. A letter was included which contained the project location/description, survey methods and participants, and a vicinity map.

October 20, 2009. The Service e-mailed Caltrans with authorization to conduct wet season surveys for federally listed vernal pool branchiopod species.

February 3, 2010. The Service received Caltrans' 90 day report for the 2009 wet season vernal pool branchiopod surveys. Four sites were surveyed from February to March 2009. No listed branchiopod species were observed but one California tiger salamander was found at one site.

April 15, 2010. Caltrans e-mailed the Service to request permission to discontinue vernal pool branchiopod sampling, which began after the first rain event on December 21, 2009 and continued until the present. Pools were still inundated with water but Caltrans reported it had not collected any shrimp species since February 2, 2010 and no longer saw shrimp in pools in which they had been found earlier in the season. The Service e-mailed Caltrans to inquire whether listed species had been found; if so, Caltrans could stop sampling, but if not, Service protocols stated that pools must be resampled when filled again.

April 27, 2010. Caltrans again e-mailed the Service to ask permission to stop fairy shrimp sampling efforts. Vernal pool fairy shrimp had been found in 11 of 30 pools and sampling in those locations ended per the Service's protocols. The remaining pools continued to be sampled every two weeks. Due to the length of the rainy season, the pools were still full, but Caltrans no longer observed presence in pools that once did contain the vernal pool fairy shrimp. Caltrans further requested that its results be accepted as negative for those pools in which vernal pool fairy shrimp presence was not established.

April 28, 2010. The Service e-mailed Caltrans to provide permission for discontinuing sampling. However, the Service explained that because the vernal pool fairy shrimp was found on the site as a whole, the Service would not accept a negative finding on a pool by pool basis. Since the pools together comprised a complex and dispersal from occupied to unoccupied pools was possible, overall presence should be inferred.

January 5, 2011. Caltrans e-mailed to the Service a copy of the 90 day report for the 2009/2010 wet season vernal pool branchiopod survey. Aerial maps, data sheets, and California Natural Diversity Database forms were included as attachments. Twenty-nine pools were surveyed comprising a wetted perimeter of 0.27 acre (Dec 21, 2009 - May 20, 2010). The vernal pool fairy shrimp was found in 10 pools within the project area.

April 28, 2011. The Service received a letter from Caltrans requesting to initiate formal consultation for the project for the California tiger salamander and vernal pool fairy shrimp. It included a BA in the initiation package.

May 25 & June 2, 2011. The Service e-mailed Caltrans with questions regarding the BA; Caltrans responded.

June 20, 2011. The Service e-mailed Caltrans with several further questions and comments regarding the project BA.

July 6, 2011. Caltrans responded to the Service's previous set of comments and questions.

BIOLOGICAL OPINION

Project Description

Caltrans proposes to construct staggered northbound and southbound passing lanes adjacent to the existing State Route (SR) 41 alignment; the northbound passing lane will be constructed from post mile (PM) 11.7 to PM 13.1, while the southbound lane will be constructed from PM 12.1 to 13.3. The length of both passing lanes includes 300 feet (ft.) of conform section at the beginning of each lane and 700 ft. of transition section at the end of each lane. Caltrans also proposes to construct a four ft. wide soft median barrier at the centerline of the existing alignment, eight ft. wide outside shoulders on both directional passing lanes, and shoulder rumble strips on both outside shoulders and the centerline of the soft median barrier. Further improvements will also include the extension of existing culverts and the installation of traffic signs in new locations. Within the project limits, rock outcroppings line the shoulder of the highway in four separate locations (PM 12.3-12.35, PM 12.74-12.86, PM 13.13-13.23, and PM 13.34-13.47) and will require removal in order to accommodate construction of the passing lanes. Caltrans proposes to blast the rock in these four areas; the contractor will provide netting in the blasting areas to minimize airborne rock debris. Drilled holes (10 ft. to 15 ft. deep) will contain the charges used to pre-split the rock. The explosion will crack the rocks and loaders will remove the rock fragments. The California Highway Patrol will close this section of SR 41 for several hours while this activity is undertaken.

The purpose of the project is to improve overall traffic operations along this segment of highway by reducing the length of traffic queues and reducing delays and accidents caused by inadequate passing opportunities. The existing 1.9 mile (mi) segment of SR 41 is a two-lane conventional highway with various intersections and private access points. According to Caltrans, traffic studies of this segment show that vehicles spend a significant amount of time behind slower moving vehicles during peak commuting hours, which leads to queuing and platooning. While there are locations along the segment that permit vehicle passing, safety is compromised by oncoming traffic during peak hours. The situation is worsened when through-traffic is further delayed by left-turning vehicles, which slow and stop in the lanes to wait for oncoming traffic to clear before turning.

The project is anticipated to begin construction on May 1, 2014 and to proceed continuously for a single season. No seasonal work windows have been specified for the project. A maximum estimate of 280 work days is proposed although work will likely take considerably less time. No

night work is expected for this project. Traffic control will be implemented via an alternate one-way, or reversing, method.

It is likely that staging will be located within the new ROW between the edge of the shoulder and the 12 ft. graded area used as the clear recovery zone. At this time, Caltrans does not yet know from where the contractor will derive fill material, but the contractor will be responsible for the selection and the environmental compliance of the borrow site prior to the start of construction activities. The project engineer believes it is likely that there will be enough material generated on-site to provide all of the fill material needed for the project.

Proposed Avoidance and Minimization Measures

According to the B.A. and further discussion with Caltrans biologists, Caltrans proposes to implement the following measures to minimize and avoid impacts to sensitive natural communities, plant species, and listed species that occur within the project area.

1. Prior to construction, Caltrans will install high visibility fencing and/or new ROW fencing around all ephemeral pools and upland habitat that are to be avoided during construction in order to avoid unplanned, accidental, or construction-related impacts. Caltrans will also install fencing at a distance of 130 ft. from an elderberry shrub located outside the project area for the same purpose. These will be established as environmentally sensitive areas (ESA).

2. Caltrans will implement a worker educational training to instruct personnel on the status of vernal pool habitat, how to avoid unanticipated effects, and the potential penalties for not complying with the conditions and requirements of the biological opinion.

3. Special provisions will be included in the construction contract for the protection of migratory birds.

    a. To the maximum extent feasible, native oak trees will be avoided and ESA fencing installed to protect them.
    b. The contractor will be required to notify the resident engineer prior to beginning any construction related activity during the nesting season (approximately February 15 to September 1).
    c. A preconstruction survey for nesting migratory birds will be conducted no more than 14 days prior to project construction and tree/vegetation removal.

4. Chemicals, lubricants, and petroleum products will be closely monitored and precautions used. If a spill occurs, cleanup will take place immediately. All equipment shall be maintained such that there will be no leaks of fluids such as gasoline, oils, or solvents.

5. Dust control measures will be implemented during construction.

6. The construction contractor will comply with all requirements specified by the California Department of Fish and Game (CDFG) and the Service.

7. Habitat areas temporarily impacted by project activities will be restored to their original conditions once construction is completed.

8. Caltrans will conduct full protocol-level botanical surveys during the appropriate blooming periods for the following four species: the fleshy owl's clover (*Castilleja campestris* ssp. *succulenta*), the San Joaquin Valley Orcutt grass (*Orcuttia inaequalis*), the hairy Orcutt grass (*Orcuttia pilosa*), and the Greene's tuctoria (*Tuctoria greenei*). Surveys will be undertaken prior to the start of construction if a period of five years or more passes between the original 2009/2010 botanical surveys and the construction start date in order to discover any future changes in, or new additions to, the floristic composition of federally-listed plant species at the project site.

9. Caltrans proposes to compensate for effects to the vernal pool fairy shrimp and California tiger salamander as a result of the permanent modification and loss of vernal pools which serve as habitat for both the vernal pool fairy shrimp and as aquatic breeding habitat for the California tiger salamander; by applying a 3:1 compensation ratio to 0.15 ac (=0.45 credits). Caltrans also proposes to compensate for permanent effects to 21.75 ac of California tiger salamander upland habitat, using a 3:1 compensation ratio (=65.25 credits), and for temporary effects to 18.51 ac of upland habitat, using a 1.1:1 compensation ratio (=20.36 credits). These result in a total 85.61 credits of California tiger salamander upland habitat and a total 0.45 credit of California tiger salamander and vernal pool fairy shrimp aquatic habitat to be purchased at a Service-approved conservation bank whose service area covers the project area.

Action Area

The action area is defined in 50 CFR § 402.02, as "all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action." The action area includes the immediate project impact area (PIA) defined by Caltrans as the area to be directly impacted by construction related activities. This is composed of the 1.9 mile (mi) segment of existing SR 41 along which the passing lanes will be aligned; portions of annual grassland and blue oak woodland within the existing and newly proposed Caltrans right-of-way (ROW); the 17 vernal pools comprising 0.15 ac of aquatic habitat that will be lost as a result of lane construction; and the 21.75 ac and 18.51 ac of upland habitat that will be permanently and temporarily affected by construction work, respectively. Additionally, the action area includes the borrow site(s) (either on- or off-site) from which fill material will be obtained but which is not yet identified, as well as the land proposed as compensation area at a Service-approved California tiger salamander and vernal pool fairy shrimp conservation bank.

Analytical Framework for the Jeopardy/No Jeopardy Determination

In accordance with policy and regulation, the following analysis relies on four components to support the jeopardy/no jeopardy determination for the California tiger salamander and the vernal pool fairy shrimp: (1) the *Status of the Species*, which evaluates the range-wide condition of the California tiger salamander and vernal pool fairy shrimp, the factors responsible for that condition, and their survival and recovery needs; (2) the *Environmental Baseline*, which evaluates the condition of the California tiger salamander and vernal pool fairy shrimp in the action area, the factors responsible for that condition, and the role of the action area in the species' survival and recovery; (3) the *Effects of the Action*, which determines the direct and indirect impacts of the proposed Federal action and the effects of any interrelated or interdependent activities on the California tiger salamander and vernal pool fairy shrimp; and (4) *Cumulative Effects*, which evaluates the effects of future, non-Federal activities in the action area on the California tiger salamander and vernal pool fairy shrimp.

In accordance with policy and regulation, the jeopardy/no jeopardy determination is made by evaluating the effects of the proposed Federal action in the context of the current status of the California tiger salamander and vernal pool fairy shrimp, taking into account any cumulative effects, to determine if implementation of the proposed action is likely to cause an appreciable reduction in the likelihood of both the survival and recovery of the California tiger salamander and vernal pool fairy shrimp in the wild.

The following analysis places an emphasis on consideration of the range-wide survival and recovery needs of the California tiger salamander and vernal pool fairy shrimp and the role of the action area in meeting those needs as the context for evaluating the significance of the effects of the proposed Federal action, combined with cumulative effects, for purposes of making the jeopardy/no jeopardy determination. In short, a non-jeopardy determination is warranted if the proposed action is consistent with maintaining the role of habitat and the California tiger salamander and vernal pool fairy shrimp populations in the action area for the survival and recovery of the two species.

Status of the Species

<u>California Tiger Salamander</u>

On May 23, 2003, the Service proposed to list the Central California Distinct Population Segment (DPS) of the California tiger salamander as threatened. On August 4, 2004, the Service listed the species as threatened throughout its range and in doing so, changed the status of the Santa Barbara and Sonoma County populations from endangered to threatened (69 FR 47212). On August 19, 2005, U.S. District Judge William Alsup vacated the Service's downlisting of the Sonoma and Santa Barbara populations from endangered to threatened.

Description

The California tiger salamander is a large, stocky, terrestrial salamander with a broad, rounded snout. Adults may reach a total length of 8.2 inches (Petranka, 1998). The California tiger salamander exhibits sexual dimorphism with males tending to be larger than females. The coloration of the California tiger salamander is white or yellowish markings against black. As adults, the California tiger salamander tends to have creamy yellow to white spotting on the sides with much less on the dorsal surface of the animal, whereas other tiger salamander species have brighter yellow spotting that is heaviest on the top of the animals.

Distribution

Historically, the California tiger salamander inhabited low elevation grassland and oak savanna plant communities of the Central Valley, and adjacent foothills, and the inner Coast Ranges in California (Jennings and Hayes, 1994; Storer, 1925; Shaffer *et al.*, 1993). Along the Coast Ranges, the species occurred from the Santa Rosa area of Sonoma County south to the vicinity of Buellton in Santa Barbara County. In the Central Valley and surrounding foothills, the species occurred from northern Yolo County southward to northwestern Kern County and northern Tulare County. The species has been recorded as ranging from near sea level, to approximately 3,900 ft. in the Coast Ranges, to approximately 1,600 feet in the Sierra Nevada foothills (Shaffer *et al.*, 2004). Currently, California tiger salamanders in the Central Valley and Sierra Nevada foothills are patchily distributed in remaining suitable habitat throughout their historic range.

Life History

The California tiger salamander requires both wetland and adjacent upland habitat to complete its life cycle (Shaffer *et al.*, 1993). Although the larvae develop in the vernal pools and ponds in which they were born, California tiger salamanders are otherwise terrestrial and spend most of their post-metamorphic lives in widely dispersed underground retreats (Shaffer *et al.*, 2004; Trenham *et al.*, 2001). Subadult and adult California tiger salamanders spend the dry summer and fall months of the year in small mammal burrows, such as those of California ground squirrels (*Spermophilus beecheyi*) and Botta's pocket gopher (*Thomomys bottae*) (Loredo and Van Vuren, 1996; Petranka, 1998; Trenham, 1998a).

The larval stage of the California tiger salamander usually lasts three to six months, as most seasonal ponds and pools dry up during the summer (Petranka, 1998). Amphibian larvae must grow to a critical minimum body size before they can metamorphose to the terrestrial stage (Wilbur and Collins, 1973). Feaver (1971) found that larvae metamorphosed and left the breeding pools 60 to 94 days after the eggs had been laid, with larvae developing faster in smaller, more rapidly drying pools. The longer the ponding duration, the larger the larvae and metamorphosed juveniles are able to grow, and the more likely they are to survive and to reproduce (Pechmann *et al.*, 1989; Semlitsch *et al.*, 1988; Morey, 1998; Trenham, 1998b). The larvae will perish if a site dries before metamorphosis is complete (Anderson, 1968; Feaver, 1971).

In the late spring or early summer, before the ponds dry completely, metamorphosed juveniles leave them and enter upland habitat. This emigration occurs in both wet and dry conditions (Loredo and Van Vuren, 1996; Loredo *et al.*, 1996). Unlike their winter migration, the wet conditions that California tiger salamanders prefer do not generally occur during the months in which their breeding ponds begin to dry. As a result, juveniles may be forced to leave their ponds on rainless nights. Under these conditions, they may move only short distances to find temporary upland sites for the dry summer months, waiting until the next winter's rains to move further into suitable upland refugia. Once juvenile California tiger salamanders leave their birth ponds for upland refugia, they typically do not return to ponds to breed for an average of four to five years. However, they remain active in the uplands, coming to the surface during rainfall events to disperse or forage.

The upland component of California tiger salamander habitat typically consists of grassland and savannah. Within these upland habitats, adult California tiger salamanders spend the greater part of their lives in the underground burrows of California ground squirrels and Botta's pocket gophers (Barry and Shaffer, 1994; Loredo *et al.*, 1996; Trenham, 1998a). Camel crickets (*Ceuthophilus spp.*) and other invertebrates within these burrows provide food for the California tiger salamander. Upland refugia also provide protection from the sun and wind associated with the dry California climate that can cause desiccation of amphibian skin. Although the California tiger salamander is a member of a family of "burrowing salamanders," it is not known to create its own burrows in the wild, likely due to the hardness of soils in the California ecosystems in which they are found. Because they live underground the California tiger salamander is rarely encountered even where abundant. Burrows used as upland refugia may or may not also be occupied by mammals, but because they collapse within 18 months if not maintained, an active population of burrowing mammals is necessary to sustain sufficient underground refugia for the species (Loredo *et al.*, 1996). However, a recent study has shown that an apparent absence of rodent burrows does not directly result in an absence of California tiger salamanders. Significant numbers of California tiger salamanders were found to inhabit upland habitat that appeared to be without rodent burrows (Orloff, 2007), where the California tiger salamander may utilize leaf litter or desiccation cracks in the soil as refugia.

Upland burrows inhabited by the California tiger salamander have often been referred to as "aestivation" sites. However, "aestivation" implies a state of inactivity, while most evidence suggests that California tiger salamanders remain active in their underground dwellings. A recent study has found that California tiger salamanders move, feed, and remain active in their burrows (van Hattem, 2004). Because California tiger salamanders arrive at breeding ponds in good condition and are heavier when entering the pond than when leaving, researchers have long inferred that California tiger salamanders are feeding while underground. Recent direct observations have confirmed this (Trenham, 2001; van Hattem, 2004). Thus, "upland habitat," rather than "aestivation" site, is a more accurate description of the terrestrial areas used by the California tiger salamander.

Dispersal and migration movements made by the California tiger salamander can be grouped into two main categories: (1) breeding migration; and (2) interposed dispersal. Breeding migration is the movement of the California tiger salamander to and from a pond from the surrounding

upland habitat. After metamorphosis, juveniles move away from breeding ponds into the surrounding uplands, where they live continuously for several years. Following breeding, adult California tiger salamanders return to upland habitats, where they may live for one or more years before breeding again (Trenham *et al.*, 2000).

California tiger salamanders are known to travel large distances from breeding ponds into upland habitats. Maximum distances moved are generally difficult to establish for any species. California tiger salamanders are also known to travel between breeding ponds; one study found that 20 to 25 percent of the individuals captured at one pond were recaptured later at ponds approximately 1,900 and 2,200 ft. away (Trenham *et al.*, 2000). In addition to traveling long distances during migration to or dispersal from ponds, California tiger salamanders may reside in burrows that are far from ponds.

Although previously cited information indicates the California tiger salamander can travel long distances, they typically remain close to their associated breeding ponds. A trapping study conducted in Solano County during the winter of 2002-2003 suggested that juveniles dispersed and used upland habitats further from breeding ponds than adults (Trenham and Shaffer, 2005). These data suggest that many California tiger salamanders travel far while still in the juvenile stage. Post-breeding movements away from breeding ponds by adults, however, appear to be much shorter. During post-breeding emigration from aquatic habitat, radio-equipped adult California tiger salamanders were tracked to burrows located between 62 and 813 ft. from their breeding ponds (Trenham, 2001).

Rather than staying in a single burrow, most individuals also appear to use several successive burrows at increasing distances from the pond. Although the studies discussed above provide an approximation of the distances that California tiger salamanders regularly move from their breeding ponds, upland habitat features will drive the details of movements in a particular landscape. Trenham (2001) found that radio-tracked adults favored grasslands with scattered large oaks, over more densely wooded areas. Based on radio-tracked adults, there is no indication that certain habitat types are favored as corridors for terrestrial movements (Trenham, 2001). In addition, at two ponds completely encircled by drift fences and pitfall traps, captures of arriving adults and dispersing new metamorphs were distributed roughly evenly around the ponds. Thus, it appears that dispersal into the terrestrial habitat occurs randomly with respect to direction and to habitat.

Lifetime reproductive success for the California tiger salamander and other tiger salamanders is low. With such low recruitment, isolated populations are susceptible to unusual, randomly occurring natural events as well as to human-caused factors that reduce breeding success and individual survival. Factors that repeatedly lower breeding success in isolated pools can quickly extirpate a population.

Threats analysis

In addition to direct loss of habitat, the widespread conversion of undisturbed land to urban and agricultural uses has fragmented habitat throughout the range of the California tiger salamander

and has isolated several remaining populations (Shaffer *et al.*, 1993), precluding dispersal between sub-populations and jeopardizing the viability of metapopulations (broadly defined as multiple subpopulations that occasionally exchange individuals through dispersal, and are capable of colonizing or "rescuing" extinct habitat patches). California tiger salamanders are also prone to chance environmental or demographic events, to which small populations are particularly vulnerable.

Agricultural activities that threaten California tiger salamander survival include disking and deep-ripping, as well as the cultivation, planting, and maintenance of row crops, orchards, and vineyards. Historically in California, there existed approximately 15.59 million acres of valley and coastal grasslands, blue oak/foothill pine, valley oak, or mixed hardwood lands (Kuchler, 1988). Urbanization and intensive agriculture have eliminated virtually all valley grassland and oak savanna habitat from the Central Valley floor.

Light-to-moderate livestock grazing by cattle, sheep, and horses is generally thought to be compatible with continued successful use of rangelands by the California tiger salamander so long as the grazed areas do not also have intensive burrowing rodent control efforts (Shaffer *et al.*, 1993; S. Sweet, personal communication, 1998; B. Shaffer and P. Trenham, personal communication, 2003). By maintaining shorter vegetation, grazing may make areas more suitable for ground squirrels whose burrows are essential to California tiger salamanders. Widespread control of ground squirrels and pocket gophers may also pose a significant indirect threat to the California tiger salamander by reducing the number of upland burrows available to specific California tiger salamander subpopulations (Loredo-Prendeville *et al.*, 1994).

The relative loss of native habitat has been even more extreme with respect to vernal pools, the historic breeding habitat of the California tiger salamander. Remaining vernal pool complexes are now fragmented and reduced in area. Where vernal pools remain, they are often disturbed and degraded by drainage modification, overgrazing, off road vehicles use, non-native plant invasion, trash dumping, road construction, and urban development (Service, 1994b; Keeler-Wolf *et al.*, 1998). While California tiger salamanders do breed successfully in stock ponds, these ponds often are poorer habitat for California tiger salamanders than are natural vernal pools. Hydroperiods in stock ponds may be so short that larvae cannot metamorphose, or so long that predatory fish and bullfrogs can colonize the pond (Shaffer *et al.*, 1993; Seymour and Westphal, 1994). Extirpation of the California tiger salamander in stock ponds is likely if, as commonly occurs, fish are introduced (Shaffer *et al.*, 1993; Seymour and Westphal, 1994).

A number of non-native species have adversely affected the California tiger salamander through predation and competition. A strong negative correlation exists between bullfrog (*Rana catesbeiana*) presence and California tiger salamander presence (Shaffer *et al.*, 1993; Seymour and Westphal, 1994). Morey and Guinn (1992) documented a shift in amphibian community composition at a vernal pool complex, with California tiger salamanders becoming proportionally less abundant as bullfrogs increased in number. Permanent ponds occupied by bullfrogs and exotic fishes are often considered unsuitable as viable breeding habitat (Fisher and Shaffer, 1996). Loredo-Prendeville *et al.* (1994) failed to find any California tiger salamanders inhabiting ponds containing western mosquito fish. A number of other non-native fish species

have either been directly implicated in the predation of the California tiger salamander, or appear to have the potential to do so. Non-native sunfish, catfish, and bullheads (*Ameiurus spp.*) have been, and still are, widely introduced to ponds in California for sport fishing.

Another current factor associated with declines in the Central California DPS is hybridization with the non-native eastern tiger salamander (*Ambystoma tigrinum*) (Fitzpatrick and Shaffer, 2004; Riley *et al.*, 2003). Continued colonization of existing habitat by non-native tiger salamanders may in fact represent the most significant current threat.

Since the California tiger salamander inhabits both aquatic and terrestrial habitats at different stages in their life cycles, it is thus exposed to both aquatic and terrestrial pollutants due to its highly permeable skin (Blaustein and Wake, 1990). Even when toxic or detectable amounts of pesticides are not found in breeding ponds or groundwater, the California tiger salamander may still be affected, particularly by chemicals applied during the migration and dispersal seasons. The specific effects of disease on the California tiger salamander are not well known. Pathogens, fungi, water mold, bacteria, and viruses have been known to adversely affect other tiger salamander species or other amphibians. Pathogens are suspected of causing global amphibian declines (Davidson *et al.*, 2003). Nonnative species, such as bullfrogs, are located within the range of the Central California DPS and have been identified as potential carriers of chytridiomycosis (a fungal infection) and ranaviruses, which can adversely affect amphibians. Human activities can facilitate the spread of disease by encouraging the further introduction of non-native carriers and by acting as carriers themselves (i.e., contaminated boots or fishing equipment). Disease will likely become a growing threat because of the relatively small, fragmented remaining California tiger salamander breeding sites, the many stresses on these sites due to habitat losses and alterations, and the many other potential disease-enhancing anthropogenic changes which have occurred both inside and outside the species' range.

Status with Respect to Recovery

The Service determined that conserving the California tiger salamander over the long-term requires a five-pronged approach: (1) maintaining the current genetic structure across the species range; (2) maintaining the current geographical, elevational, and ecological distribution; (3) protecting the hydrology and water quality of breeding pools and ponds; (4) retaining or providing for connectivity between locations for genetic exchange and re-colonization; (5) protecting sufficient barrier-free upland habitat around each breeding location to allow for sufficient survival and recruitment to maintain a breeding population over the long-term. Specific actions that help meet these goals include, but are not limited to (1) protection, restoration, and management of large blocks of contiguous aquatic and terrestrial habitat; (2) management of stock ponds to eliminate or reduce populations of non-native predators; (3) elimination of non-native tiger salamanders and their hybrids; and (4) reduced exposure to contaminants, particularly in the vulnerable larval stages (Service, 2004b, 2005a).

According to the California Natural Diversity Database (CNDDB, 2011), there are 15 recorded occurrences of the species within the Little Table Mountain 7.5- minute United States Geological Survey (USGS) quadrangle, which covers the action area, and an additional eight occurrences in the neighboring Millerton Lake West 7.5' quadrangle. The closest occurrence is located about one mile from the approximate centerpoint of the action area and dates from 2008. A further four occurrences are recorded within three miles of the centerpoint of the action area and date from 1994, 2006, and 2008. Another two observations occur within 3.3 miles, with the most recent identified in 2010.

Vernal Pool Fairy Shrimp

The vernal pool fairy shrimp was listed as threatened on September 19, 1994 (Service, 1994a).

Distribution

The vernal pool fairy shrimp is currently found in 28 counties across the Central Valley and Coast Ranges of California, and in Jackson County of southern Oregon. The species occupies a variety of vernal pool habitats and occurs in 11 of the 17 vernal pool regions identified in California (Keeler-Wolf *et al.*, 1998). Although the vernal pool fairy shrimp is distributed more widely than most other fairy shrimp species, it is generally uncommon throughout its range and rarely abundant where it does occur (Eng *et al.*, 1990; Eriksen and Belk, 1999). Helm (1998) found vernal pool fairy shrimp in only 16 percent of pools sampled across 27 Counties, and Sugnet (1993) found this species in only five percent of 3,092 sampled locations.

In the San Joaquin Valley Vernal Pool Region, the vernal pool fairy shrimp is found at the grasslands Ecological Area in Merced County, at the Pixley national Wildlife Refuge in Tulare County, and at isolated locations in Kings and Stanislaus Counties. In the Southern Sierra Foothills Vernal Pool Region, the vernal pool fairy shrimp is known from the Stone Corral Ecological Reserve and the Hogwallow Preserve in Tulare County and from scattered locations on private lands in Stanislaus, San Joaquin, Fresno, Madera, and Merced Counties.

The historical distribution of this species coincides with the historical distribution of vernal pools in California's Central Valley and southern Oregon. Holland (1978) estimated that roughly 4,000,000 ac of vernal pool habitat existed in the Central Valle prior to the widespread agricultural development that began in the mid-1800s. He found that although current and historical distribution of vernal pools are similar, vernal pools are now far more fragmented and isolated from each other than during historical times and currently occupy only about 25 percent of their former land area (Holland, 1998). The current distribution of the vernal pool fairy shrimp in the Central Valley may be similar to its historical distribution in extant, but remaining populations are now considerably more fragmented and isolated than in pre-agricultural times.

Species Description

The vernal pool fairy shrimp has a delicate elongate body, large stalked compound eyes, no carapace and 11 pairs of phyllopods, or gill-like structures that also serve as legs. They swim or

glide gracefully upside down by means of complex beating movements of the legs that pass in a wave-like anterior to posterior direction. Vernal pool fairy shrimp are filter feeders, and consume algae, bacteria, protozoa, rotifers, and bits of detritus as they move through the water. The females carry eggs in an oval or elongate ventral sac (brood sac). Once fertilized, the eggs are coated with a protective protein layer that allows them to withstand heat, cold, anoxic conditions, and prolonged dehydration. The fully developed eggs are either dropped to the pool bottom or remain within the brood sac until the female dies and sinks.

Life History

Vernal pool fairy shrimp are highly adapted to the conditions of their ephemeral habitats. One adaptation is the ability of the vernal pool fairy shrimp eggs, or cysts, to remain dormant in the soil when their vernal pool habitats are dry. Cysts that do not hatch remain dormant and viable in the soil. These form a cyst bank which may be composed of cysts from multiple years of breeding, and which may hatch in subsequent years. Vernal pool crustaceans like the vernal pool fairy shrimp actually depend on dry conditions during the summer months in order to discourage aquatic predator species such as bullfrogs, garter snakes, and fish (Eriksen and Belk, 1999). Another critical adaptation is that the vernal pool fairy shrimp has a relatively short life span, allowing it to hatch, mature to adulthood, and reproduce during the short time period when vernal pools contain water. The vernal pool fairy shrimp can reach sexual maturity in as few as 18 days at optimal conditions of 68 degrees Fahrenheit, and can complete its life cycle in as little as nine weeks (Gallagher, 1996; Helm, 1998). However, maturation and reproduction rates of vernal pool crustaceans are controlled by water temperature and can vary greatly (Eriksen and Brown, 1980; Helm, 1998). Helm (1998) observed the vernal pool fairy shrimp did not reach maturity until 41 days at water temperatures of 59 degrees Fahrenheit. Helm (1998) observed six separate hatches of vernal pool fairy shrimp in a single pool within a single wet season, and Gallagher (1996) observed three separate hatches of vernal pool fairy shrimp in vernal pools in Butte County. In larger pools that hold water for longer durations, vernal pool fairy shrimp are capable of hatching multiple times if water temperatures drop to or below 50 degrees Fahrenheit, a necessary environmental cue for vernal pool fairy shrimp cyst hatching (Gallagher, 1996; Helm, 1998). Helm (1998) observed vernal pool fairy shrimp living for as long as 147 days.

Vernal pool crustaceans like the vernal pool fairy shrimp are often dispersed from one pool to another through surface swales that connect one pool to another. These dispersal events allow for genetic exchange between pools and create a population of animals that extends beyond the boundaries of a single vernal pool. Rather, populations are defined by the entire vernal pool complex in which they occur (Simovich *et al.*; 1992, King 1996). These dispersal events also allow vernal pool fairy shrimp and other vernal pool crustaceans to move into pools with a range of sizes and depths; this allows these species to survive the environmental variability that is characteristic of their habitats.

Upland areas associated with vernal pools are also an important source of nutrients to vernal pool organisms (Wetzel, 1975). Vernal pool habitats derive most of their nutrients from detritus which is washed into the pool from adjacent uplands, and these nutrients provide the foundation for

vernal pool aquatic communities' food chain. Detritus is a primary food source for the vernal pool crustaceans (Eriksen and Belk, 1999).

Threats Analysis

The vernal pool fairy shrimp is imperiled by a variety of human-caused activities, primarily urban development, water supply/flood control projects, and land conversion for agricultural use. Habitat loss occurs from direct destruction and modification of pools due to filling, grading, disking, and leveling, as well as modification of surrounding uplands which alters vernal pool watersheds. Other activities which adversely affect these species include off-road vehicle use, certain mosquito abatement measures, and pesticide/herbicide use. The most significant threat is attributed to the loss of habitat associated with human activities, including urban/suburban development, water supply/flood control development, and conversion of natural lands to intensively farmed agricultural uses.

In addition to direct habitat loss, vernal pool fairy shrimp habitat is also highly fragmented throughout its range due to the nature of vernal pool landscapes and the conversion of natural habitat by human activities. Such fragmentation results in small, isolated populations of vernal pool fairy shrimp that may be more susceptible to extinction due to random demographic, genetic, and environmental events.

According to the CNDDB (2011), there are eight recorded occurrences of the species within the Little Table Mountain 7.5- minute USGS quadrangle, which covers the action area. The closest occurrence is located within three and one half miles of the approximate centerpoint of the action area and dates from 1992. Two further records are located within four and one half miles of the approximate centerpoint and date from 2001 and 2004.

Environmental Baseline

California Tiger Salamander

A primary cause of the decline of the California tiger salamander is the conversion of natural habitat to modified habitat for urban uses (Service, 2003b, 2004a, 2004b; Shaffer *et al.*, 1993). Road-related activities in particular can lead to habitat loss stemming from construction, widening, and realignments. Suitable breeding habitat for the California tiger salamander exists in the action area in the form of 29 ephemeral pools; however, a number of these pools may not hold water for the minimum 10 week period needed to allow California tiger salamander larvae to fully metamorphose. But with a heavy rain season, several of those pools may offer potential breeding opportunities. California tiger salamander larvae were discovered within approximately 330 ft. of the action area by Caltrans biologists during 2009 and 2010 vernal pool branchiopod surveys. Non-native grassland habitat, currently used for livestock grazing, provides suitable upland habitat for the species; a ground squirrel population in the area supplies potential burrow sites for the California tiger salamander.

Caltrans did not conduct separate California tiger salamander surveys for the project and instead assumed presence of the species based on the existence of suitable breeding and upland habitat for the species within the action area, CNDDB documentation, and the discovery of larvae during vernal pool branchiopod surveys in close proximity to the action area. The Service anticipates that the California tiger salamander is reasonably certain to occur within the action area based on the biology and ecology of the species; the presence of suitable aquatic and upland habitat (in the form of vernal pools and non-native grassland and blue oak woodland, respectively) necessary for breeding, foraging, and dispersal; and recorded species occurrences in locales neighboring the project's action area.

Vernal Pool Fairy Shrimp

Vernal pool crustaceans like the vernal pool fairy shrimp suffer from loss and degradation of habitat and continue to be impacted by a variety of human activities that render existing vernal pools unsuitable for the species. Such effects are a result of changes to natural hydrology due to encroachment of roads and urbanization. Caltrans conducted wet season protocol-level vernal pool branchiopod surveys over the course of one year from the spring of 2009 through the spring of 2010, following the Service's 1996 *Interim Survey Guidelines to Permittees for Recovery Permits under Section 10(a)(1)(A) of the Endangered Species Act for the Listed Vernal Pool Branchiopods*. As a result of these surveys, a total of 29 pools were identified, mapped, and sampled within the action area. The vernal pool fairy shrimp was specifically identified within 10 of these pools. No other branchiopod species were identified within any of the pools. Nineteen pools were found to contain no vernal pool fairy shrimp, but presence of vernal pool fairy shrimp was inferred based on habitat features and close proximity to those pools containing the vernal pool fairy shrimp; these 29 vernal pools exist together as a complex.

Although existing roadway infrastructure is already present in the action area, the permanent loss of 0.15 ac of vernal pools and 21.75 ac of grassland/blue oak woodland as a result of the construction of the passing lanes will induce changes in the overall baseline effects to both the California tiger salamander and vernal pool fairy shrimp in the area. We are unaware of any unrelated Federal actions that have been subject to prior section 7 formal or informal consultation that have specifically occurred within the action area, and that have affected the environmental baselines of the two species. Neither are we cognizant of any prior or contemporaneously occurring State, local, or private actions specific to the action area.

Effects of the Proposed Action

The proposed project is likely to result in a number of adverse effects to the California tiger salamander and vernal pool fairy shrimp. Construction activities will permanently remove 0.15 ac of aquatic habitat in the form of 17 vernal pools within a complex of 29 pools through excavation, filling, and paving associated with the addition of passing lanes adjacent to the existing SR 41. The vernal pool fairy shrimp is linked throughout its entire life cycle to vernal pool habitat; therefore, as a result of the permanent loss of the pools, individuals both in cyst and adult form will be killed by the proposed activities. Some of these ephemeral pools also serve as potential California tiger salamander breeding sites and are therefore essential to subsequent

larval growth and development for this species. Although construction work is anticipated to begin in May after the typical major spring rain events have passed, pool inundation at these sites will depend on the weather conditions at that time.

There are 12 remaining vernal pools in the complex located outside of the action area that will not be permanently graded, excavated, filled, or paved over. No temporary effects to these pools are anticipated since the installation of ESA fencing and/or new ROW fencing prior to the start of construction will prevent the contractor from entering these locales. However, it is possible that indirect effects resulting from construction could alter the topography and even potentially the drainage and hydrology of these neighboring pools and associated upland areas. Infrastructure-related activities like grading and filling can affect the amount and quality of water available to the perched water tables characteristic of vernal pool areas. Changes to the perched water table can lead to alterations in the rate, extent, and duration of inundation of the remaining habitat on-site following construction (Hanes *et al.*, 1990; Hanes and Stromberg, 1998). A decrease in the duration of inundation of such habitat can affect the reproductive success of species present like the vernal pool fairy shrimp and potential larval California tiger salamander.

Project activities will permanently remove 21.75 ac of suitable California tiger salamander upland habitat, through the acquisition of new ROW and the excavation, filling, and/or paving of this ROW. Temporary effects to 18.51 ac of upland habitat will result from the driving of construction vehicles over this area, as well as from tree removal. Since the California tiger salamander spends the majority of its life cycle in burrows in upland areas, the loss of, and disturbance to, this habitat are also significant adverse effects.

Caltrans proposes to offset the loss of both aquatic and upland habitat through the purchase of conservation credits at an appropriate Service-approved conservation bank. The proposed preservation of suitable vernal pool and upland habitat will minimize the effects of the permanent and temporary effects to the habitat considered in this biological opinion. The compensation measures will help protect and manage suitable habitat for the conservation of the species in perpetuity. The protected land purchased through credits will provide habitat to offset the habitat lost and disturbed as a result of the project, ensuring that the California tiger salamander and vernal pool fairy shrimp continue to persist and recover.

Passing lane construction work within the action area could result in the loss of California tiger salamanders. Mortality of, or injury to, juvenile or adult California tiger salamanders by project related equipment or vehicles could occur from their being crushed by construction debris and vehicles above-ground. The greatest effects to the California tiger salamander will likely come from being crushed or entombed in underground burrows due to activities like excavation and filling.

Those California tiger salamanders that are exposed during earthmoving also could be subject to predation. Individuals using upland habitat disturbed by construction activities could attempt overland movements in an effort to find alternative upland habitat away from the disturbance. These individuals could be harmed, harassed, injured, or killed by predators during overland movements from the project site, in the attempt to find more suitable habitats in adjacent areas.

Since no disposal plan for trash and debris has been proposed for the project site, adverse effects resulting from predation are anticipated. Trash left daily during construction activities could attract predators and scavengers to the work site, which could, in turn harm, harass, or kill the California tiger salamander. For example, scavenger species such as ravens and coyotes are attracted to trash as food items and could further seize the opportunity to prey upon the California tiger salamander.

Additional effects resulting in California tiger salamander mortality and injury could also occur when the animals are above-ground and attempt to cross the newly expanded highway segment. For amphibians in general, the majority of fatalities occur on rainy nights when they are above-ground and/or moving to their breeding locations. Caltrans potentially will continue to work into the fall months, so probable rain events during this period will bring California tiger salamander individuals to the surface to feed and forage, again increasing their risk of being hit by construction vehicles on-site and by traffic on the road. Amphibian immobilization behaviors in response to oncoming or passing vehicles can significantly influence road crossing times (Andrews and Jochimsen, 2007). Their lower capacity for movement, their inability to respond in time to the hazards posed by vehicles, and their tendency to freeze in moments of danger consequently all lead to longer times spent on roadways (Puky, 2005, citing Scoccianti, 2001). Vehicular mortality remains a direct source of death for many amphibian species, and if sufficiently frequent in a given area, can result in reduced local abundance.

Cumulative Effects

Cumulative effects are those impacts of future State, Tribal, local or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act.

The Service is not aware of any non-Federal actions currently planned in or around the SR 41 action area that would directly remove or further disturb California tiger salamander and vernal pool fairy shrimp habitat.

Conclusion

After reviewing the current status of the California tiger salamander and vernal pool fairy shrimp, the environmental baselines for the action area, the project-specific effects of the Madera 41 Passing Lane Project, and the cumulative effects, it is the Service's biological opinion that the project, as proposed, is not likely to jeopardize the continued existence of these two species. We base this determination on the fact that the number of California tiger salamanders likely to be taken is low relative to its range-wide status and extent of its central population; also, although approximately 59% of the vernal pool complex at the project site will be lost, as will all those vernal pool fairy shrimp present in these pools, the number likely to be taken remains minimal relative to its range-wide status. We further base this determination on the proposed implementation of minimization measures such as protective buffer fencing, personnel training, and compensation to offset lost and disturbed vernal pool and upland habitats.

INCIDENTAL TAKE STATEMENT

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

The measures described below are nondiscretionary, and must be implemented by Caltrans so that they become binding conditions of any grant or permit issued to the applicant, as appropriate, for the exemption under section 7(o)(2) to apply. Caltrans has a continuing duty to regulate the activity that is covered by this incidental take statement. If Caltrans (1) fails to require the applicant or any of its contractors to adhere to the terms and conditions of the incidental take statement through enforceable terms, and/or (2) fails to retain oversight to ensure compliance with these terms and conditions, the protective coverage of section 7(o)(2) may lapse.

Amount or Extent of Take

California Tiger Salamander

The Service anticipates that incidental take of the California tiger salamander will be difficult to detect for the following reasons: the species is secretive in nature; it is relatively small in size, particularly in its larval form; its dependence on weather, time of the year, and activity patterns make the finding of a dead specimen unlikely; losses may be masked by seasonal fluctuations in their numbers; and the species occurs in habitat types that make it difficult to find. Thus, it is problematic to quantify the number of California tiger salamanders that are anticipated to be taken as a result of the proposed action. In instances when take calculations are difficult to accurately calculate, the Service may quantify take in numbers of acres of permanently lost or degraded habitat, as these impacts reflect a significant biological effect to the species. The Service therefore anticipates take incidental to the project as all California tiger salamander larvae and adults inhabiting or using 17 vernal pools over 0.15 ac of aquatic breeding habitat, in addition to all California tiger salamanders inhabiting, using, or moving through 40.26 ac of suitable upland habitat within the project's action area that will be permanently lost and temporarily disturbed. Upon implementation of the following *Reasonable and Prudent Measures*, incidental take associated with the project in the form of harm, harassment, injury to, or mortality of the California tiger salamander stemming from the filling, grading, excavation,

paving, and loss of its vernal pool breeding habitat, in addition to the loss of upland habitat, and the risk of entombment and crushing arising from passing lane construction activities and equipment and vehicle presence, will become exempt from the prohibitions described under section 9 of the Act.

Vernal Pool Fairy Shrimp

The Service anticipates that incidental take of the vernal pool fairy shrimp will be difficult to detect for the following reasons: the species has a very small body size, thereby making the discovery of a dead or injured specimen unlikely; the species occurs in a habitat-type that makes discovery difficult; and losses may be masked by seasonal and annual fluctuations in numbers, chance events, changes in water regime, or other environmental disturbances. Thus, it is problematic to quantify the number of vernal pool fairy shrimp that are anticipated to be taken as a result of the proposed action. In instances when take calculations are difficult to accurately calculate, the Service may quantify take in numbers of acres of permanently lost or degraded habitat, as these impacts reflect a significant biological effect to the species. The Service therefore anticipates take incidental to the project as all vernal pool fairy shrimp adults and cysts living within 17 vernal pools comprising a total of 0.15 ac that will be permanently lost through construction activities. Upon implementation of the following *Reasonable and Prudent Measures*, incidental take associated with the project in the form of mortality of the vernal pool fairy shrimp stemming from the filling, grading, excavation, paving, and loss of its vernal pool habitat, will become exempt from the prohibitions described under section 9 of the Act.

Effect of Take

The Service has determined that this level of anticipated take is not likely to jeopardize the continued existence of the central population of the California tiger salamander and the vernal pool fairy shrimp.

Reasonable and Prudent Measures

The following reasonable and prudent measures are necessary and appropriate to minimize the impact of the Madera 41 Passing Lane Project on the California tiger salamander and vernal pool fairy shrimp.

1. All of the conservation measures proposed in the biological assessment, the *Project Description*, and as augmented and modified below, must be fully implemented.

2. Trash must be handled in a manner to minimize the potential for take of the California tiger salamander from scavenger and predator species.

3. On-site monitoring by a Service-approved biologist must be conducted to minimize the potential for take of the California tiger salamander and vernal pool fairy shrimp.

Terms and Conditions

In order to be exempt from the prohibitions of section 9 of the Act, Caltrans, as well as any contractor acting on its behalf, must comply with the following terms and conditions, which implement the Reasonable and Prudent Measures described above. These terms and conditions are nondiscretionary.

The following Term and Condition implements Reasonable and Prudent Measure one:

1. Caltrans shall be responsible for implementing all measures described in this biological opinion. Terms and conditions that apply to contractor activities shall be conditioned in contracts for the work.

The following Term and Condition implements Reasonable and Prudent Measure two:

1. To eliminate the risk of increased predation to the California tiger salamander, all food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in closed containers and removed at least once per day from the entire project site.

The following Terms and Conditions implement Reasonable and Prudent Measure three:

1. A Service-approved biologist shall be on-site or on-call during all activities that could result in the take of listed species. The qualifications of the biologist(s) shall be presented to the Service for review and approval at least 60 calendar days prior to any groundbreaking at the project site. The biologist shall have oversight of implementation of all the measures described in the *Proposed Avoidance and Minimization Measures* and *Terms and Conditions* of this biological opinion, and if any of the requirements associated with these measures are not being fulfilled, he/she shall have the authority to stop project activities through communication with the Resident Engineer, who shall be responsible for implementing these measures.

2. The Service-approved biologist shall check for the California tiger salamander and any other species under any equipment such as vehicles and stored pipes before the start of work each morning. He/she will also check all excavated steep-walled holes or trenches greater than six inches deep for the California tiger salamander.

3. To prevent inadvertent entrapment of the California tiger salamander during construction, all excavated, steep- walled holes or trenches shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they shall be thoroughly inspected for trapped animals. If at any time a trapped species is discovered, the on-site biologist shall immediately place escape ramps or other appropriate structures to allow the animal to escape.

Reporting Requirements

1. Before construction starts on this project, the Service shall be provided with the final documents related to protection of conservation acres, including but not limited to, proof of purchase of conservation bank credits.

2. On a monthly basis Caltrans shall monitor and document the amount of habitat lost during construction to ensure that the amount of habitat lost does not exceed the amount of take anticipated in this biological opinion. Caltrans shall notify the Service when the take limit is reached and shall reinitiate consultation if the limit will be exceeded.

3. A post-construction report detailing compliance with the project design criteria described under the *Description of the Proposed Action* section of this biological opinion shall be provided to the Service within 30 calendar days of completion of the project. The report shall include: (1) dates of project groundbreaking and completion; (2) pertinent information concerning the success of the project in meeting compensation and other conservation measures; (3) an explanation of failure to meet such measures, if any; (4) known project effects on the California tiger salamander and vernal pool fairy shrimp, if any; (5) occurrences of incidental take of the California tiger salamander and vernal pool fairy shrimp, and; (6) any other pertinent information.

4. New sightings of the California tiger salamander or vernal pool fairy shrimp or any other listed or sensitive animal species should be reported to the CDFG's California Natural Diversity Database (CNDDB). A copy of the reporting form and a topographic map clearly marked with the location in which the animals were observed also should be provided to the Service.

Disposition of Individuals Taken

In the case of injured and/or dead California tiger salamanders and vernal pool fairy shrimp, the Service shall be notified within one day and the animals shall only be handled by a Service-approved, permitted biologist. Injured California tiger salamanders shall be cared for by a licensed veterinarian or other qualified person. In the case of a dead animal, the individual animal shall be preserved, as appropriate, and held in a secure location until instructions are received from the Service regarding the disposition of the specimen or until the Service takes custody of the specimen. Caltrans must report to the Service within one calendar day any information about take or suspected take of federally-listed species not authorized in this opinion. Notification must include the date, time, and location of the incident or of the finding of a dead or injured animal. The Service contacts are Mr. Daniel Russell, Deputy Assistant Field Supervisor, Endangered Species Program, Sacramento, at (916) 414-6600 and Mr. Daniel Crum, the Resident Agent-in-Charge of the Service's Law Enforcement Division at (916) 414-6660. The CDFG contact is the Fresno Office at (559) 243-4017.

Any contractor or employee who, during routine operations and maintenance activities inadvertently kills or injures a listed species must immediately report the incident to his

representative at his contracting/employment firm or to Caltrans. This representative must contact the Service within one calendar day in the case of a federally-listed species and contact the CDFG in the case of a dead or injured State-listed species.

CONSERVATION RECOMMENDATIONS

Conservation recommendations are suggestions of the Service regarding discretionary measures to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, or regarding the development of new information. These measures may serve to minimize or avoid further adverse effects of a proposed action on listed, proposed, or candidate species, or on designated critical habitat. They may also serve as suggestions on how action agencies can assist species conservation in furtherance of their responsibilities under section 7(a)(1) of the Act, or recommend studies improving an understanding of a species' biology or ecology. Wherever possible, conservation recommendations should be tied to tasks identified in recovery plans. The Service is providing you with the following conservation recommendations:

There are no conservation recommendations for this project.

REINITIATION—CLOSING STATEMENT

This concludes the Service's review of the Madera 41 Passing Lane Project. As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been maintained (or is authorized by law) and if (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action.

If you have any questions regarding this biological opinion, please contact Jen Schofield or Thomas Leeman, San Joaquin Valley Division Chief, at the letterhead address or at telephone (916) 414-6600.

Sincerely,

for Susan K. Moore
Field Supervisor

cc:
Ms. Annee Ferranti, California Department of Fish and Game, Fresno, California

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DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO CA 95814-2922

REPLY TO
ATTENTION OF

January 27, 2015

Regulatory Division (SPK-2012-00055)

State of California
Department of Transportation, District 6
Attn: Mr. Anand Kapoor
2015 E. Shields Ave., Suite 100
Fresno, California 93726

Dear Mr. Kapoor:

We are responding to your November 3, 2014, request for a Department of the Army Nationwide Permit verification for the Madera 41 Passing Lanes (PM 9.2/17.9, EA 06-0G900) project. This approximately 48-acre project involves activities, including discharges of dredged or fill material, in waters of the United States to construct staggered northbound and southbound passing lanes on State Route (SR) 41. The project is located on or near pool, Section 10, Township 10 South, Range 20 East, Mount Diablo Meridian, Latitude 37.055781°, Longitude -119.772605°, Madera County, California.

Based on the information you provided, the proposed activity, resulting in the permanent loss of approximately 0.160 acre of wetlands and 0.006 acre of ephemeral stream authorized by Nationwide Permit Number (NWP) However, until Section 401 Water Quality Certification for the activity has been issued or waived, our authorization is denied without prejudice. Once you have provided us evidence of water quality certification, the activity is authorized and the work may proceed subject to the conditions of certification and the NWP. Your work must comply with the general terms and conditions listed on the NWP information sheet, applicable regional conditions, and the following special conditions. The NWP information sheet and regional general conditions can be found on our website at *http://www.spk.usace.army.mil/Missions/Regulatory/Permitting/NationwidePermits.aspx*. If you do not have access to the internet, a hard copy of the NWP information sheet and regional general conditions will be provided upon request.

Special Conditions

1. To mitigate for the loss of 0.160 acre of wetlands and 0.006 acre of ephemeral stream, you shall purchase 0.631 aquatic resource credits from the National Fish and Wildlife Foundation's (NFWF) Sacramento District California In-Lieu Fee Program for the San Joaquin River Watershed Service Area. Contact information for NFWF can be found on their website at: www.nfwf.org/ilf. Evidence of this purchase shall be provided to this office prior to initiation of construction activities within waters of the U.S.

2. This permit is contingent upon you applying for and being issued a Section 401 Water Quality Certification. Evidence of a water quality certification must be submitted to this office, prior to commencing work in potential waters of the U.S. All terms and conditions of the Section 401 Water Quality Certification are expressly incorporated as conditions of this permit.

3. This Corps permit does not authorize you to take an endangered species, in particular The federally-threatened California tiger salamander (Ambystoma *californiense) and the federally-threatened vernal pool fairy shrimp *(*Branchinecta *lynchi)*, or designated critical habitat. In order to legally take a listed species, you must have separate authorization under the Endangered Species Act (e.g., an Endangered Species Act Section 10 permit, or a Biological Opinion under Endangered Species Act Section 7, with "incidental take" provisions with which you must comply). The enclosed Fish and Wildlife Service Biological Opinion (81420-2010-F-0642-1, dated August 19, 20111, and last amended on May 14, 2012), contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" that is also specified in the Biological Opinion. Your authorization under this Corps permit is conditional upon your compliance with all of the mandatory terms and conditions associated with "incidental take" of the attached Biological Opinion, which terms and conditions are incorporated by reference in this permit. Failure to comply with the terms and conditions associated with incidental take of the Biological Opinion, where a take of the listed species occurs, would constitute an unauthorized take, and it would also constitute non-compliance with your Corps permit. The U. S. Fish and Wildlife Service is the appropriate authority to determine compliance with the terms and conditions of its Biological Opinion, and with the Endangered Species Act. You must comply with all conditions of this Biological Opinion.

4. You shall notify this office of any proposed modifications to the project, including revisions to any of the work plans or documents cited in this authorization, for review and approval prior to construction work associated with the proposed modification(s).

5. If any of the above conditions are violated or unauthorized activities occur, you shall stop work immediately and notify this office. You shall provide us with a detailed description of the unauthorized activity(s), photo documentation, and any measures taken to remedy the violation.

You must sign the enclosed Compliance Certification and return it to this office within 30 days after completion of the authorized work.

This verification is valid until March 18, 2017, when the existing NWP's are scheduled to be modified, reissued, or revoked. Furthermore, if you commence or are under contract to commence this activity before the date that the relevant NWP is modified, reissued or revoked, you will have twelve (12) months from the date of the modification, reissuance or revocation of the NWP to complete the activity under the present terms and conditions. Failure to comply with the General and Regional Conditions of this NWP, or the project-specific Special Conditions of this authorization, may result in the suspension or revocation of your authorization.

We would appreciate your feedback. At your earliest convenience, please tell us how we are doing by completing the customer survey on our website under *Customer Service Survey*.

Please refer to identification number SPK-2012-00055 in any correspondence concerning this project. If you have any questions, please contact Jason Deters at our California South Branch Office, 1325 J Street, Room 1350, Sacramento, California 95814-2922, by email at *Jason.Deters@usace.army.mil*, or telephone at 916-557-7152. For more information regarding our program, please visit our website at *www.spk.usace.army.mil/Missions/Regulatory.aspx*.

Sincerely,

for Kathleen A. Dadey, Ph.D
Chief, CA South Branch
Regulatory Division

Enclosures

cc: (w/o encls)

Mr. Thomas Leeman, United States Fish and Wildlife Service, Endangered Species Division, thomas_leeman@fws.gov
Mr. Jason Brush, Supervisor, Wetland Regulatory Office, U.S. Environmental Protection Agency, Region IX, Wetlands Regulatory Office (WTR-8), brush.jason@usepa.gov
Ms. Elizabeth Lee, California Regional Water Quality Control Board, Central Valley Region, Fresno Branch Office, emlee@waterboards.ca.gov
Mr. Javier Almaguer, Chief, Central Region Biology Branch, Caltrans Environmental Division, javier.almaguer@dot.ca.gov

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO CA 95814-2922

REPLY TO ATTENTION OF

November 20, 2012

Regulatory Division SPK-2012-00055

State of California
Department of Transportation, District 6
Attn: Mr. Javier Almaguer
855 M Street, Suite 200
Fresno, California 93721

Dear Mr. Almaguer:

We are responding to your December 20, 2011 request for a preliminary jurisdictional determination (PJD), in accordance with our Regulatory Guidance Letter (RGL) 08-02, for the State Route (SR) 41 Passing Lane Project (06-0G9000) site. The approximately 48-acre site is located along SR41, near Section 10, Township 10 South, Range 20 East, Mount Diablo Meridian, Latitude 37.0557464856134°, Longitude -119.772489702688°, in Madera County, California.

On January 12, 2012, we notified you in an electronic mail correspondence that we were unable to complete our review and evaluation of the wetland delineation, and needed to schedule a site visit to review the survey area. On January 26, 2012, we conducted a site visit and concluded that additional information was needed in order to complete our review of the survey area. As a follow-up to the site visit, on January 30, 2012, we supplied you with an itemized list of the information need to continue processing your request and that the additional information must be submitted within 30-days in order to continue processing your request. After 30-days had passed, we notified you on March 9, 2012, that we withdrew your PJD request. On November 16, 2012, as requested, we received additional information to complete our review of your wetland delineation and PJD request.

Based on the available data and additional information you've submitted, **we concur with the amount and location of wetlands on the site as depicted on the enclosed *Madera Passing Lanes Preliminary Wetland Delineation, SR41 Madera County, EA 0G9000, PM 11.7 to 13.6, Sheets 1-4* drawing, dated November 19, 2012, prepared by Caltrans**. The approximately 0.6456 acres of ephemeral pools and swales present within the survey area are potential waters of the United States regulated under Section 404 of the Clean Water Act.

A copy of our RGL 08-02 Preliminary Jurisdictional Determination Form for this site is enclosed. Please sign and return a copy of the completed form to this office. Once we receive a copy of the form with your signature we can accept and process a Pre-Construction Notification or permit application for your proposed project.

PRELIMINARY JURISDICTIONAL DETERMINATION FORM
Sacramento District

This preliminary JD finds that there *"may be"* waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

Regulatory Branch: **California South** File/ORM #: **SPK-2012-00055** PJD Date: **November 20, 2012**

State: **CA** City/County: **Rural Madera County**
Nearest Waterbody: **San Joaquin River**

Location (Lat/Long): **37.0557464856134°, -119.772489702688°**

Size of Review Area: **48** acres

Name/Address Of Property Owner/ Potential Applicant: **State of California Department of Transportation Attn: Mr. Javier Almaguer 855 M Street, Suite 200 Fresno, Ca 93721**

Identify (Estimate) Amount of Waters in the Review Area
Non-Wetland Waters:
linear feet ft wide acre(s)
Stream Flow: **N/A**

Wetlands: **0.6456** acre(s) Cowardin Class: **Palustrine, emergent**

Name of any Water Bodies on the site identified as Section 10 Waters: Tidal: **none** Non-Tidal: **none**

☐ Office (Desk) Determination
☒ Field Determination:
Date(s) of Site Visit(s): **January 26, 2012**

SUPPORTING DATA: Data reviewed for preliminary JD (check all that apply – checked items should be included in case file and, where checked and requested, appropriately reference sources below)

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: **See administrative record.**
☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
☐ Data sheets prepared by the Corps.
☐ Corps navigable waters' study.
☐ U.S. Geological Survey Hydrologic Atlas:
  ☐ USGS NHD data.
  ☐ USGS HUC maps.
☒ U.S. Geological Survey map(s). Cite scale & quad name: **1:24K; CA-LITTLE TABLE MOUNTAIN**
☒ USDA Natural Resources Conservation Service Soil Survey.
☒ National wetlands inventory map(s).
☒ State/Local wetland inventory map(s).
☐ FEMA/FIRM maps.
☐ 100-year Floodplain Elevation (if known):
☒ Photographs: ☒ Aerial ☐ Other
☐ Previous determination(s). File no. and date of response letter:
☐ Other information (please specify):

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

FISHER.LEAH.MICHELLE.1171018214 Digitally signed by FISHER.LEAH.MICHELLE.1171018214 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=FISHER.LEAH.MICHELLE.1171018214 Date: 2012.11.29 17:08:23 -08'00'

Signature and Date of Regulatory Project Manager (REQUIRED)

Signature and Date of Person Requesting Preliminary JD (REQUIRED, unless obtaining the signature is impracticable)

EXPLANATION OF PRELIMINARY AND APPROVED JURISDICTIONAL DETERMINATIONS:

1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "preconstruction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable.

WATER QUALITY

CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

2 December 2014

Javier Almaguer
California Department of Transportation
855 M St., Ste. 200
Fresno, CA 93721

CLEAN WATER ACT §401 TECHNICALLY CONDITIONED WATER QUALITY CERTIFICATION FOR DISCHARGE OF DREDGED AND/OR FILL MATERIALS FOR THE MADERA 41 PASSING LANE PROJECT, WDID#5B20CR00076, MADERA COUNTY

This Order responds to the 5 July 2014 application submitted by California Department of Transportation (Applicant) for the Water Quality Certification of a transportation project permanently impacting 0.169 acres of waters of the United States.

This Order serves as certification of the subject Project permitted by the United States Army Corps of Engineers' Nationwide Permit 14 under § 401 of the Clean Water Act, and a Waste Discharge Requirement under the Porter-Cologne Water Quality Control Act and State Water Board Order 2003-0017-DWQ.

WATER QUALITY CERTIFICATION STANDARD CONDITIONS:

1. This Certification is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to § 13330 of the California Water Code and § 3867 of Title 23 of the California Code of Regulations (23 CCR).

2. This Certification is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent certification application was filed pursuant to 23 CCR § 3855(b) and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.

3. The validity of any non-denial certification action shall be conditioned upon total payment of the full fee required under 23 CCR § 3860.

4. In the event of any violation or threatened violation of the conditions of this Certification, the violation or threatened violation shall be subject to any remedies, penalties, process, or sanctions as provided for under State law and § 401 (d) of the federal Clean Water Act. The applicability of any State law authorizing remedies, penalties, process, or sanctions for the violation or threatened violation constitutes a limitation necessary to ensure compliance with this Certification.

WATER QUALITY CERTIFICATION GENERAL CONDITIONS:

1. Certification is valid for the duration of the Madera 41 Passing Lane Project (Project) described in the attached "Project Information Sheet." This Certification is no longer valid if the Project (as summarized in the "Project Information Sheet" and described in the water quality certification application) is modified, or coverage under the project permit issued by the U.S. Army Corps of Engineers pursuant to § 404 of the Clean Water Act has expired.

2. The Applicant shall provide a Notice of Completion (NOC) **no later than 30 days** after Project completion. The NOC shall demonstrate that the Project has been carried out in accordance with the Project description in the Certification and in any approved amendments. The NOC shall include a map of the Project location(s), including final boundaries of any on-site restoration area(s), if appropriate, and representative pre and post construction photographs. Each photograph shall include a descriptive title, date taken, photographic site, and photographic orientation.

3. All reports, notices, or other documents required by this Certification or requested by the Central Valley Water Board shall be signed by a person described below or by a duly authorized representative of that person.

   a. For a corporation: by a responsible corporate officer such as (1) a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function; (2) any other person who performs similar policy or decision-making functions for the corporation; or (3) the manager of one or more manufacturing, production, or operating facilities if *authority* to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

   b. For a partnership or sole proprietorship: by a general partner or the proprietor.

   c. For a municipality, State, federal, or other public agency: by either a principal executive officer or ranking elected official.

4. Any person signing a document under General Condition No. 3 shall make the following certification, whether written or implied:

   "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

ADDITIONAL TECHNICALLY CONDITIONED CERTIFICATION CONDITIONS:

In addition to the standard and general conditions above, the Applicant shall satisfy the following:

1. The Applicant shall notify the Central Valley Water Board in writing **seven days** prior to beginning any in-water activities.

2. Except for activities permitted by the U.S. Army Corps of Engineers under § 404 of the Clean Water Act, soil, silt, or other organic materials shall not be placed where such materials could pass into surface water or surface water drainage courses.

3. All areas disturbed by Project activities shall be protected from washout or erosion.

4. The Applicant shall maintain a copy of this Certification and supporting documentation (Project Information Sheet) at the Project site during construction for review by site personnel and agencies. All personnel (employees, contractors, and subcontractors) performing work on the proposed Project shall be adequately informed and trained regarding the conditions of this Certification.

5. An effective combination of erosion and sediment control Best Management Practices (BMPs) shall be implemented and adequately working during all phases of construction.

6. All temporarily affected areas shall be restored to pre-construction contours and conditions upon completion of construction activities.

7. The Applicant shall perform surface water sampling: 1) when performing any in-water work; 2) in the event that Project activities result in any materials reaching surface waters or; 3) when any activities result in the creation of a visible plume in surface waters. Pollutants shall be analyzed using the analytical methods described in 40 Code of Federal Regulations Part 136; where no methods are specified for a given pollutant, the method shall be approved by Central Valley Water Board staff. The following monitoring shall be conducted immediately upstream out of the influence of the Project and approximately 300 feet downstream of the active work area. Sampling results shall be submitted to this office by the first day of the second month following sampling. The sampling frequency and monitoring locations may be modified for certain projects with written permission from the Central Valley Water Board Executive Officer.

Parameter	Unit	Type of Sample	Frequency of Sample
Turbidity	NTU	Grab	Every 4 hours during in-water work
Settleable Material	ml/L	Grab	Same as above
pH	Standard units	Grab	Daily during concrete activity
Visible construction related pollutants	Observation	Visible Inspections	Continuous throughout the construction period

8. Activities shall not cause in surface waters:

   (a) where natural turbidity is less than 1 Nephelometric Turbidity Units (NTUs), controllable factors shall not cause downstream turbidity to exceed 2 NTUs;
   (b) where natural turbidity is between 1 and 5 NTUs, increases exceeding 1 NTU;
   (c) where natural turbidity is between 5 and 50 NTUs, increases exceeding 20 percent;
   (d) where natural turbidity is between 50 and 100 NTUs, increases exceeding 10 NTUs;
   (e) where natural turbidity is greater than 100 NTUs, increases exceeding 10 percent.

   In determining compliance with the above limits, appropriate averaging periods may be applied provided that beneficial uses will be fully protected. Averaging periods may only be used with prior permission of the Central Valley Water Board Executive Officer.

9. Activities shall not cause settleable material to exceed 0.1 ml/L in surface waters as measured in surface waters downstream from the Project.

10. Activities shall not cause the pH in surface waters to be depressed below 6.5 nor raised above 8.5.

11. The discharge of petroleum products or other excavated materials to surface water is prohibited. Activities shall not cause visible oil, grease, or foam in the work area or downstream. The Applicant shall notify the Central Valley Water Board immediately of any spill of petroleum products or other organic or earthen materials.

12. Prior to arrival at the project site and prior to leaving the project site, construction equipment that may contain invasive plants and/or seeds shall be cleaned to reduce the spreading of noxious weeds.

13. The Applicant shall notify the Central Valley Water Board immediately if any of the above conditions are violated, along with a description of measures it is taking to remedy the violation.

14. The Applicant shall comply with all California Department of Fish and Game Code § 1600 requirements for the Project.

15. The Applicant must obtain coverage under the NPDES General Permit for Storm Water Discharges Associated with Construction Activities issued by the State Water Resources Control Board for any project disturbing an area of one acre or greater.

16. In the event of any violation or threatened violation of the conditions of this Certification, the violation or threatened violation shall be subject to any remedies, penalties, process, or sanctions as provided for under State law and § 401 (d) of the federal Clean Water Act. The applicability of any State law authorizing remedies, penalties, process, or sanctions for the violation or threatened violation constitutes a limitation necessary to ensure compliance with this Certification.

17. If the Applicant or a duly authorized representative of the Applicant fails or refuses to furnish technical or monitoring reports, as required under this Certification, or falsifies any information provided in the monitoring reports, the Applicant will be subject to civil liability, for each day of violation, or criminal liability.

18. In response to a suspected violation of any condition of this Certification, the Central Valley Water Board may require the Applicant to furnish, under penalty of perjury, any technical or monitoring reports the Central Valley Water Board deems appropriate, provided that the burden, including cost of the reports, shall be in reasonable relationship to the need for the reports and the benefits to be obtained from them.

19. The Applicant shall allow staff of the Central Valley Water Board, or an authorized representative(s), upon the presentation of credentials and other documents, as may be required by law, to enter the Project premises for inspection, including taking photographs and securing copies of project-related records, for the purpose of assuring compliance with this Certification and determining the ecological success of the Project.

CENTRAL VALLEY WATER BOARD CONTACT PERSON:

Debra Mahnke, Water Resource Control Engineer
1685 E Street
Fresno, CA 93706
(559) 445-6281
dmahnke@waterboards.ca.gov

WATER QUALITY CERTIFICATION:

I hereby issue an order certifying that the proposed discharge from the California Department of Transportation Madera 41 Passing Lane Project, WDID 5B20CR00076, will comply with the applicable provisions of § 301 ("Effluent Limitations"), § 302 ("Water Quality Related Effluent Limitations"), § 303 ("Water Quality Standards and Implementation Plans"), § 306 ("National Standards of Performance"), and § 307 ("Toxic and Pretreatment Effluent Standards") of the Clean

Water Act. This discharge is also regulated under State Water Resources Control Board Water Quality Order No. 2003-0017 DWQ "Statewide General Waste Discharge Requirements For Dredged Or Fill Discharges That Have Received State Water Quality Certification."

Except insofar as may be modified by any preceding conditions, all certification actions are contingent on (a) the discharge being limited to and all proposed mitigation being completed in strict compliance with the Applicant's project description, the attached "Project Information Sheet," and the Applicant's water quality certification application; and (b) compliance with all applicable requirements of the Central Valley Water Board' *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins*, Fourth Edition, revised October 2011.

Any person aggrieved by this action may petition the State Water Resources Control Board to review the action in accordance with California Water Code § 13320 and California Code of Regulations, title 23, § 2050 and following. The State Water Resources Control Board must receive the petition by 5:00 p.m., 30 days after the date of this action, except that if the thirtieth day following the date of this action falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Resources Control Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

Clay L. Rodgers

for Pamela C. Creedon
Executive Officer

Enclosure: Water Quality Order No. 2003-0017 DWQ
Attachment: Project Information Sheet

cc: Jason Brush, Supervisor, Wetlands Regulatory Office, U.S. Environmental Protection Agency, Region 9, San Francisco (email)
Kate Dadey, Sacramento South Branch Chief, Regulatory Unit, Department of the Army, Corps of Engineers, Sacramento
Bill Orme, Water Quality Certification Unit Chief, Division of Water Quality, State Water Resources Control Board, Sacramento (email)
Jeffrey Single, Regional Manager, San Joaquin Valley-Southern Sierra Region, California Department of Fish and Wildlife, Fresno

PROJECT INFORMATION SHEET

Application Date: 5 July 2014

Applicant: California Department of Transportation

Applicant Representatives: Javier Almaguer
Andrew Domingos

Project Name: Madera 41 Passing Lane Project

Application Number: WDID 5B20CR00076

Type of Project: Transportation

Project Location: Sections 10, 15, and 22, Township 10 South, Range 20 East, MDB&M. Latitude: 37.04179° and Longitude: -119.77971

Project Duration: The Project is tentatively scheduled to begin in March 2015 and is anticipated to take 160 work days to complete.

County: Madera

Receiving Water: Ephemeral pools and swales, tributary to Hildreth Creek, San Joaquin River Hydrologic Basin, Ahwanee Hydrologic Unit #539.20, Daulton HA

Water Body Type: Wetland swales and pools

Designated Beneficial Uses: The *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins*, Fourth Edition, revised October (Basin Plan), has designated beneficial uses for surface and ground waters within the region. Beneficial uses that could be impacted by the project include, but are not limited to: Municipal and Domestic Water Supply (MUN); Agricultural Supply (AGR); Industrial Supply (IND); Hydropower Generation (POW); Groundwater Recharge (GWR); Water Contact Recreation (REC-1); Non-Contact Water Recreation (REC-2); Warm Freshwater Habitat (WARM); Cold Freshwater Habitat (COLD); Preservation of Biological Habitats of Special Significance (BIOL); Rare, Threatened, or Endangered Species (RARE); Migration of Aquatic Organisms (MIGR); Spawning, Reproduction, and/or Early Development (SPWN); and Wildlife Habitat (WILD). A comprehensive and specific list of the beneficial uses applicable for the project area can be found at http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/index.shtml.

Project Description: The Project will construct staggered northbound and southbound passing lanes on SR 41 from post mile 11.7 to 13.6. The Project requires relocation/installation of new culverts, erosion control and landscaping.

Preliminary Water Quality Concerns: Construction activities may impact surface waters with increased turbidity and settleable matter.

Proposed Mitigation to Address Concerns: Construction will take place when no water is present in the Project area. Best management practices will be implemented to prevent erosion.

Fill/Excavation Area: The Project will permanently impact 0.169 acres of jurisdictional wetlands. Approximately 1,334 cubic yards of native fill and rock will be placed in wetlands.

Dredge Volume: None

U.S. Army Corps of Engineers Permit Number: Nationwide Permit 14

Department of Fish and Wildlife Streambed Alteration Agreement: A Streambed Alteration Agreement is not needed for the Project.

Status of CEQA Compliance: The California Department of Transportation approved a Mitigated Negative Declaration (MND) on 12 July 2012 and filed a Notice of Determination with the State Clearinghouse on 26 July 2012 (SCH 2012062031).

As a Responsible Agency under California Environmental Quality Act (CEQA), the Central Valley Water Board reviewed the Environmental Impact Report and found that the Project impacts to water quality were adequately addressed. Mitigation for impacts to water quality is discussed in the "Proposed Mitigation to Address Concerns" section above and the "Compensatory Mitigation" section below.

Compensatory Mitigation: The Applicant will create 0.507 acres of wetlands onsite to mitigate for permanent impact to wetlands.

Application Fee Provided: Total fees of $2,074 have been submitted as required by 23 CCR §3833(b)(3)(A) and by 23 CCR §2200(e).

STATE WATER RESOURCES CONTROL BOARD

WATER QUALITY ORDER NO. 2003 - 0017 - DWQ

STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR DREDGED OR FILL DISCHARGES THAT HAVE RECEIVED STATE WATER QUALITY CERTIFICATION (GENERAL WDRs)

The State Water Resources Control Board (SWRCB) finds that:

1. Discharges eligible for coverage under these General WDRs are discharges of dredged or fill material that have received State Water Quality Certification (Certification) pursuant to federal Clean Water Act (CWA) section 401.

2. Discharges of dredged or fill material are commonly associated with port development, stream channelization, utility crossing land development, transportation water resource, and flood control projects. Other activities, such as land clearing, may also involve discharges of dredged or fill materials (e.g., soil) into waters of the United States.

3. CWA section 404 establishes a permit program under which the U.S. Army Corps of Engineers (ACOE) regulates the discharge of dredged or fill material into waters of the United States.

4. CWA section 401 requires every applicant for a federal permit or license for an activity that may result in a discharge of pollutants to a water of the United States (including permits under section 404) to obtain Certification that the proposed activity will comply with State water quality standards. In California, Certifications are issued by the Regional Water Quality Control Boards (RWQCB) or for multi-Region discharges, the SWRCB, in accordance with the requirements of California Code of Regulations (CCR) section 3830 et seq. The SWRCB's water quality regulations do not authorize the SWRCB or RWQCBs to waive certification, and therefore, these General WDRs do not apply to any discharge authorized by federal license or permit that was issued based on a determination by the issuing agency that certification has been waived. Certifications are issued by the RWQCB or SWRCB before the ACOE may issue CWA section 404 permits. Any conditions set forth in a Certification become conditions of the federal permit or license if and when it is ultimately issued.

5. Article 4, of Chapter 4 of Division 7 of the California Water Code (CWC), commencing with section 13260(a), requires that any person discharging or proposing to discharge waste, other than to a community sewer system, that could affect the quality of the waters of the State,[1] file a report of waste discharge (ROWD). Pursuant to Article 4, the RWQCBs are required to prescribe waste discharge requirements (WDRs) for any proposed or existing discharge unless WDRs are waived pursuant to CWC section 13269. These General WDRs fulfill the requirements of Article 4 for proposed dredge or fill discharges to waters of the United States that are regulated under the State's CWA section 401 authority.

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[1] "Waters of the State" as defined in CWC Section 13050(e)

6. These General WDRs require compliance with all conditions of Certification orders to ensure that water quality standards are met.

7. The U.S. Supreme Court decision of *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, 531 U.S. 159 (2001) (the *SWANCC* decision) called into question the extent to which certain "isolated" waters are subject to federal jurisdiction. The SWRCB believes that a Certification is a valid and enforceable order of the SWRCB or RWQCBs irrespective of whether the water body in question is subsequently determined not to be federally jurisdictional. Nonetheless, it is the intent of the SWRCB that all Certification conditions be incorporated into these General WDRs and enforceable hereunder even if the federal permit is subsequently deemed invalid because the water is not deemed subject to federal jurisdiction.

8. The beneficial uses for the waters of the State include, but are not limited to, domestic and municipal supply, agricultural and industrial supply, power generation, recreation, aesthetic enjoyment, navigation, and preservation and enhancement of fish, wildlife, and other aquatic resources.

9. Projects covered by these General WDRs shall be assessed a fee pursuant to Title 23, CCR section 3833.

10. These General WDRs are exempt from the California Environmental Quality Act (CEQA) because (a) they are not a "project" within the meaning of CEQA, since a "project" results in a direct or indirect physical change in the environment (Title 14, CCR section 15378); and (b) the term "project" does not mean each separate governmental approval (Title 14, CCR section 15378(c)). These WDRs do not authorize any specific project. They recognize that dredge and fill discharges that need a federal license or permit must be regulated under CWA section 401 Certification, pursuant to CWA section 401 and Title 23, CCR section 3855, et seq. Certification and issuance of waste discharge requirements are overlapping regulatory processes, which are both administered by the SWRCB and RWQCBs. Each project subject to Certification requires independent compliance with CEQA and is regulated through the Certification process in the context of its specific characteristics. Any effects on the environment will therefore be as a result of the certification process, not from these General WDRs. (Title 14, CCR section 15061(b)(3)).

11. Potential dischargers and other known interested parties have been notified of the intent to adopt these General WDRs by public hearing notice.

12. All comments pertaining to the proposed discharges have been heard and considered at the November 4, 2003 SWRCB Workshop Session.

13. The RWQCBs retain discretion to impose individual or General WDRs or waivers of WDRs in lieu of these General WDRs whenever they deem it appropriate. Furthermore, these General WDRs are not intended to supersede any existing WDRs or waivers of WDRs issued by a RWQCB.

IT IS HEREBY ORDERED that WDRs are issued to all persons proposing to discharge dredged or fill material to waters of the United States where such discharge is also subject to the water quality certification requirements of CWA section 401 of the federal Clean Water Act (Title 33 United States Code section 1341), and such certification has been issued by the applicable RWQCB or the SWRCB, unless the applicable RWQCB notifies the applicant that its discharge will be regulated through WDRs or waivers of WDRs issued by the RWQCB. In order to meet the provisions contained in Division 7 of CWC and regulations adopted thereunder, dischargers shall comply with the following:

1. Dischargers shall implement all the terms and conditions of the applicable CWA section 401 Certification issued for the discharge. This provision shall apply irrespective of whether the federal license or permit for which the Certification was obtained is subsequently deemed invalid because the water body subject to the discharge has been deemed outside of federal jurisdiction.

2. Dischargers are prohibited from discharging dredged of fill material to waters of the United States without first obtaining Certification from the applicable RWQCB or SWRCB.

CERTIFICATION

The undersigned, Clerk to the Board, does hereby certify that the foregoing is a full, true, and correct copy of an order duly and regularly adopted at a meeting of the State Water Resources Control Board held on November 19, 2003.

AYE: Arthur G. Baggett, Jr.
Peter S. Silva
Richard Katz
Gary M. Carlton
Nancy H. Sutley

NO: None.

ABSENT: None.

ABSTAIN: None.

Debbie Irvin
Clerk to the Board

MATERIALS INFORMATION

State of California
Department of Transportation

Business, Transportation and Housing Agency

Memorandum

Flex your power!
Be energy efficient!

To: **MR. MICHAEL K. LIM**
Design Manager
Project Development/Design

Date: March 23, 2011
Revised: May 14, 2014

Attn: Mr. Majid Monfaredian

File: 06-Mad-41
PM 11.7/13.6
EA: 06-0G9001
Madera Passing Lanes

From: **DEPARTMENT OF TRANSPORTATION**
DIVISION OF ENGINEERING SERVICES
GEOTECHNICAL SERVICES – MS 5

Subject: Geotechnical Design Report

Introduction

As requested, the Office of Geotechnical Design North (OGDN) is providing a Geotechnical Design Report (GDR) for the proposed widening on Highway 41 between postmi1es 11.7 and 13.6 in Madera County, California. The project is proposed to construct northbound (NB) and southbound (SB) passing lanes, construct an eight-foot wide shoulder in both directions, and construct a four-foot soft median barrier. The project also includes improving the existing drainage facilities by extending the culverts within the project limits as well as improving the landscaping and erosion controls.

Existing Conditions and Proposed Improvements

The project is situated on Highway 41, in Madera County, between postmiles 11.7 and 13.6. Highway 41 trends roughly northeast-southwest in this area, and was constructed on through cuts and through fills. The lanes are twelve-feet in width with zero to 2-foot wide shoulders. According to the as-built documents (Document No. 60000293) and the site reconnaissance, existing cuts lopes along the alignment were constructed between 0.5:1 and 1.5: l (H: V) and reach a maximum height of about 30-feet. Existing fill slopes were constructed at 1.5:1 to 4: l (H:V) with a maximum height of about 10-feet.

The proposed project will widen Highway 41 by approximately 24 to 38-feet. Cut slopes are anticipated to be graded at 2: l and fill slopes are proposed to be graded at 4: l.

Physical Setting

The physical setting of the project site and the surrounding area was reviewed to provide climate, topography and drainage, geology and seismicity characteristics to aid in preliminary project design and construction planning. The following is a discussion of our review:

Climate

According to the Western Regional Climate Center for the time period between 1912-2010, the average annual precipitation at the Friant Government Camp Station is about 14.23 inches. The majority of this precipitation (over 60 percent) falls between November and April. The average annual maximum air temperature is approximately 77.5° F and the average annual minimum temperature is 47.4° F. The highest average daily maximum of 100.4° F was recorded in July and the lowest average daily minimum of 36.6° F in December.

Topography and Drainage

According to the USGS topographic map of the Little Table Mountain 7.5 minute quadrangle (1981), the project site lies at elevations ranging from 600-feet to 700-feet above mean sea level. Twenty-Two Mile House is to the south of the project area, Hildreth Creek is to the west of the site. An intermittent drainage is indicated at the northerly end of the project limits, emanating from a spring situated to the northwest of the site. Surrounding land use consists primarily of private lands used for agriculture.

Site Geology

According to the Geologic Map of the Geologic map of the Raymond quadrangle, Madera and Mariposa Counties, California, (CGS, 1982), the majority of the project site lies in the Cretaceous Hornblende-Poor Facies of Tonalite (Kblb) which is a felsic intrusive igneous rock similar to granite. The map shows Cretaceous Tonalite south of the Experimental Range (Kex) outcropping at the northerly project limit. A portion of the geologic map is included as Figure 4. Overlying the rocks through much of the project site consists of silty SAND with variable amounts of gravels, silts and clay.

The soil survey of the Madera County Area, California (USDA, Web Soil Survey) indicates the upper four-feet of soils throughout the project area consist of sandy loam (SM) to coarse sandy loam (SM) with upwards of 13 percent clay content. The clay was indicated to have a low plasticity.

The State of California, Department of Conservation Map of California Showing Principle Asbestos Deposits was reviewed. According to this map, the site lies to the south of an area of naturally occurring asbestos. Asbestos forming minerals such as chrysotile, actinolite or tremolite were not observed during the site reconnaissance.

Global and Local Stability

There was no indication of global instabilities throughout the project layout. Local instability in the form of rockfall is ending up in the shoulder and travelled way primarily due to the lack of an adequate catchment area. The project has proposed 8-foot shoulders which will substantially reduce the amount of rockfall from entering travelled way.

Recommendations

We feel that the proposed 2:1 (H:V) slopes within the granitic rock are constructible. We anticipate that blasting will be necessary to perform the widening through the existing cut slopes. Blasting is anticipated to be required on approximately 70 percent of the new cutslopes. We recommend the use of the "Rock Excavation Controlled" Standard Special Provision due to the proximity of the blasting to the roadway and surrounding structures.

Construction Considerations

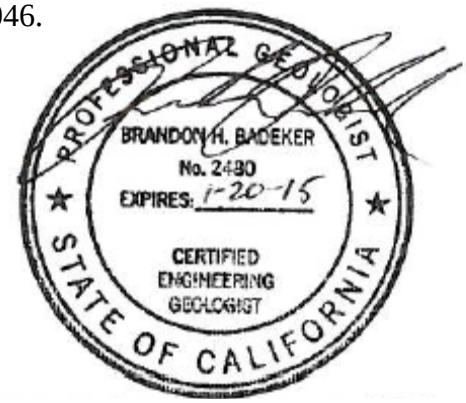
Any addition of fill to the existing embankments shall conform to Section 19-6 "Embankment Construction" of the Department Standard Specifications, May 2006.

Pertinent Reports and Investigations

The District has provided project plans. The following presents a list of references used in preparation of this report.

- Bateman, P.C., Busacca, A.J., Marchand, D.E. and Sawka, W.N., 1982, Geologic map of the Raymond quadrangle, Madera and Mariposa Counties, Califo rnia: U.S. Geological Survey, Geologic Quadrangle Map GQ-1555, scale 1:62500.
- Western Regional Climate Center for 19 12-2010
- USGS Topographic Map ofthe Little Table Mountain 7.5' quadrangle, 1:24,000, 1981
- "Califomia Seismic Hazard Map", prepared by Caltrans, dated 1996
- United States Department of Agriculture, Natural Resource Conservation Service, Web Soil Survey, http://websoilsurvey.nrcs.usda.gov/app/
- Plan and Profile of State Highway in Madera County, between Madera-Friant Road and Kelshaw Corners, Document No. 60000293, dated November 6, 1937.

If you have any questions regarding this report, please contact Brandon Badeker at (916) 227-1046.



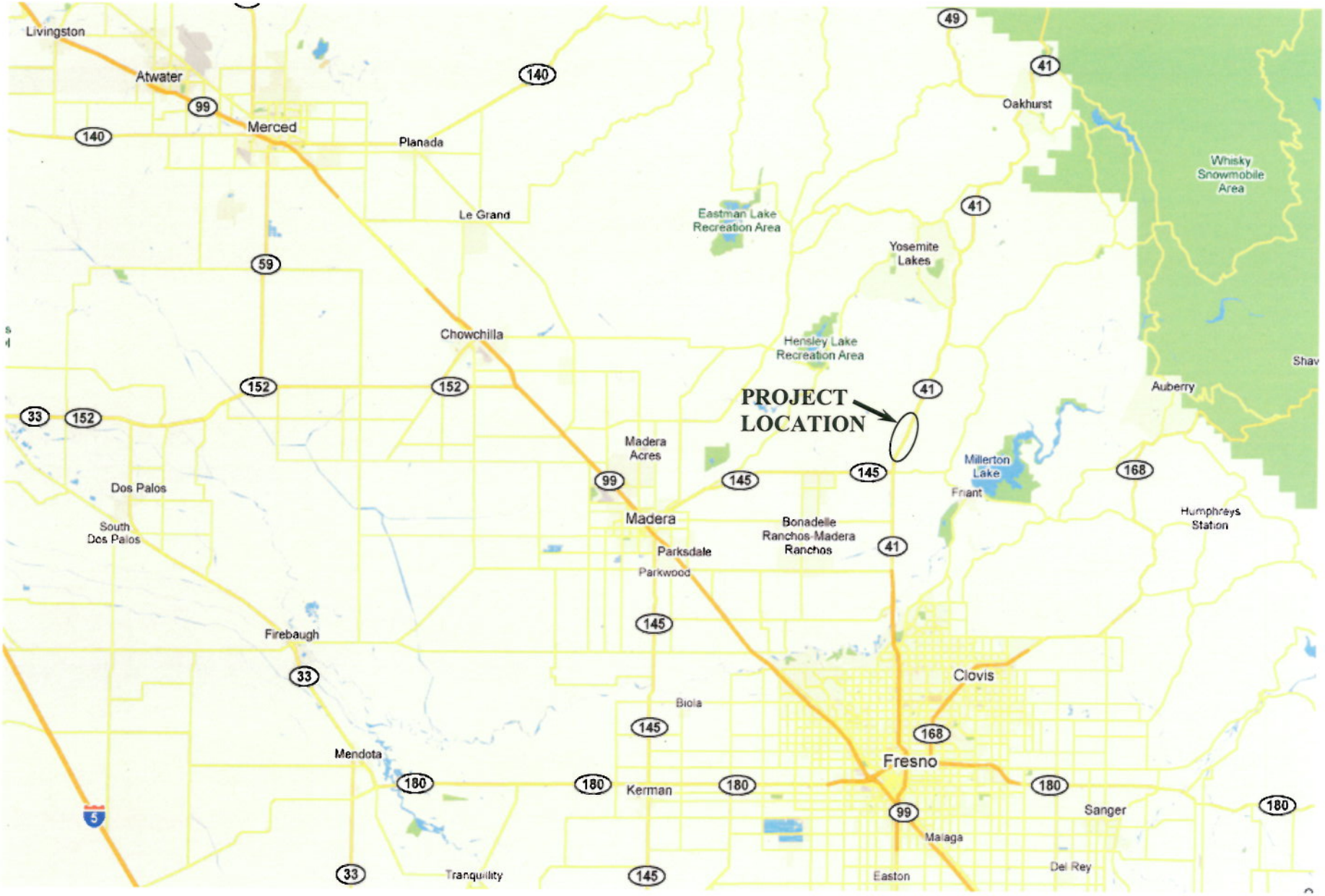
BRANDON BADEKER, CEG
Engineering Geologist
Office of Geotechnical Design – North
Branch E

Attachment:

- Figure 1: Vicinity Map
- Figure 2: Aerial Photograph
- Figure 3: Topographic Map
- Figure 4: Geologic Map

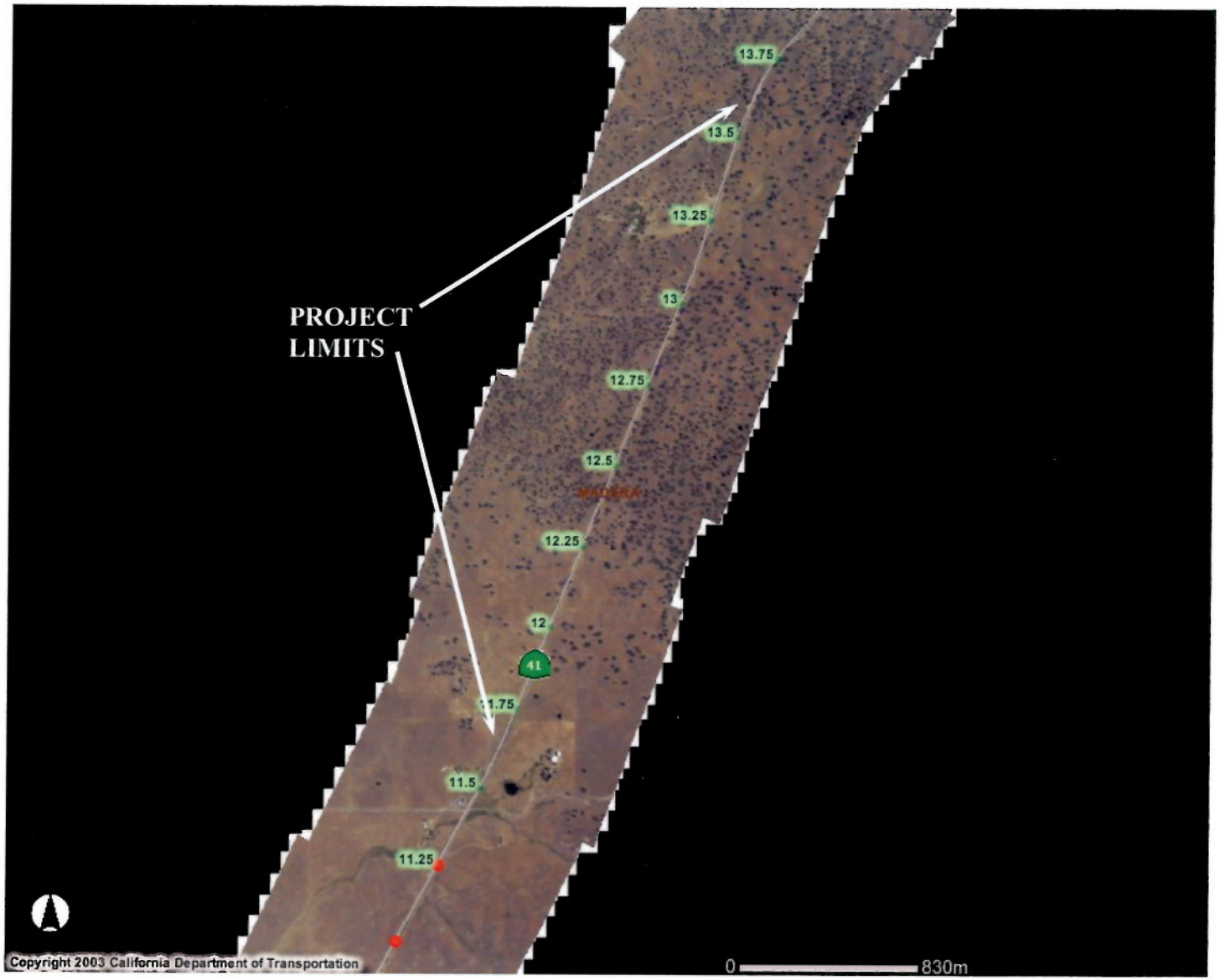
C: RBibbens (E-copy)
JHuang (E-copy)
MWillian (GS Corporate)
Anand Kapoor (District 06 Project Manager)
Alberto Lopez (District 06 Construction RE, Pending File
Ted Mooradian (District 06 Materials Engineer)
GDN File

"



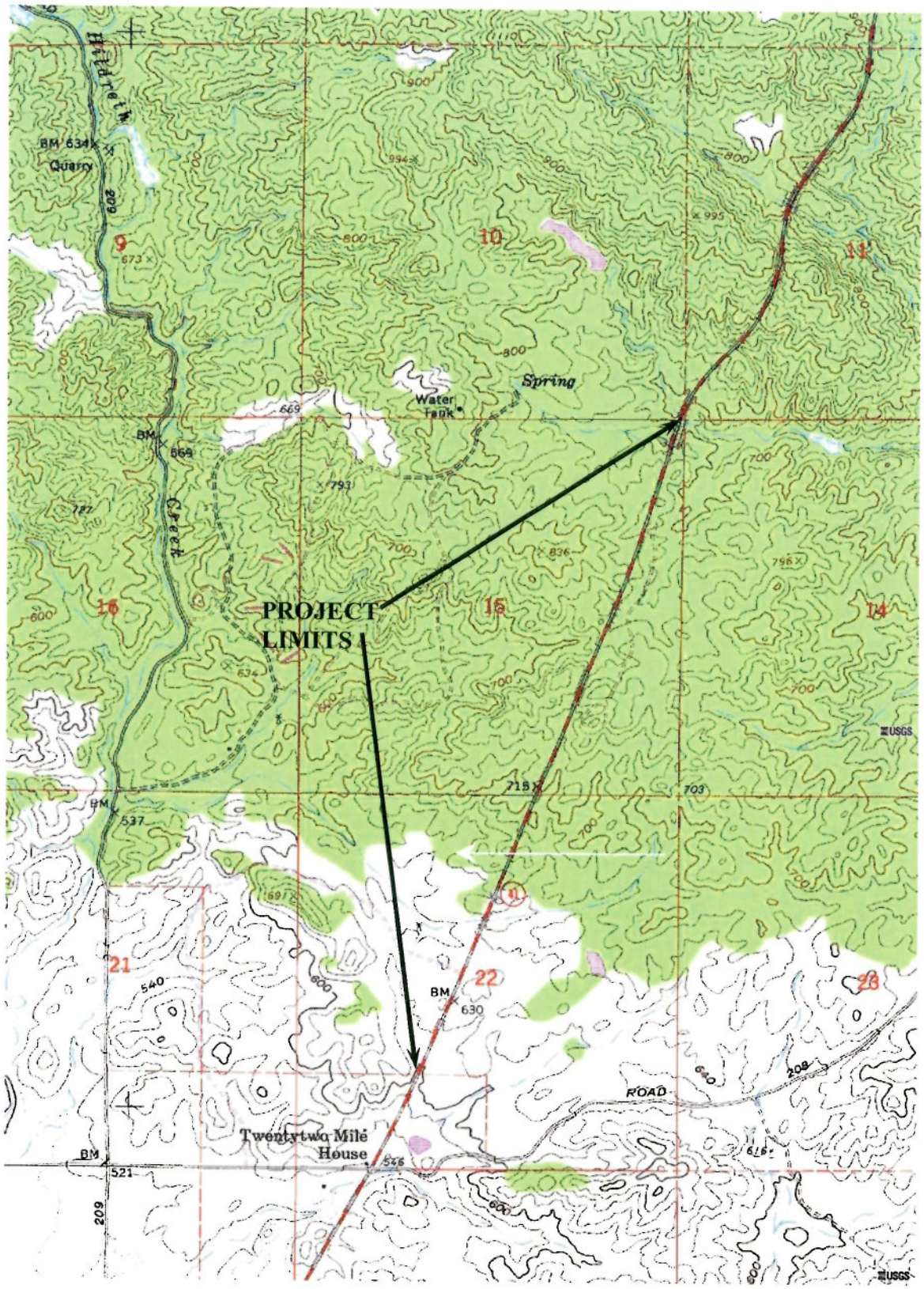
Map adapted from Google Maps, 2011

CALTRANS Division of Engineering Services Geotechnical Services Office of Geotechnical Design - North	EA: 06-0G9001 Date: March. 2011	**Vicinity Map**	Figure 1
	06-Mad-41 PM 11.7/13.6		



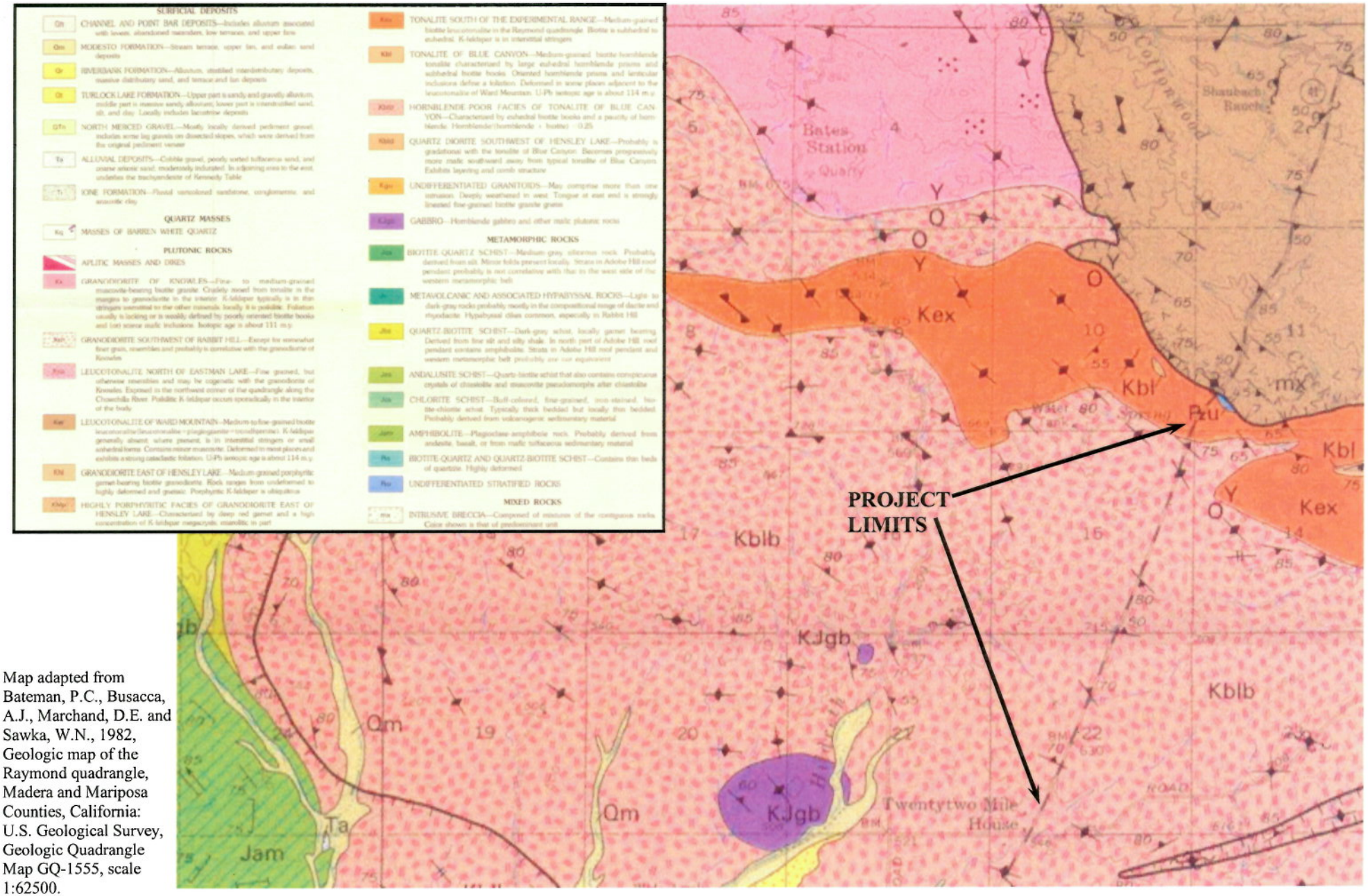
Map adapted from Caltrans DHIPP

CALTRANS Division of Engineering Services Geotechnical Services Office of Geotechnical Design - North	EA: 06-0G9001 Date: March. 2011	**Aerial Photograph**	Figure 2
		06-Mad-41 PM 11.7/13.6	



USGS Topographic Map of the Little Table Mountain 7.5' quadrangle, 1:24,000, 1981

CALTRANS Division of Engineering Services Geotechnical Services Office of Geotechnical Design - North	EA: 06-0G9001 Date: March, 2011	**Topographic Map**	Figure 3
	06-Mad-41 PM 11.7/13.6		



Map adapted from Bateman, P.C., Busacca, A.J., Marchand, D.E. and Sawka, W.N., 1982, Geologic map of the Raymond quadrangle, Madera and Mariposa Counties, California: U.S. Geological Survey, Geologic Quadrangle Map GQ-1555, scale 1:62500.

CALTRANS Division of Engineering Services Geotechnical Services Office of Geotechnical Design - North	EA: 06-0G9001 Date: March, 2011	**Geologic Map**	Figure 4
		06-Mad-41 PM 11.7/13.6	

Monfaredian, Majid@DOT

From: Bud Tickel <Bud.Tickel@fresno.gov>
Sent: Thursday, January 15, 2015 1:56 PM
To: Monfaredian, Majid@DOT
Cc: Michael Carbajal
Subject: Madera 41 Passing Lanes

Mr. Monfaredian,

My name is Bud Tickel and I am the Chief of Water Operations for the City of Fresno. Mike Carbajal forwarded me your request to use City of Fresno water for Construction purposes. When you are ready to start your project, you will need to bring a check for $575.00 to the water Division, located @ 1910 E. University. This is a deposit for the travel meter; we will also need to know where the work water will be used. The front office will explain the procedures for the use of the travel meter from that point on. Please feel free to contact me if you have any questions.

Best Regards,

Bud Tickel, Chief of Water Operations
City of Fresno, Water Division
1910 E University Ave
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Bud.Tickel@fresno.gov