

INFORMATION HANDOUT

**For Contract No. 08-0G9004
At 08-SBd-247-9.6/20.3**

**Identified by
Project ID 0800020175**

PERMITS

California Department of Fish and Wildlife Inland Desert Region

California Endangered Species Act Incidental Take Permit No. 2081-2014-072-06

United States Army Corps of Engineers

Approved Jurisdictional Determination regarding geographic jurisdiction

AGREEMENTS

California Department of Fish and Wildlife

Streambed Alteration Agreement Notification No.1600-2014-0241-R6

MATERIALS INFORMATION

Final Materials Report

Water Source Information



California Department of Fish and Wildlife
Inland Deserts Region
3602 INLAND EMPIRE BLVD SUITE C-220
ONTARIO, CA 91764

California Endangered Species Act
Incidental Take Permit No. 2081-2014-072-06

STATE ROUTE 247 STANDARD SHOULDER CONSTRUCTION PROJECT

Authority: This California Endangered Species Act (CESA) incidental take permit (ITP) is issued by the California Department of Fish and Wildlife (CDFW) pursuant to Fish and Game Code section 2081, subdivisions (b) and (c), and California Code of Regulations, Title 14, section 783.0 et seq. CESA prohibits the take¹ of any species of wildlife designated by the California Fish and Game Commission as an endangered, threatened, or candidate species.² 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
Principal Officer: Scott Quinnell, Senior Environmental Planner
Contact Person: Kyle Myrick
Mailing Address: California Department of Transportation
464 West 4th Street, 6th Floor, MS 822
San Bernardino, CA 92401-1400

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 **January 1, 2020**.

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 6.8.

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

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

Project Location:

The State Route 247 Standard Shoulder Construction Project (Project) is located on State Route 247 (SR-247) from Handley Road to 0.1 miles north of Boone Avenue between post mile (PM) 9.6 and 20.3 near the town of Landers in the County of San Bernardino (USGS 7.5 minute quadrangles; "Bighorn Canyon" and "Landers" (USGS 1993)(Figure 1: Project Vicinity Map).

Project Description:

The Project includes upgrading the existing SR-247 by constructing an 8-foot asphalt standard shoulder on each direction of travel along the highway for 10.7 miles. Rumble strips will be installed on the existing and proposed shoulders along the highway. The Project will impact 61.24 acres of pre-disturbed areas; this includes paved roadway, unpaved roadway and unpaved but graded shoulders which are not suitable desert tortoise habitat because they are subject to continuous human disturbance. The proposed project would result in permanent impacts to 1.82 acres of undisturbed vegetation that is suitable for desert tortoise. The Project activities may include; vegetation removal, grading, backfilling, cleanup, and restoration activities.

The original SR-247 was constructed with multiple Arizona crossings as well as one culvert. As part of the Project, one culvert located at 34°20'6.69"N, -116°29'26.77"W will be replaced to fit the widening specifics; there will be no installation of rock slope protection associated with the new culvert. The Project will remove the existing 24" corrugated metal pipe and replace it with a new 24" metal pipe at the culvert location. The existing 27 Arizona crossings will be slightly modified to fit the widening of the road. Locations of the Arizona crossing are described in the Appendix A-Jurisdictional Area of the Natural Environmental Study.

Covered Species Subject to Take Authorization Provided by this ITP:

This ITP covers the following species:

Common Name	Scientific Name	CESA Status
Desert tortoise	<i>Gopherus agassizii</i>	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

³ see Cal. Code Regs. tit. 14 § 670.5, subd. (b)(4)(A)

individuals of the Covered Species. The activities described above expected to result in incidental take of individuals of the Covered Species include vegetation removal, grading, backfilling, cleanup, restoration, capture, relocation activities, and other activities described in the Project Description section of this ITP (Covered Activities).

Incidental take of individuals of the Covered Species in the form of mortality ("kill") may occur as a result of Covered Activities, such as vehicle strikes and suffocation from accidental crushing of burrows by construction equipment and walking through the Project area. Incidental take of individuals of the Covered Species may also occur from the Covered Activities in the form of pursue, catch and attempt to capture, of the Covered Species from capture or entrapment in holes or trenches, uncovering Covered Species through the excavation of burrows, by corralling the Covered Species into a confined area when barrier fencing is constructed, and relocation of Covered Species when required by this ITP. The areas where authorized take of the Covered Species is expected to occur include: California Department of Transportation's Right-of-Way (ROW) (collectively, the Project Area).

The Project is expected to cause the permanent loss of 1.82 acres of 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 tunneling 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 Areas, including areas used for vehicular/equipment ingress and egress, staging, parking, noise, and vibration generating activities that have the potential to cause take. CDFW's issuance of this ITP and Permittee's authorization to take the Covered Species are

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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. **California Environmental Quality Act (CEQA) Compliance:** Permittee shall implement and adhere to the mitigation measures related to the Covered Species in the Biological Resources section of Mitigated Negative Declaration for the SR-247 Standard Shoulder Construction Project (State Clearing House (SCH) No.: 2012071070) certified by California Department of Transportation, January 25, 2013 as lead agency for the Project pursuant to the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.).
3. **Lake and Streambed Agreement (LSA) Compliance:** Permittee shall implement and adhere to the mitigation measures and conditions related to the Covered Species in the Lake and Streambed Alteration Agreement (LSA) (Notification No. 1600-2014-0241-R6) for the Project executed by CDFW pursuant to Fish and Game Code section 1600 et seq.
4. **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 of this ITP.
5. **General Provisions:**
 - 5.1. 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, 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.
 - 5.2. Biological Monitor(s). Permittee shall submit a Desert Tortoise Monitor and Biologist Responsibilities and Qualifications Form to CDFW at least 30 days before starting Covered Activities or with change of personnel (Attachment 2). Permittee shall ensure that the Biological Monitor(s) is knowledgeable and experienced in the biology, natural history, collecting and handling of the Covered Species. The Biological Monitor(s) 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 Biological Monitor(s) in writing before starting Covered Activities, and shall also obtain approval in advance in writing if the Biological Monitor(s) must be changed.

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- 5.3. Authorized Biologist(s). Permittee shall submit the Desert Tortoise Monitor and Biologist Responsibilities and Qualifications Form to CDFW for the approval of the Authorized Biologist (s) (Attachment 2). In addition to meeting the qualifications to be Biological Monitor(s) identified in Condition 5.2 above, the Authorized Biologist (s) shall possess a valid Memorandum of Understanding (MOU) with CDFW for handling the Covered Species associated with this ITP. Only Authorized Biologist(s) shall be allowed to excavate burrows, handle, and relocate Covered Species.
- 5.4. Authorized Biologist(s) and Biological Monitor(s) Authority. Only Authorized Biologist(s) with an MOU with CDFW for this ITP is authorized to excavate burrows, handle, and relocate Covered Species. To ensure compliance with the Conditions of Approval of this ITP, the Biological Monitor(s) and/or Authorized Biologist(s) shall have authority to immediately stop any activity that does not comply with this ITP, and/or to order any reasonable measures to avoid the unauthorized take of an individual of the Covered Species.
- 5.5. 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 Biological Monitor(s) or Authorized Biologist(s) 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.
- 5.6. Construction Monitoring Notebook. The Biological Monitor(s) or Authorized Biologist(s) 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.
- 5.7. 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.

- 5.8. Dust Control. Permittee shall implement dust control measures during Covered Activities to facilitate visibility for monitoring of the Covered Species by the Biological Monitor(s) or Authorized Biologist(s). Permittee shall keep the amount of water used to the minimum amount needed, and shall not allow water to form puddles.
- 5.9. 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.
- 5.10. Delineation of Property Boundaries. Before starting Covered Activities along each part of the route in active construction, 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 in that area.
- 5.11. 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.
- 5.12. Project Access. Project-related personnel shall access the Project Area using existing routes, or routes identified in the Project Description 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. Permittee shall ensure that vehicle speeds do not exceed 20 miles per hour to avoid Covered Species on or traversing the roads. 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.
- 5.13. 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 Conditions of Approval 5.12 of this ITP.

- 5.14. 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.
- 5.15. Firearms and Dogs. Permittee shall prohibit firearms and domestic dogs from the Project Area and site access routes during Covered Activities, except those in the possession of authorized security personnel or local, state, or federal law enforcement officials.
- 5.16. CDFW Access. Permittee shall provide CDFW staff with reasonable access to the Project and mitigation lands under Permittee control, and shall otherwise fully cooperate with CDFW efforts to verify compliance with or effectiveness of mitigation measures set forth in this ITP.
- 5.17. Refuse Removal. Upon completion of Covered Activities, Permittee shall remove from the Project Area and properly dispose of all temporary fill and construction refuse, including, but not limited to, broken equipment parts, wrapping material, cords, cables, wire, rope, strapping, twine, buckets, metal or plastic containers, and boxes.

6. Monitoring, Notification and Reporting Provisions:

- 6.1. Notification before Commencement. The Permittee's 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.
- 6.2. Notification of Non-compliance. The Biological Monitor(s) or Authorized Biologist(s) 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 Biological Monitor(s) or Authorized Biologist(s) shall report any non-compliance with this ITP to CDFW within 24 hours.
- 6.3. Compliance Monitoring. The Biological Monitor(s) or Authorized Biologist(s) shall be on-site daily when Covered Activities occur. The Biological Monitor(s) or Authorized Biologist(s) 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, Biological Monitor(s), or Authorized Biologist(s) shall prepare daily written observation and inspection records summarizing: oversight activities and compliance inspections, observations of Covered Species and their sign, survey results, and monitoring activities required by this ITP. The Biological Monitor(s) or Authorized Biologist(s) shall conduct compliance inspections a minimum of twice a day during periods of inactivity and after clearing, grubbing, and grading are completed.

- 6.4. Quarterly Compliance Report. The Biological Monitor(s) or Authorized Biologist(s) shall compile the observation and inspection records identified in Condition of Approval 6.3 into a Quarterly 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. Quarterly Compliance Reports shall be submitted to the CDFW offices 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 Heather Weiche (heather.weiche@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.
- 6.5. 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 general description of the status of the Project Area and Covered Activities, including actual or projected completion dates, if known; (2) a copy of the table in the MMRP with notes showing the current implementation status of each mitigation measure; (3) an assessment of the effectiveness of each completed or partially completed mitigation measure in avoiding, minimizing and mitigating Project impacts; (4) all available information about Project-related incidental take of the Covered Species; and (5) information about other Project impacts on the Covered Species.
- 6.6. California Natural Diversity Data Base Observations. The Biological Monitor(s) or Authorized Biologist(s) shall submit all observations of Covered Species to CDFW's California Natural Diversity Database (CNDDDB) within 60 calendar days of the observation and the Biological Monitor(s) or Authorized Biologist(s) shall include copies of the submitted forms with the next Annual Report.
- 6.7. Notification of Take or Injury. Permittee shall immediately notify the Biological Monitor(s) or Authorized Biologist(s) if a Covered Species is taken or injured by a Project-related activity, or if a Covered Species is otherwise found dead or injured

within the vicinity of the Project. The Biological Monitor(s), Authorized Biologist(s), or Designated Representative shall provide initial notification to CDFW by calling the Regional Office at (909) 466-8462 and by notifying the CDFW Regional Representative Heather Weiche (heather.weiche@wildlife.ca.gov). 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's Biological Monitor(s) or Authorized Biologist(s) 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.

- 6.8. Final Mitigation Report. No later than 45 days after completion of all mitigation measures, Permittee shall provide CDFW with a Final Mitigation Report. The Biological Monitor(s) or Authorized Biologist(s) shall prepare the Final Mitigation Report which shall include, at a minimum: (1) a summary of all Annual Reports; (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. 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.

Desert Tortoise

- 7.1. Pre-Construction Surveys. No more than 30 days prior to start of Covered Activities, the Biological Monitor(s) or Authorized Biologist(s) shall conduct pre-construction surveys for desert tortoise. These surveys shall cover 100 percent of the Project Area with a 50-foot buffer zone. The Biological Monitor(s) or Authorized Biologist(s) shall follow the survey methodology in the most recent United States Fish and Wildlife Service (USFWS) Desert Tortoise (Mojave Population) Field Manual 2009 (Field Manual, Attachment 3). The Biological Monitor(s) or Authorized Biologist(s) shall flag

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all potential burrows within this area. Within 30 days of performing the pre-construction surveys, the Biological Monitor(s) or Authorized Biologist(s) shall submit a report to CDFW documenting results (using the USFWS Protocol data sheet) and include a Translocation Plan (following the most current USFWS guidance document). Upon report receipt and Translocation Plan approval by CDFW, desert tortoise burrows shall be excavated and individuals can be relocated by the Authorized Biologist(s) only.

- 7.2. Desert Tortoise Translocation Plan. Permittee shall submit a desert tortoise translocation plan to CDFW for review and approval at least three (3) months prior to initiating construction. Translocation of desert tortoise shall only occur in the spring (April-May 31) or fall (September-October). Permittee shall include in the translocation plan a description of the flora and fauna of the entire planned translocation sites. The Permittee shall follow the Translocation of Mojave Desert Tortoises from Project Site: Plan Development Guidance (U.S. Fish and Wildlife Service November 2011).
- 7.3. Relocation of Desert Tortoise. Using the methods described in Chapter 7 of the Field Manual titled "Guidelines for Handling Desert Tortoises Mojave Population and Their Eggs 2009" (hereinafter referred to as Handling Guidelines, Attachment 4) and the approved Translocation Plan, the Authorized Biologist(s) shall capture, collect measurement and identification data, permanently mark, and relocate any desert tortoise found within the Project site to a suitable, undisturbed off-site habitat, as agreed by CDFW and based on the Permittee's Translocation Plan. Desert tortoise shall be relocated and/or moved as short a distance as possible but no less than 300 feet from the existing ROW. The Authorized Biologist(s) shall follow all excavation, capture, handling, and relocation procedures described in the Handling Guidelines and the Translocation Plan to protect the health and well-being of desert tortoise. If a desert tortoise is found above ground, the Authorized Biologist(s) shall release it above ground in suitable habitat and conditions. If a desert tortoise is found during burrow excavation, the Authorized Biologist(s) shall relocate it to an unoccupied burrow of similar size. If no such burrow is available for relocation, the Authorized Biologist(s) shall construct an artificial burrow similar in size, depth, and orientation as the original burrow. The Authorized Biologist(s) shall follow all protocols for the construction of the artificial burrows found in the Handling Guidelines (Attachment 4). The Authorized Biologist(s) shall record the location of all desert tortoise burrows, desert tortoises, and relocation sites using GPS technology. The Authorized Biologist(s) shall collapse all potential or actual desert tortoise burrows present within the work site after establishing that desert tortoise does not currently occupy them.
- 7.4. Clearance Survey and Burrow Collapse. Immediately prior to start of ground disturbance activities, the Biological Monitor(s) or Authorized Biologist(s) shall resurvey the Project Area and access routes for desert tortoise and their burrows. The

Biological Monitor(s) or Authorized Biologist(s) shall inspect all the burrows within the Project Area for habitation prior to collapsing them in accordance to Condition of Approval 7.5.

- 7.5. Handling Desert Tortoise and Excavating Burrows. Only the Authorized Biologist(s) may excavate burrows and handle the desert tortoise. During pre-construction clearance surveys the Authorized Biologist(s) shall excavate all burrows by hand that cannot be avoided within the area to be impacted as a result of the Project, including burrows not recently used that are considered by the Authorized Biologist(s) to be potentially suitable for the desert tortoise. Potentially suitable burrows shall be excavated and collapsed by the Authorized Biologist(s) at the time of survey to prevent re-entry by the desert tortoise. The Authorized Biologist(s) shall excavate all potentially suitable burrows in accordance with the handling protocol outlined in the Handling Guidelines (Attachment 4). If the desert tortoise is active above-ground, a final survey for the desert tortoise shall occur no more than 48 hours before the onset of surface-disturbing activities.
- 7.6. Pre-construction Sweeps. The Biological Monitor(s) or Authorized Biologist(s) shall conduct a sweep before construction, to ensure that desert tortoises are absent from the Project Area. Additionally, the Biological Monitor(s) or Authorized Biologist(s) shall be on site during construction of the desert tortoise exclusion fencing and all Covered Activities. If handling of a desert tortoise is required, the Designated Representative(s) or Biological Monitor(s) shall contact the on-call Authorized Biologist(s). Only an Authorized Biologist(s) shall be allowed to excavate burrows, handle, and relocate desert tortoise.
- 7.7. Temporary Fencing. Permittee shall install temporary desert tortoise exclusion fencing, with the Biological Monitor(s) or Authorized Biologist(s) present and prior to ground-disturbing activities. Permittee shall install the temporary desert tortoise exclusionary fence around any active construction area, lay down area, and storage area (whether on-site or off-site). The Biological Monitor(s) or Authorized Biologist(s) should inspect the temporary desert tortoise exclusionary fencing daily for any gaps/breaches or required repairs (except on weekends and holidays).
- 7.8. Desert Tortoise Fencing Maintenance. The Biological Monitor(s) or Authorized Biologist(s) shall inspect the desert tortoise fencing during the Covered Activities, at the end of each working day, and during and after major rainfall events to ensure the desert tortoise is prohibited from entering the site. Desert tortoises are often active during rainfall and have been known to enter Project sites on fences that have been knocked down by weather events. If the fence is compromised, repairs shall be completed at that time.
- 7.9. Vehicle Inspection. Workers shall inspect for desert tortoise under vehicles and

equipment before the vehicles and equipment are moved. If a desert tortoise is present, the worker shall contact the Biological Monitor(s) or Authorized Biologist(s) and wait for the desert tortoise to move unimpeded to a safe location OR the Authorized Biologist(s) shall translocate the desert tortoise as described in Condition of Approval 7.2 of this ITP before moving vehicles and equipment.

- 7.10. Minimization of Vegetation Removal. Permittee shall minimize vegetation removal associated with construction activities to the fullest extent possible. The Biological Monitor(s) or Authorized Biologist(s) shall review and approve or deny any grubbing or clearing of vegetation.
- 7.11. Desert tortoise Observations. All personnel on the Project site shall immediately report all encounters with desert tortoise to the Biological Monitor(s) or Authorized Biologist(s). If a desert tortoise is identified during Project activities, the Permittee shall immediately stop all work in the area and contact the Biological Monitor(s) or Authorized Biologist(s). The Biological Monitor(s) or Authorized Biologist(s) shall allow the desert tortoise to escape unimpeded or contact the Authorized Biologist(s). The Authorized Biologist(s) shall relocate the desert tortoise as described in this ITP, the Handling Guidelines (Attachment 4), and the approved Translocation Plan. Permittee shall not resume work until the Authorized Biologist(s) has relocated the animal or allowed it to move outside the Project Area on its own. The Designated Representative, Biological Monitor(s), or Authorized Biologist(s) shall immediately, or no later than noon on the next business day, notify the CDFW Regional Representative Heather Weiche of any desert tortoise observations. Notification to CDFW shall be via telephone and e-mail, followed by a written report. Notification and the written report shall include the date, location, and circumstances of the observation, the name of the Authorized Biologist(s) that relocated the individual, and the location (including GPS coordinates) where the individual was moved.
- 7.12. Ambient Air Temperature. The Authorized Biologist(s) shall ensure that desert tortoises are not captured, moved, transported, released, or purposefully caused to leave their burrow for any reason when the ambient air temperature is above 95 degrees Fahrenheit (35 degrees Celsius). The Authorized Biologist(s) shall ensure that no desert tortoise is captured if the ambient air temperature is anticipated to exceed 95 degrees Fahrenheit before handling or processing can be completed. If the ambient air temperature exceeds 95 degrees Fahrenheit during handling or processing, the Authorized Biologist(s) shall ensure the desert tortoise is kept in a shaded environment with a temperature that does not exceed 95 degrees Fahrenheit, and that the individual is not released until ambient air temperature declines to below 95 degrees Fahrenheit. Desert tortoises moved during inactive periods shall be monitored by the Authorized Biologist(s) for at least two days after placement in the new burrows to ensure their safety. During relocation, the Authorized Biologist(s) may hold a captured desert tortoise overnight and move them the following morning within these temperature constraints.

- 7.13. Desert Tortoise Re-hydration. If a desert tortoise voids its bladder as a result of being handled, the Authorized Biologist(s) shall rehydrate the individual(s). The Authorized Biologist(s) shall rehydrate the desert tortoise at the location where the individual(s) was or were captured, or the location where the individual(s) is or will be relocated. The Authorized Biologist(s) shall rehydrate the desert tortoise by placing it in a tub with a clean plastic disposable liner. The Authorized Biologist(s) shall add water to the lined tub while ensuring that the water level is not higher than the lower jaw of the desert tortoise. The Authorized Biologist(s) shall rehydrate each desert tortoise individually for a minimum of 10 to 20 minutes. The Authorized Biologist(s) shall place the lined tub in a quiet protected area during rehydration. After each tortoise is rehydrated the water shall be emptied and a new plastic disposable liner placed in the tub.

Other Minimization Measure:

- 7.14. Trench Inspection. The Biological Monitor(s) or Authorized Biologist(s) shall inspect all open holes and trenches within the Project Area at the beginning, middle, and end of each day for any trapped animals. To prevent inadvertent entrapment of Covered Species or any other animals, the Biological Monitor(s) or Authorized Biologist(s) shall 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 enter and become entrapped. Permittee shall provide escape ramps in holes greater than two feet deep that do not hold water or other material, to allow animals to escape. Before holes or trenches are filled, the Biological Monitor(s) or Authorized Biologist(s) shall thoroughly inspect them for trapped animals. If any worker discovers that Covered Species have become trapped, they shall halt Project Activities and notify the Authorized Biologist(s) immediately. Project workers and the Biological Monitor(s) or Authorized Biologist(s) shall allow the Covered Species to escape unimpeded if possible, or the Authorized Biologist(s) shall move the Covered Species out of harm's way before allowing work to continue. The use of temporary fencing, around the perimeter of trenches or holes is an acceptable minimization measure as long as the trenches or holes are inspected at least once a day.
- 7.15. Care of Injured Covered Species. If a Covered Species is injured or killed as a result of Project-related activities or if a Covered Species is otherwise found dead within the Project Area, Permittee shall immediately notify the Authorized Biologist(s) as described in Conditions of Approval 7.11. The Authorized Biologist(s) shall immediately take injured individuals to a CDFW-approved wildlife rehabilitation or veterinary facility. Permittee shall identify the facility prior to the start of Covered Activities. Permittee shall bear any costs associated with the care or treatment of such injured Covered Species.
- 7.16. Vehicular Traffic Restrictions. Permittee shall restrict Project-related vehicle traffic to

established roads and the delineated Project Area; cross-country (off-road) vehicle travel is prohibited and signs shall be posted to this affect during maintenance activities. If a Covered Species is encountered, drivers shall stop, wait for the Covered Species to move off the road, and immediately notify the Biological Monitor(s) or Authorized Biologist(s) of the Covered Species location. If handling of a Covered Species is required the Biological Monitor(s) shall notify the Authorized Biologist(s) and shall halt Project-related activities immediately.

8. Habitat Management Land Acquisition:

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 5.46 acres of Covered Species credits from a CDFW-approved mitigation or conservation bank (Condition of Approval 8.2) OR shall provide for both the permanent protection and management of 5.46 acres of Habitat Management (HM) lands pursuant to Condition of Approval 8.3 below and the calculation and deposit of the management funds pursuant to Condition of Approval 8.4 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.

8.1. Cost Estimates. CDFW has estimated the cost of acquisition, protection, and perpetual management of the HM lands as follows:

8.1.1. Land acquisition costs for HM lands identified in Condition of Approval 8.3 below, estimated at \$1458.00/acre for 5.46 acres: **\$7,960.68**. Land acquisitions costs are estimated using local fair market current value for lands with habitat values meeting mitigation requirements;

8.1.2. Start-up costs for HM lands, including initial site protection and enhancement costs as described in Condition of Approval 8.3.5 below, estimated at \$290.00/acre for 5.46 acres: **\$1,583.40**;

8.1.3. Interim management period funding as described in Condition of Approval 8.3.6 below, estimated at **\$3,822.00**;

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8.1.4. Long-term management funding as described in Condition of Approval 8.4 below, estimated at \$1490.00/acre for 5.46 acres: **\$8,135.40** plus a ten percent contingency fee as described in Condition of Approval 9.4.2.2.1 below: **\$813.54** for a total of **\$8,948.94**. Long-term management funding is estimated initially for the purpose of providing Security to ensure implementation of HM lands management.

8.1.5. 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 8.5, estimated at **\$3,000.00**.

8.2. Covered Species Credits. Permittee shall purchase 5.46 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 9 below.

OR:

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

8.3.1. 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);

- 8.3.2. 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 5B) identifying the land to be purchased or property interest conveyed to an approved entity as mitigation for the Project's impacts on Covered Species;
- 8.3.3. HM Lands Documentation. Provide a recent preliminary title report, initial hazardous materials survey report, and other necessary documents (see Attachment 5A). 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;
- 8.3.4. 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.
- 8.3.5. 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;
- 8.3.6. 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. 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.

- 8.4. Endowment Fund. The Permittee shall ensure that the HM lands are perpetually managed, maintained, and monitored by the long-term land manager as described in this ITP, the conservation easement, and the final management plan approved by CDFW. After obtaining CDFW approval of the HM lands, Permittee shall provide long-term management funding for the perpetual management of the HM lands by establishing a long-term management fund (Endowment). The Endowment is a sum of money, held in a CDFW-approved fund that 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 8.3.5. 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.

- 8.4.1. 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).;

8.4.2. 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 (hereinafter "PAR") 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.

8.4.2.1. 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.

8.4.2.2. 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:

8.4.2.2.1. 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.

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

8.4.2.2.3. 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.

8.4.3. 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.

- 8.5. 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. 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:

- 9.1. Security Amount. The Security shall be in the amount of **\$25,315.00**. This amount is based on the cost estimates identified in Condition of Approval 8.1 above.
- 9.2. Security Form. The Security shall be in the form of an irrevocable letter of credit (see Attachment 6) or another form of Security approved in advance in writing by CDFW's Office of the General Counsel.
- 9.3. 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.
- 9.4. Security Holder. The Security shall be held by CDFW or in a manner approved in advance in writing by CDFW.
- 9.5. Security Transmittal. If CDFW holds the Security, Permittee shall transmit it to CDFW with a completed Mitigation Payment Transmittal Form (see [Attachment 7]) or by way of an approved instrument such as escrow, irrevocable letter of credit, or other.
- 9.6. 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.
- 9.7. 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 Biological Monitor(s) or Authorized Biologist(s) 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 1266
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 (2081-2014-072-06) in a cover letter and on any other associated documents.

Original cover with attachment(s) to:

Leslie MacNair
Acting Regional Manager
California Department of Fish and Wildlife
3602 Inland Empire Blvd., Suite C-220
Ontario, CA 91764
Telephone (909) 466-8462
FAX (909) 948-4358

and a copy to:

Habitat Conservation Planning Branch
California Department of Fish and Wildlife
Attention: CESA Permitting Program
1416 Ninth Street, Suite 1266
Sacramento, CA 95814

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

Heather Weiche, Environmental Scientist
California Department of Fish and Wildlife
3602 Inland Empire Blvd. Suite C220
Ontario, CA 91764
Telephone (909) 980-8607
Fax (909) 481-2945

Compliance with California Environmental Quality Act (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 set forth in the Mitigated Negative Declaration for the SR-247 Standard Shoulder Construction Project State Clearing House Number (SCH No.; 2012071070) certified by the lead agency California Department of Transportation, January 25, 2013.

This ITP, along with CDFW's related CEQA findings, which are available as a separate document, provide evidence of the 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 California Endangered Species Act (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, SR-247 Shoulder Widening and Rumble Strip Projects, Mitigated Negative Declaration, the results consultations, and the administrative record of proceedings, that issuance of this ITP

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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 acquisition; (2) establishment of avoidance zones; (3) worker education; and (4) Quarterly 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 5.46 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 | Location Map |
| ATTACHMENT 1 | Mitigation Monitoring and Reporting Program |
| ATTACHMENT 2 | Desert Tortoise Monitor and Biologist Responsibilities and Qualifications |
| ATTACHMENT 3 | United States Fish and Wildlife Service (USFWS) Desert Tortoise (Mojave Population) Field Manual 2009 |
| ATTACHMENT 4 | United States Fish and Wildlife Service Chapter 7. Guidelines for Handling Desert Tortoise-Mojave Population and Their Eggs, 2009. |
| ATTACHMENT 5A | Habitat Management Lands Checklist |
| ATTACHMENT 5B | Proposed Lands for Acquisition Form |
| ATTACHMENT 6 | Letter of Credit Form |
| ATTACHMENT 7 | Mitigation Payment Transmittal Form |

ISSUED BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

on 6/3/15



Leslie MacNair,
Acting Regional Manager
Inland Deserts Region
California Department of Fish and Wildlife

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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: Scott Quinnell Date: 6-25-15

Printed Name: Scott Quinnell Title: Senior Environmental Planner

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DEPARTMENT OF THE ARMY
LOS ANGELES DISTRICT, U.S. ARMY CORPS OF ENGINEERS
VENTURA FIELD OFFICE
2151 ALESSANDRO DRIVE, SUITE 110
VENTURA, CA 93001

May 11, 2015

Scott Quinnell, Senior Environmental Planner
California Department of Transportation, District 8
464 West 4th Street, 6th Floor
San Bernardino, California 92401-1400

SUBJECT: Approved Jurisdictional Determination regarding geographic jurisdiction

Dear Mr. Quinnell:

I am responding to your request (File No. SPL-2015-00037-TS) dated January 6, 2015, for an approved Department of the Army jurisdictional determination (JD) for the State Route (SR) 247 Safety Upgrades project site (Lat/Long: 34.32065095°N, -116.47914466°W) located near the town of Landers, San Bernardino county, California.

The Corps' evaluation process for determining whether or not a Department of the Army permit is needed involves two tests. If both tests are met, a permit would likely be required. The first test determines whether or not the proposed project is located within the Corps' geographic jurisdiction (i.e., it is within a water of the United States). The second test determines whether or not the proposed project is a regulated activity under Section 10 of the Rivers and Harbors Act or Section 404 of the Clean Water Act. This evaluation pertains only to geographic jurisdiction.

Based on available information, I have determined waters of the United States do not occur on the project site. The basis for our determination can be found in the enclosed Approved Jurisdictional Determination (JD) form(s).

The aquatic resource(s) identified as unnamed tributaries to Mercer, Means or Emerson dry lake(s) in project documentation you provided is are intrastate isolated waters with no apparent interstate or foreign commerce connection. As such, these aquatic resources are not currently regulated by the Corps of Engineers. This disclaimer of jurisdiction is only for Section 404 of the Clean Water Act. Other federal, state, and local laws may apply to your activities. In particular, you may need authorization from the California State Water Resources Control Board, the California Department of Fish and Wildlife, and/or the U.S. Fish and Wildlife Service.

This letter includes an approved jurisdictional determination for the Caltrans SR 247 Safety Upgrades project site. If you wish to submit new information regarding this jurisdictional determination, please do so within 60 days. We will consider any new information so submitted and respond within 60 days by either revising the prior determination, if appropriate, or reissuing the prior determination. If you object to this or any revised or reissued jurisdictional determination, you may request an administrative appeal under Corps regulations at 33 CFR Part

331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you wish to appeal this decision, you must submit a completed RFA form within 60 days of the date on the NAP to the Corps South Pacific Division Office at the following address:

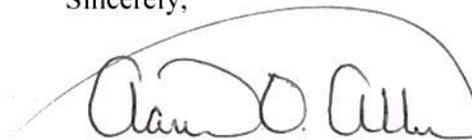
Tom Cavanaugh
Administrative Appeal Review Officer
U.S. Army Corps of Engineers
South Pacific Division, CESPDPDS-O, 2042B
1455 Market Street
San Francisco, California 94103-1399

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5 (see below), and that it has been received by the Division Office by **July 11, 2015**.

This determination has been conducted to identify the extent of the Corps' Clean Water Act jurisdiction on the particular project site identified in your request, and is valid for five years from the date of this letter, unless new information warrants revision of the determination before the expiration date. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work.

Thank you for participating in the regulatory program. If you have any questions, please contact Theresa Stevens, Ph.D. at 805-585-2146 or via e-mail at theresa.stevens@usace.army.mil. Please help me to evaluate and improve the regulatory experience for others by completing the customer survey form at http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey.

Sincerely,

A handwritten signature in black ink, appearing to read "Aaron O. Allen". The signature is written in a cursive style with a large, sweeping arch over the first name.

Aaron O. Allen, Ph.D.
Chief, North Coast Branch

Enclosure(s) Approved JD Forms

**NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND
REQUEST FOR APPEAL**

Applicant: Caltrans District 8 SR 247 Safety Improvements		File Number: SPL-2015-00037-TS	Date: May 11, 2015
Attached is:			See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A	
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B	
	PERMIT DENIAL	C	
x	APPROVED JURISDICTIONAL DETERMINATION	D	
	PRELIMINARY JURISDICTIONAL DETERMINATION	E	

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/cecw/pages/reg_materials.aspx or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

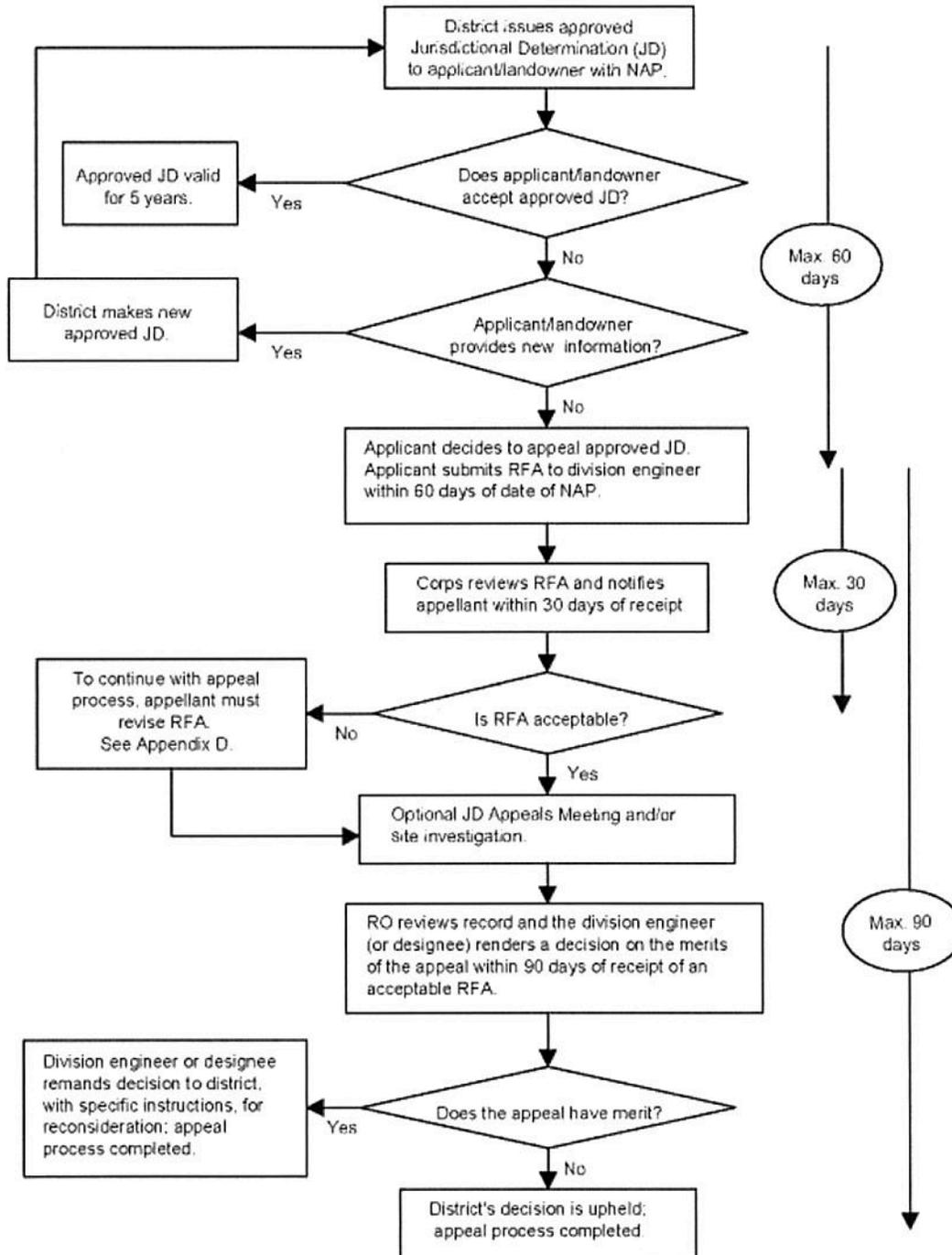
If you have questions regarding this decision and/or the appeal process you may contact:

If you only have questions regarding the appeal process you may also contact: Thomas J. Cavanaugh
Administrative Appeal Review Officer,
U.S. Army Corps of Engineers
South Pacific Division
1455 Market Street, 2052B
San Francisco, California 94103-1399
Phone: (415) 503-6574 Fax: (415) 503-6646
Email: thomas.j.cavanaugh@usace.army.mil

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

_____	Date:	Telephone number:
Signature of appellant or agent.		

Administrative Appeal Process for Approved Jurisdictional Determinations



Appendix C

§ 331.5 Criteria.

(a) *Criteria for appeal* —(1) *Submission of RFA*. The appellant must submit a completed RFA (as defined at §331.2) to the appropriate division office in order to appeal an approved JD, a permit denial, or a declined permit. An individual permit that has been signed by the applicant, and subsequently unilaterally modified by the district engineer pursuant to 33 CFR 325.7, may be appealed under this process, provided that the applicant has not started work in waters of the United States authorized by the permit. The RFA must be received by the division engineer within 60 days of the date of the NAP.

(2) *Reasons for appeal*. The reason(s) for requesting an appeal of an approved JD, a permit denial, or a declined permit must be specifically stated in the RFA and must be more than a simple request for appeal because the affected party did not like the approved JD, permit decision, or the permit conditions. Examples of reasons for appeals include, but are not limited to, the following: A procedural error; an incorrect application of law, regulation or officially promulgated policy; omission of material fact; incorrect application of the current regulatory criteria and associated guidance for identifying and delineating wetlands; incorrect application of the Section 404(b)(1) Guidelines (see 40 CFR Part 230); or use of incorrect data. The reasons for appealing a permit denial or a declined permit may include jurisdiction issues, whether or not a previous approved JD was appealed.

(b) *Actions not appealable*. An action or decision is not subject to an administrative appeal under this part if it falls into one or more of the following categories:

(1) An individual permit decision (including a letter of permission or a standard permit with special conditions), where the permit has been accepted and signed by the permittee. By signing the permit, the applicant waives all rights to appeal the terms and conditions of the permit, unless the authorized work has not started in waters of the United States and that issued permit is subsequently modified by the district engineer pursuant to 33 CFR 325.7;

(2) Any site-specific matter that has been the subject of a final decision of the Federal courts;

(3) A final Corps decision that has resulted from additional analysis and evaluation, as directed by a final appeal decision;

(4) A permit denial without prejudice or a declined permit, where the controlling factor cannot be changed by the Corps decision maker (e.g., the requirements of a binding statute, regulation, state Section 401 water quality certification, state coastal zone management disapproval, etc. (See 33 CFR 320.4(j));

(5) A permit denial case where the applicant has subsequently modified the proposed project, because this would constitute an amended application that would require a new public interest review, rather than an appeal of the existing record and decision;

(6) Any request for the appeal of an approved JD, a denied permit, or a declined permit where the RFA has not been received by the division engineer within 60 days of the date of the NAP;

(7) A previously approved JD that has been superseded by another approved JD based on new information or data submitted by the applicant. The new approved JD is an appealable action;

(8) An approved JD associated with an individual permit where the permit has been accepted and signed by the permittee;

(9) A preliminary JD; or

(10) A JD associated with unauthorized activities except as provided in §331.11.

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
INLAND DESERTS REGION
INLAND EMPIRE BLVD, SUITE C-220
ONTARIO, CA 91764



STREAMBED ALTERATION AGREEMENT
NOTIFICATION No. 1600-2014-0241-R6

CALIFORNIA DEPARTMENT OF TRANSPORTATION
STATE ROUTE (SR) 247 STANDARD SHOULDER CONSTRUCTION PROJECT

This Streambed Alteration Agreement (Agreement) is entered into between the California Department of Fish and Wildlife (CDFW) and California Department of Transportation (Permittee).

RECITALS

WHEREAS, pursuant to Fish and Game Code (FGC) section 1602, Permittee notified CDFW on December 11, 2014, that Permittee intends to complete the project described herein. CDFW sent an incomplete letter on January 12, 2015, the appropriate information was given to CDFW and a complete letter was sent on January 23, 2015.

WHEREAS, pursuant to FGC section 1603, CDFW has determined that the project could substantially adversely affect existing fish or wildlife resources and has included measures in the Agreement necessary to protect those resources.

WHEREAS, Permittee has reviewed the Agreement and accepts its terms and conditions, including the 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 located on State Route 247 (SR-247) from Handley Road to 0.1 miles north of Boone Avenue between post mile (PM) 9.6 and 20.3 near the town of Landers in the County of San Bernardino. USGS 7.5 minute quadrangles; "Bighorn Canyon" and "Landers" (USGS 1993). Longitude 34.2527 and Latitude -116.4394.

PROJECT DESCRIPTION

The project consists of upgrading the existing SR-247 by constructing an 8-foot asphalt concrete shoulder along each direction of travel on the SR-247. The project will also construct rumble strips on the existing and proposed shoulders along the SR-247 (Project). The original SR-247 was constructed with multiple Arizona crossings as well as one culvert. As part of the Project the one culvert located at 34°20'6.69"N,

-116°29'26.77"W will be replaced to fit the widening specifics; there will be no installation of rock slope protection associated with the new culvert. The Project will remove the existing 24" corrugated metal pipe and replace it with another 24" metal pipe at the culvert location. The existing 27 Arizona crossings will be slightly modified to fit the widening of the road, locations of the Arizona crossing are described in the Appendix A-Jurisdictional Area of the Natural Environmental Study. The drainage areas located within the Project area are tributaries to the Melville Dry Lake Bed, Means Dry Lake Bed and Emerson Dry Lake Bed.

PROJECT IMPACTS

Existing fish or wildlife resources the Project could substantially adversely affect include:

Native plant species: cheesebush (*Hymenoclea salsola*), shadscale (*Atriplex confertifolia*), and goldenbush (*Ericameria* species). Associated understory species included rice grass (*Achnatherum hymenoides*), Mediterranean grass (*Schismus* species), checker fiddleneck (*Amsinckia tessellata*), California dandelion (*Malacothrix californica*), small flowered blazing star (*Mentzelia albicaulis*), yellow pepper-weed (*Lepidium flavum* var. *flavum*), Fremont's pincushion (*Chaenactis fremontii*), tansy mustard (*Descurainia pinnata*), and California mustard (*Guillenia lasiophylla*).

Mammals: Merriam's kangaroo rat (*Dipodomys merriami*), white-tailed antelope ground squirrel (*Ammospermophilus leucurus*), desert wood rat (*Neotoma lepida*), and cactus mouse (*Peromyscus eremicus*), Desert cottontail (*Sylvilagus audubonii*) and black-tailed jackrabbit (*Lepus californicus*), coyote (*Canis latrans*), gray fox (*Urocyon cinereargenteus*), desert kit fox (*Vulpes macrotis*), bobcat (*Felis rufus*), and mountain lion (*Felis concolor*) **Reptiles:** side-blotched lizard (*Uta stansburiana*), western whiptail (*Cnemidophorus tigris*), desert iguana (*Dipsosaurus dorsalis*), zebra-tailed lizard (*Urosaurus gratioisus*), and desert horned lizard (*Phrynosoma platyrhinos*), coachwhip (*Masticophis flagellum*), Mojave patchnose snake (*Salvadora hexalepis mojavensis*), Great Basin gopher snake (*Rhinocheilus lecontei lecontei*), Sonoran ground snake (*Sonora semiannulata*), Mojave shovelnose snake (*Chionactis occipitalis occipitalis*), desert night snake (*Hypsiglena torquata deserticola*), Mojave Desert sidewinder (*Crotalus cerastes*), and speckled rattlesnake (*Crotalus mitchelli*). **Bird:** common raven (*Corvus corax*), house finch (*Carpodacus mexicanus*), mourning dove (*Zenaida macroura*), horned lark (*Eremophila alpestris*), rock wren (*Salpinctes obsoletus*), black-throated sparrow (*Amphispiza bilineata*), and greater roadrunner (*Geococcyx californianus*), brewer's sparrow (*Spizella brewerii*), sage sparrow (*Amphispiza bellii*), yellow-rumped (Audubon's) warbler (*Denroica coronata audoboni*), and American pipit (*Anthis rubescens*), red-tailed hawk (*Buteo jamaicensis*), golden eagle (*Aquila chrysaetos*), barn owl (*Tyto alba*), burrowing owl (*Athene cunicularia*). **Invasive Species** Seaside barley (*Hordeum marinum*), Wild oat (*Avena fatua*), Foxtail chess (*Bromus madritensis* ssp. *Rubens*), Cheat grass (*Bromus tectorum*), Seaside barley (*Hordeum marinum*), Tamarisk (*Tamarix parviflora*), Russian thistle (*Salsola tragus*), Black mustard (*Brassica nigra*), Sahara mustard (*Brassica tournefortii*), Oleander (*Nerium oleander*)

Special Status Species

Birds Western snowy plover (*Charadrius alexandrinus nivosus*), Western yellow-billed (cuckoo) *Coccyzus americanus occidentalis*, Yuma clapper rail (*Rallus longirostris yumanensis*), **Reptiles** Desert tortoise (*Gopherus agassizi*), **Mammals** Mohave ground squirrel (*Spermophilus Mohavensis*).

The adverse effects the Project could have on the fish or wildlife resources identified above include: permanent impacts to 0.33 acres of jurisdictional areas.

Detailed information of the species impacted and measures to reduce these impacts can be found in the Mitigated Negative Declaration State Route 247 Shoulder Widening and Rumble Strip Project (State Clearing House Number: 2012071070).

MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES

1. Administrative Measures

Permittee shall meet each administrative requirement described below.

- 1.1 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.
- 1.2 Providing Agreement to Persons at Project Site. Permittee shall provide copies of this Agreement and any extensions and amendments to the Agreement to a representative of all entities 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.
- 1.3 Notification of Conflicting Provisions. Permittee shall notify CDFW if the Permittee determines or learns that a provision in this Agreement might conflict with a provision imposed on the project by another local, state, or federal agency. In that event, CDFW shall contact Permittee to resolve any conflict.
- 1.4 Compliance with other Agencies. This Agreement does not relieve the Permittee of responsibility for compliance with applicable federal, state, or local laws, ordinances or grant conditions. A consummated Agreement does not constitute CDFW endorsement of the proposed operation, or assure CDFW concurrence with permits and/or grant conditions required from other agencies.

- 1.5 Project Site Entry. Permittee agrees that CDFW personnel may enter the project site at any time to verify compliance with this Agreement. CDFW personnel shall notify Permittee in advance as practicable to facilitate site access and shall comply with all site safety procedures.
- 1.6 Personnel Compliance On Site. If the Permittee or any employees, agents, contractors and/or subcontractors violate any of the terms or conditions of this Agreement, all work shall terminate immediately and shall not proceed until CDFW has been contacted and the issue remedied, or CDFW has taken all of its legal actions.
- 1.7 Pre-Project Briefing. A pre-construction meeting/briefing shall be held involving all the contractors and subcontractors, concerning the conditions in this Agreement.
- 1.8 Notification Prior to Work. The Permittee shall notify CDFW, in writing, at least five days prior to the start of any construction activities. Notification shall be either: a) submitted to the CDFW Regional Office, at 3602 Inland Empire Boulevard, Suite C-220, Ontario, CA 91764, Attn: Streambed Alteration Staff; b) sent electronically to the local CDFW staff working on this project. For this notification, please reference, Agreement No. 1600-2014-0241-R6, in the subject line.
- 1.9 Other Project Documents Submitted to CDFW. Any other required reports, survey results, and other project documentation shall be submitted by mail or via e-mail to the current CDFW staff associated with this project. When no immediate CDFW staff is available to receive these documents, then they shall be submitted to the CDFW regional office, at 3602 Inland Empire Boulevard, Suite C-220, Ontario, CA 91764, Attn: Streambed Alteration Staff, or, may be sent electronically to the CDFW inbox via email at: AskRegion6@wildlife.ca.gov. For all documents, please reference, Agreement No. 1600-2014-0241-R6, in the subject line.

2. Avoidance and Minimization Measures

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

Wildlife Protection

- 2.1 Designated Biologist(s). Permittee shall submit to CDFW in writing the name, qualifications, business address, and contact information of a biologist(s) (Designated Biologist(s)) before commencement of project activities (including construction and/or site preparation). Permittee shall ensure that the Designated Biologist(s) is knowledgeable and experienced in the biology, natural history, collecting, and handling of appropriate species. The Designated Biologist(s) shall be responsible for monitoring activities addressed by this Agreement, including, but not limited to all activities that result in the clearing or grading of sensitive habitat as well as grading, excavation, and/or other ground-disturbing activities in

jurisdictional areas. The Designated Biologist(s) shall flag the limits of grading and the jurisdictional areas, perform necessary surveys, and take photographs during the construction process, as required by this Agreement. Permittee shall obtain CDFW approval of Designated Biologist(s) in writing before commencement of project activities (Including site preparation), and shall also obtain approval in advance in writing if a Designated Biologist must be changed.

- 2.2 On-site Designated Biologist(s) with Stop work Authorization. The Designated Biologist(s) shall have the authority to immediately stop any project activities; if a State listed Species of Special Concern, or threatened or endangered species are found within the Project work area. The Designated Biologist(s) shall immediately stop work within the Project work area and notify CDFW in writing, via email (heather.weiche@wildlife.ca.gov), and by calling Heather Weiche, Environmental Scientist at (909) 980-8607 and the Regional Office at (909) 484-0167. Consultation with CDFW is required prior to cancellation of a stop work order.
- 2.3 Worker Environmental Awareness Program. Prior to any construction activities on the project site, the Permittee will implement a Worker Environmental Awareness Program (WEAP) to educate on-site workers about sensitive environmental issues associated with the Project. The program will be administered to all on-site personnel, including the Permittee's personnel, contractors, and all subcontractors, prior to the employee's commencing work on the site. The WEAP will include but not be limited to protected species that have potential to occur within the Project site, including the Mojave desert tortoise, burrowing owl, desert kit fox, as well as nesting birds, plants, and other wildlife species.
- 2.4 Best Management Practices. Permittee shall actively implement Best Management Practices (BMPs) to prevent erosion and discharge of sediment and pollutants into streams during Project activities. BMPs shall be monitored and repaired if necessary to ensure maximum control of erosion, sediment, and pollution. Permittee shall prohibit the use of erosion control materials potentially harmful to fish and wildlife species, such as welded-weave monofilament netting (erosion control matting) or similar material, within and adjacent to CDFW jurisdictional areas. All fiber rolls, straw wattles, and/or hay bales utilized within and adjacent to the Project site shall be certified free of nonnative plant materials. Fiber rolls or erosion control mesh shall be made of loose-weave mesh that is not fused at the intersections of the weave, such as jute, or coconut (coir) fiber, or other products without welded weaves. Non-welded weaves reduce entanglement risks to wildlife by allowing animals to push through the weave, which expands when spread.
- 2.5 Work Period in Dry Weather Only. Work within the desert dry washes shall be restricted to periods of no stream flow and dry weather. Precipitation forecasts and potential increases in stream flow shall be considered when planning construction activities. Construction activities shall cease and all necessary erosion control measures shall be implemented prior to the onset of precipitation. Construction activities halted due to precipitation may resume when precipitation ceases and

the National Weather Service 72 hour weather forecast indicates a 20% or less chance of precipitation, provided no work occurs in the stream bed if water is flowing. If a construction phase may cause the introduction of sediments into the stream: 1) no phase of the project shall be started in May or November of any year, unless all work for that phase and all associated erosion control measures are completed prior to the onset of precipitation; and 2) no phase of the project shall commence unless all equipment and materials are removed from the channel at least 12 hours prior to the onset of precipitation and all associated erosion control measures are in place prior to the onset of precipitation. No work shall occur during a dry-out period of 24 hours after the above referenced wet weather. Weather forecasts shall be documented upon request by CDFW.

- 2.6 Post Storm Event Inspection. After any storm event, Permittee shall inspect all sites scheduled to begin or continue construction within the next 72 hours. Corrective action for erosion and sedimentation shall be taken as needed. National Weather Service 72 hour weather forecasts shall be reviewed prior to the start of any phase of the project that may result in sediment runoff to the stream, and construction plans adjusted to meet this requirement. The National Weather Service forecast can be found at: <http://www.nws.noaa.gov>

Desert Tortoise and Mohave Ground Squirrel

- 2.7 Check for Wildlife in Pipes / Construction Materials. Permittee shall visually check all sections of pipe / construction materials for the presence of wildlife sheltering within them prior to the pipe sections being placed in the trench and attached together, or shall have the ends capped while stored on site so as to prevent wildlife from entering. After attachment of the pipe sections to one another, whether in the trench or not, the exposed end(s) of the pipeline shall be capped at the end of each day during construction to prevent wildlife from entering and being trapped within the pipeline.
- 2.8 Escape Ramp in Trench. At the end of each work day, Permittee shall place an escape ramp at each end of the open trench to allow any animals that may have become entrapped in the trench to climb out overnight. The ramp may be constructed of either dirt fill or wood planking or other suitable material that is placed at an angle no greater than 30 degree.
- 2.9 Pre-construction sweeps. The Permittee shall implement sweeps within the proposed project site, the sweeps shall be conducted before construction, to ensure that desert tortoises are absent from the project area. Additionally, biological monitors will be on site during construction of the desert tortoise exclusion fencing. Upon completion of construction of the desert tortoise exclusion fencing, an on-call biologist will be available should desert tortoise be encountered during construction activities.

Nesting Birds

- 2.10 Nesting Bird/Burrowing Owl Plan. **No later than September 1, 2015**, Permittee shall submit to CDFW for review and approval a Nesting Bird/Burrowing Owl Plan (NBP) that includes project specific avoidance and minimization measures to ensure that impacts to nesting birds do not occur and that the project complies with all applicable laws related to nesting birds and birds of prey, including Burrowing Owl. The NBP shall include at a minimum: monitoring protocols; survey timing and duration; the creation, maintenance, and submittal to CDFW of a bird-nesting log; and Project-specific avoidance and minimization measures. Avoidance and minimization measures shall include, at a minimum: project phasing and timing, monitoring of project-related noise, sound walls, and buffers. The NBP shall be submitted to CDFW via email to: Heather.Weiche@wildlife.ca.gov
- 2.11 Work Period and Time Limits - Bird Nesting Surveys. Migratory non-game native bird species are protected by international treaty under the federal Migratory Bird Treaty Act (MBTA) of 1918, as amended (16 U.S.C. 703 et seq.). In addition, Sections 3503, 3503.5, and 3513 of the FGC prohibit the take of all birds and their nests. The Designated Biologist(s) shall survey the entirety of the project site, and within a recommended 500-foot buffer (with the exception of inaccessible private properties) surrounding the project site for both diurnal and nocturnal nesting birds, prior to commencing project activities (including construction and/or site preparation). Surveys shall be conducted by the Designated Biologist(s) at the appropriate time(s) of day, no more than three days prior to commencement of project activities. Documentation of surveys and findings shall be submitted to CDFW for review prior to conducting project activities. If no nesting activities were observed, project activities may begin. If an active bird nest is located, the Designated Biologist(s) shall implement and monitor specific avoidance and minimization measures as specified in the CDFW-approved NBP (refer to Measure 2.11).

Burrowing Owls

- 2.12 Burrowing Owl Habitat Assessment. Habitat assessments, surveys, impact assessments, and all associated reports shall be completed following the recommendations and guidelines provided within the *Staff Report on Burrowing Owl Mitigation* (Department of Fish and Game, March 2012). It is the responsibility of the Project proponent to ensure compliance with these laws for the entire Project site.

Prior to the initiation of any Project activities, Permittee shall conduct a burrowing owl habitat assessment. The assessment shall be conducted by a biologist knowledgeable of burrowing owl habitat, ecology, and field identification of the species and burrowing owl sign and in accordance with the attached *Staff Report on Burrowing Owl Mitigation* (Department of Fish and Game, March 2012). The assessment shall consist of walking the entire Project site and adjoining areas

within 150 meters, including areas that may be indirectly impacted by the Project, to identify the presence of burrowing owl habitat. A report summarizing the results of the habitat assessment shall be submitted to CDFW in accordance with the Nesting Bird/Burrowing Owl plan, following the completion of the assessment and shall include all information as outlined in Appendix C of the *Staff Report on Burrowing Owl Mitigation* (Department of Fish and Game, March 2012). Note that Burrowing Owl habitat assessments dated more than one year prior to the construction start date will not be accepted by CDFW. If no suitable habitat is found on-site, no additional surveys are necessary. If suitable habitat is found onsite, burrowing owl surveys shall be conducted by a qualified biologist during the breeding season of February 1 through September 30 in accordance with the attached *Staff Report on Burrowing Owl Mitigation* (Department of Fish and Game, March 2012). Survey results shall be submitted to CDFW within 30 days of completion of surveys following the guidelines provided in Appendix D of the *Staff Report on Burrowing Owl Mitigation* (Department of Fish and Game, March 2012). If surveys confirm occupied Burrowing Owl habitat in or adjoining the Project area, the Permittee shall contact CDFW and conduct an impact assessment, in accordance with *Staff Report on Burrowing Owl Mitigation* (Department of Fish and Game, March 2012), to assist in the development of avoidance, minimization, and mitigation measures, prior to commencing Project activities. Reports shall be mailed to CDFW at Heather Weiche, Environmental Scientist, at 3602 Inland Empire Boulevard Suite C-220, Ontario, California, 91764. **Please reference 1600-2014-0241-R6.**

Vegetation removal and restoration

- 2.13 Invasive Species. Permittee shall conduct project activities in a manner that prevents the introduction, transfer, and spread of invasive species, including plants, animals, and microbes (e.g., algae, fungi, parasites, bacteria, etc.), from one project site and/or waterbody to another. Prevention BMPs and guidelines for invasive plants can be found on the California Invasive Plant Council's website at: <http://www.cal-ipc.org/ip/prevention/index.php> and for invasive mussels and aquatic species can be found at the Stop Aquatic Hitchhikers website: <http://www.protectyourwaters.net/>.
- 2.14 Non-native plant removal: The Permittee shall remove any non-native vegetation from the work area and shall dispose of it in a manner and a location which prevents its reestablishment.
- 2.15 Protection of Native Plants. Permittee shall flag or otherwise mark native plant species within the vicinity of invasive plants scheduled for control or eradication.
- 2.16 Pre-project vegetation surveys. No more than 30 days prior to the initiation of any Project activities, the Permittee shall submit to CDFW a survey of the proposed Project areas and a 150-foot buffer zone. These surveys shall include the following

information: (A) a description of the proposed Project; (B) a summary of vegetation present, including species present and percent cover; and (C) any proposed avoidance/minimization measures that will be employed to protect native species. If the pre-project vegetation surveys identify any sensitive or rare plant species, the Permittee shall contact CDFW **via email at: Heather.Weiche@wildlife.ca.gov**

- 2.17 Temporary Storage Areas. All temporary staging areas, storage areas, and access roads involved with this project shall occur within the permanent impacted area (future pavement, median, on- and off ramps, interchanges etc.).
- 2.18 Pollution and Litter. Permittee shall comply with all litter and pollution laws. All contractors, subcontractors, and employees shall also obey these laws and it shall be the responsibility of Permittee to ensure compliance.
- 2.18.1 Permittee shall not allow water containing mud, silt, or other pollutants from grading, aggregate washing, or other activities to enter a lake, streambed, or flowing stream or be placed in locations that may be subjected to high storm flows.
- 2.18.2 Spoil sites shall not be located within a lake, streambed, or flowing stream or locations that may be subjected to high storm flows, where spoil shall be washed back into a lake, streambed, or flowing stream where it will impact streambed habitat and aquatic or riparian vegetation.
- 2.18.3 Raw cement/concrete or washings thereof, asphalt, paint, or other coating material, oil or other petroleum products, or any other substances which could be hazardous to fish and wildlife resources resulting from project related activities shall be prevented from contaminating the soil and/or entering the waters of the State. These materials, placed within or where they may enter a lake, streambed, or flowing stream by Permittee or any party working under contract or with the permission of Permittee, shall be removed immediately.
- 2.18.4 No broken concrete, cement, debris, soil, silt, sand, bark, slash, sawdust, rubbish, or washings thereof, oil or petroleum products, or other organic or earthen material from any construction or associated activity of whatever nature shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into a streambed, wash, or wetland. When operations are completed, any excess materials or debris shall be removed from the work area. No rubbish shall be deposited within 150 feet of the high water mark of any streambed or wash.
- 2.18.5 All equipment or vehicles driven and/or operated within or adjacent to a streambed or channel shall be checked daily and maintained as need to prevent deleterious material leaks.

- 2.18.6 No equipment maintenance shall be done within or near any streambed, wash, or wetland where petroleum products or other pollutants from the equipment may enter these areas under any flow.

3. Compensatory Measures

Compensatory Measures are needed to compensate for adverse impacts to fish and wildlife resources identified above that cannot be avoided or minimized, including listed species and critical habitats.

Permanent Project impacts include 0.33 acres of creosote brush scrub and Mojave Desert wash; the impacts shall be mitigated for at a ratio of 3:1. Total mitigation required for the Project includes 0.99 acres. Land that will be acquired through the 2081 Incidental Take Permit (ITP) 2081-2014-072-06 may be used for mitigation with written approval from CDFW. However, if the 2081 permit requirements did not adequately cover the mitigation needs of this 1600 agreement, the Permittee will be responsible for acquiring the appropriate mitigation within three years of the start of construction. The mitigation shall include 0.99 acres of creosote brush scrub and Mojave Desert wash, the common vegetation associated with creosote brush scrub and Mojave desert wash include; white bursage (*Ambrosia dumosa*), saltbush (*Atriplex sp.*), desert-holly (*Atriplex hymenelytra*), brittlebush (*Encelia farinosa*), ephedra (*Ephedra sp.*), hop sage (*Grayia spinosa*), creosote bush (*Larrea tridentata*), prickly pear (*Opuntia sp.*), big galleta (*Pleuraphis rigida*), mesquite (*Prosopis sp.*), indigo bush (*Psorothamnus schottii*), California buckwheat (*Eriogonum fasciculatum*), and Joshua tree (*Yuccabrevifolia*).

4. Reporting Measures

- 4.1 Notification to CNDDDB. If any sensitive species are observed on or in proximity to the project site, or during project surveys, Permittee shall submit California Natural Diversity Data Base (CNDDDB) forms and maps to the CNDDDB within five working days of the sightings, and provide the regional CDFW office with copies of the CNDDDB forms and survey maps. The CNDDDB form is available online at: <http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp>. This information shall be mailed within five days to: Department of Fish and Wildlife, California Natural Diversity Data Base, 1807, 13th Street, Suite 202, Sacramento, CA 95814, Phone (916) 324-3812. A copy of this information shall also be mailed within five days to Department of Fish and Wildlife, Inland Deserts Region at the address below under Contact Information. **Please reference SAA # 1600-2014-0241-R6.**
- 4.2 Notification of Start of Construction. Permittee shall notify CDFW, in writing, at least five (5) days prior to initiation of project activities in jurisdictional areas, and at least five (5) days prior to completion of project activities in jurisdictional areas.

Notification shall be sent to CDFW at 3602 Inland Empire Blvd., Suite-C220, Ontario, CA 91764 Attn: Lake and Streambed Alteration Team. Please reference **SAA # 1600-2014-0241-R6**.

CONTACT INFORMATION

Any communication between Permittee and CDFW shall be in writing and any communication or documentation shall be delivered to the address below by U.S. mail, fax, or email, or an alternative if Permittee or CDFW specifies by written notice to the other.

To Permittee:

Scott Quinnell
California Department of Transportation
464 West 4th Street, 6th Floor MS 822
San Bernardino, CA 92401-1400
(909) 383-6936
Scott_quinnell@dot.ca.gov

To CDFW:

Department of Fish and Wildlife
Inland Deserts Region
3602 Inland Empire Blvd, Suite-220
Attn: Heather Weiche
Notification #1600-2014-0241-R6
(909) 484-0459 Fax
Heather.Weiche@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 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 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 an amendment is necessary to protect an existing fish or wildlife resource.

The 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 "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the corresponding amendment fee identified in the current fee schedule (Cal. Code Regs., tit. 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. To request a transfer or assignment, Permittee shall submit to CDFW a completed "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the minor amendment fee identified in the current fee schedule (Cal. Code Regs., tit. 14, § 699.5).

EXTENSIONS

In accordance with FGC section 1605(b), Permittee may request one 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 "Request to Extend Lake or Streambed Alteration" form and include with the completed form payment of the extension fee identified in the current fee schedule (Cal. Code Regs., tit. 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 must submit a new notification and notification fee before beginning or continuing the project the Agreement covers (FGC section 1605, subd. (f)).

EFFECTIVE DATE

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

TERM

TERM

This Agreement shall expire on **May 1, 2020** 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 required by FGC section 1605(a)(2).

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 provisions contained herein.

FOR CALIFORNIA DEPARTMENT OF TRANSPORTATION



Mr. Scott Quinnell 5/27/15
Date

FOR DEPARTMENT OF FISH AND WILDLIFE



 Heidi Calvert 6, 25, 15
Date
Acting Environmental Program Manager

Prepared by: Heather Weiche
Environmental Scientist

Memorandum

To: **Renee Sasse,**
Office Chief Design A

Date: **April 17, 2014**

Attention: **Paul Phan,**
Project Engineer

File **08-SBd-247 PM 9.6/20.3**
No: **EA 08-0G900**
Construct Standard
Shoulders on both side

From: **DEPARTMENT OF TRANSPORTATION**
Bruce W. Kean, District 8 Materials Engineer



Subject: **Final Materials Report**

This transmittal constitutes the Materials Report for the above referenced project. Information contained herein was based on historical and field investigation for this project, documentation that accompanied your request dated November 13, 2013, and the traffic data from the Office of Forecasting dated June 21, 2011.

1.0 GENERAL

1.1 Background

A Project Initiation Proposal (PIP) No. 2830 was approved on November 17, 2005 to construct standard shoulders. The incidence of traffic collisions was investigated along this stretch of SR-247 during three years period preceding the PIP. This project was approved by HQ Office of Safety and coded for funding under its Collision Severity Reduction Project Program due to preventive safety improvements.

1.2 Proposed Improvements

According to your request, the project proposes to construct standard eight-foot shoulders on both sides of the highway, centerline rumble strip, shoulder rumble strips in both direction of SR-247 from Handley Road (PM 9.6) to 0.1 mile north of Boone Avenue (PM 20.3) in Landers, in the homestead Valley and to the north of Yucca Valley, in addition this office recommend Pre-grind existing mainline and overlay it.

1.3 Existing Facilities

State Route 247 is a two-lane conventional undivided highway that traverses desert areas of San Bernardino County, connecting SR-62 in Yucca Valley and Interstate 15 in Barstow. The alignment of SR-247 consists of long tangents bounded together by occasional curves. SR-247 within the project limits, maintains the two-lane undivided highway with shoulders varying from 1 to 8 feet in width, mostly unpaved and soft shoulder. Existing pavement was resurfaced under Maintenance CAPM project in early 2013 but transverse, longitudinal, and some block cracking re-surfaced to the top of pavement.

1.4 Climate

The project site, near Yucca Valley, lies in an arid desert region at an elevation between 3,000 and 3,400 feet above sea level. Climate in Yucca valley is characterized by short, mild winters and long, hot summers, with mean temperatures ranging from 37 °F in January to 117 °F.

The average annual rainfall is about 4-inches with most of the rainfall occurring between November and April. The area is subject to periodic drought conditions.

1.5 Geology, Terrain, and Soils

Yucca Valley has experienced high level of seismic activity, fault line cross the area. Terrain of the majority of this project is a gently sloping plane, comprised of consolidated Quaternary alluvial deposits washed down from the San Jacinto Mountains to Southwest. Soils are the product of mature weathering and decomposition of granitic rocks, modified by desert winds which have removed much of the finer material. Sieve analysis conducted on soil samples indicates a soil classification of poorly graded sands with silt, and one location showed silty sand.

2.0 EXISTING STRUCTURAL SECTIONS

A search of As-Builts revealed that the road has been resurfaced several times mostly being AC overlays and seal coats. There are limited As-Builts prior to 1977, and according to some As-Built, there are indications that SR-247 was originally a county road designed and constructed with 3” roadway mix surfacing over native soil.

According to a pavement deflection study report dated February 7, 1995 for project 00641K (SBd-247 PM 2.2/13.8) the existing pavement sections were summarized as follows:

Segment #	From	To	Direction	Existing Structural Section
1	9.70	9.90	SB	0.02’Chip Seal over 0.35’ RMAC over OG
2	10.10	10.30	NB	0.02’Chip Seal over 0.10’ DGAC over 0.27’ RMAC over OG
3	10.60	10.80	SB	0.02’Chip Seal over 0.07’ OGAC over 0.25’ RMAC over OG
4	11.12	11.33	NB	0.06’Chip Seal over 0.25’ RMAC over OG
5	11.70	11.90	SB	0.06’Chip Seal over 0.22’ RMAC over OG
6	12.24	12.45	NB	0.07’Chip Seal over 0.29’ RMAC over OG
7	12.60	12.80	SB	0.06’Chip Seal over 0.42’ RMAC over OG
8	13.11	13.32	NB	0.02’Chip Seal over 0.39’ RMAC over OG
9	13.8	20.3	NB/SB	No As-Built were found for Structural Section

* AC (Asphalt Concrete), RMAC (Road Mix Asphalt Concrete), OGAC (Open graded Asphalt Concrete) OG (Original Ground)

The following shows a list of As-Builts found for this Route within the project limits:

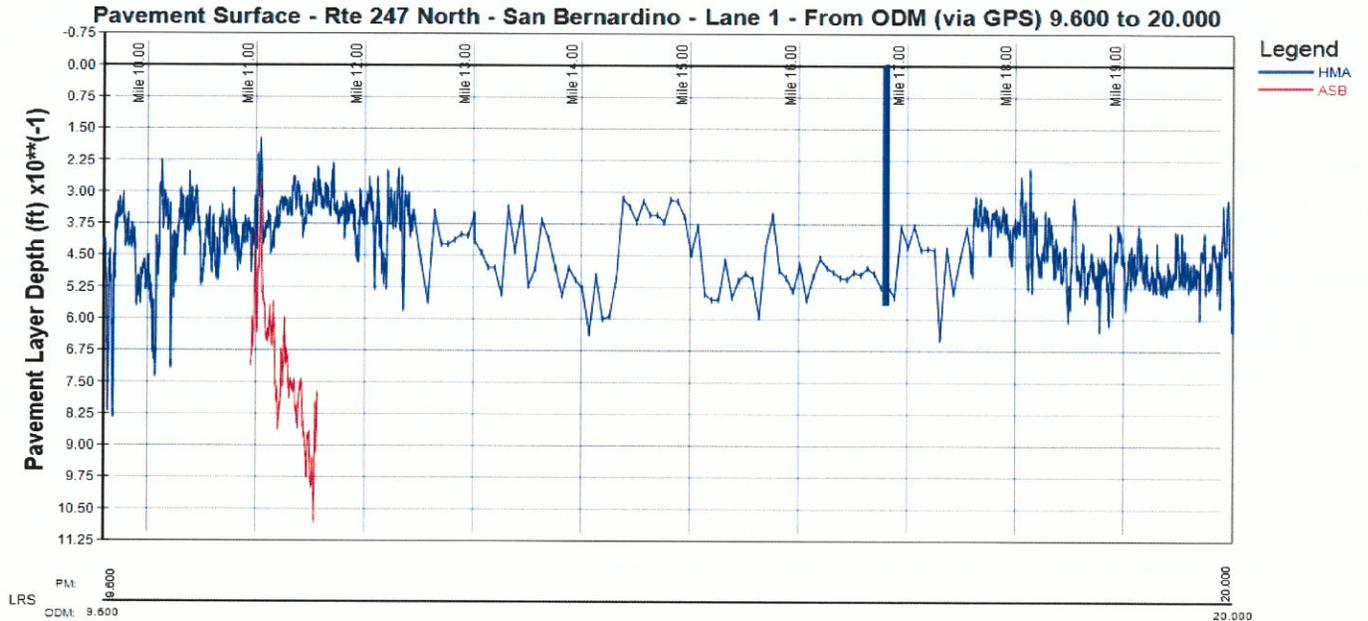
Year 2001: 0.10’ RAC-G overlay (PM 8.2/22.0)

Year 2005: 0.08’ AC Type B overlay and rubber chip seal (PM 0.5/13.2)

Ground Penetration Radar (IGPR) taken October 15, 2010 showed existing structural section within the project limit varies between 3.6” to 6.85”.

Year 2013 EA: 0P930 PM 8.5/22.1 completed January, 2013 Cold plane the existing pavement 0.1’ and overlay by 0.20’ of HMA-A.

The following chart show pavement thickness using (IGPR) taken October 15, 2010.



3.0 PAVEMENT DESIGN PARAMETERS

3.1 Traffic Index (TI) and Average Daily Traffic (ADT)

The following TI values were provided in the memorandum dated June 21, 2011 from the Office of Forecasting.

Forecasted Period*	SBd-247 (PM 9.6/20.3)	
	Mainline	Shoulder
10-Year	9.0	5.5
20-Year	10.0	6.5
40-Year	11.5	7.0

* Traffic data are based on Construction Year 2014. The current ADT is 5,400 vehicles, and the projected 20-Year ADT is 10,300 vehicles.

3.2 Pavement Design Life

a) New Shoulders:

Based on the Highway Design Manual Table 612.2, along with the traffic data provided by the Office of Forecasting the proposed new structural section for shoulders requires to be designed for a 20-Year service life.

b) Mainline Pavement Improvement

According to the HDM Topic 612.3 “Widening” when widening a roadway, the existing pavement should be rehabilitated and brought up to the same life expectancy as the new widened portion of the roadway.

3.3 Resistance Values for Basement Soils

Four Soil samples collected by Materials Branch sent to the Lab on January 28, 2014 to determine R-value. The Lab reported result between 69 and 75. Base on HDM section 614.3 (California R-Value for sub-grade soils used for pavement design should be limited to no more than 50). Based on the results, an R-Value of 50 will be selected for final pavement design.

4.0 STRUCTURAL SECTION DESIGN

According to Table 612.2 in HDM the Pavement Design Life for the shoulder on this project should be designed to 20-Year.

4.1 New Pavement

Pavement sections shown below were obtained employing CalFP version 1.1, a computer program based on design methodology as documented in Chapter 630 and chapter 610 Figure 613.5B of the Caltrans Highway Design Manual.

Shoulder 20-Year, R-value 50

Structural Section	Widening Section (PM 9.6/20.3)
Rubberized Gap Graded RHMA-G	0.10'
Hot Mix Asphalt Type A (HMA-A)	0.45'
Class 2 Aggregate Base (AB Class 2)	0.55'

4.2 Existing Mainline

Existing mainline pavement was preserved under EA: 0P930 (PM 8.5 to 22.1) and completed early 2013. Scope for that project consist of cold plane 0.1-foot and overlay by 0.20-foot of HMA-A. Shortly after the project completion a transverse, longitudinal, and some block cracking re-surfaced to the top of pavement. Due to the fact that cold plane 0.10-foot did not eliminate the existing crack and resurfaced after placing an overlay, we recommend rehabilitating the existing mainline and bring it up to the same life expectancy as the new widening area (HDM Topic 612.3) by cold plane 0.20' seal the cracks wider than ¼ inch, and overlay 0.30' HMA Type A over 0.1' RHMA Type G. If Safety project reject to fund mainline rehabilitation then Pre-Grind existing mainline, seal the cracks wider than 1/4 inch, and then overlay by 0.10-foot or 0.20-foot RHMA Type G.

5.0 FIELD INSPECTION AND MATERIALS TESTING

5.1 Visual Inspection

During field trip to the project site on January 28, 2014. Materials Branch collected four samples and sent to the lab. Soil appeared to be Silty Sand. Slope of the majority of this project are flat on both side with some soft shoulders. Existing pavement was rehabilitated early 2013 but transverse, longitudinal, and some block cracking re-surfaced to the top of pavement. Only one 24" CMP culvert within the project limits approximate (PM 16) and it appears to be very shallow from the west side of the pavement.

5.2 Laboratory Data

Four Soil Sample collected from the project site on January 28, 2014 and sent to the Laboratory to determine R-Values. The Lab reported the following results on February 24, 2014.

Sample	Approximate PM	Location	R-Value
1	19.5	30' LT of Centerline	69
2	16.2	30' LT of Centerline	71
3	12.5	40' RT of Centerline	72
4	10.2	38' RT of Centerline	75

Based on the above results, an R-Value of 50 will be selected for final pavement design.

Sieve Analysis for the above samples.

Measuring Unit	Particle Diam. (mm)	Sieve Size/No.	Passing Percentage			
			No.1	No.2	No.3	No.4
Inches	76.2	3"				
	63.5	2 1/2"				
	50.8	2"				
	38.1	1 1/2"				
	25.4	1"				
	19.05	3/4"			100.0	100.0
	12.7	1/2"			99.0	98.0
Sieve No.	9.525	3/8"	100.0	100.0	99.0	96.0
	4.75	# 4	99.0	95.0	95.0	87.0
	2.36	# 8	94.0	74.0	86.0	69.0
	1.18	# 16	85.0	54.0	72.0	47.0
	0.6	# 30	74.0	38.0	56.0	30.0
	0.3	# 50	55.0	24.0	39.0	17.0
	0.15	# 100	30.0	14.0	26.0	10.0
0.075	# 200	10.0	9.5	18.1	5.2	
	Sample ID:	14-01-04 PM 19.5	14-01-05 PM 16.2	14-01-06 PM 12.5	14-01-07 PM 10.2	

5.3 Soil Classification

	Sample 1 (PM 19.5)	Sample 2 (PM 16.2)	Sample 3 (PM 12.5)	Sample 4 (PM 10.2)
Soil Classification	Poorly graded Sand with Silt (SP-SM)	Well graded Sand with Silt (SW-SM)	Silty Sand (SM)	Poorly graded Sand with Silt (SP-SM)

5.4 Corrosion Recommendation

Section 4.1 of the Caltrans “Corrosion Guidelines” dated September 2003, consider a site to be corrosive if one or more of the following conditions exist for the representative soil and/or water samples taken at the site: Chloride concentration is 500 ppm or greater, sulfate concentration is 2000 ppm or greater, or the pH is 5.5 or less. In general, a minimum resistivity value for soil and/or water less than 1000 ohm-cm indicates the presence of high quantities of soluble salts and a higher propensity for corrosion.

Soil samples taken on the edge of existing culvert approximate (PM 16.2) showed the soil pH 8.53 and minimum resistivity 8900. This information was used as input for the AltPipe software program version 7. The following table summarize the list of pipes could be used on this project.

Pipe Diameter: 24”

Plain Galvanized Steel Pipe OR Corrugated Steel Pipe (CSP)	Plastic Pipe	Corrugated Aluminum Pipe (CAP)
Steel thickness 0.052” OR Steel thickness 0.064”	PVC Corrugated HDPE Corrugated-Type S HDPE Corrugated-Type C	Should Not be used. Soil PH is outside allowable range (Between 5.5 and 8.5)

6.0 SHOULDER DETOURS

It is currently unknown if detours will utilize the existing shoulders during construction. In the event that this is planned in the project, the designer should notify this Office; a temporary pavement section will be provided by Materials Engineering Branch for the shoulders in order to handle the temporary detour traffic for the duration of the project.

7.0 MATERIALS SPECIFICATIONS

7.1 Flexible Pavement

- For Shoulder use Hot Mix Asphalt (HMA) Type A with aggregate complying with the 1-inch grading and Asphalt Binder PG 64-28 M
- For Mainline and shoulder final lift use Rubberized Gap Graded RHMA-G with aggregate complying with 1/2-inch grading and Asphalt Binder PG 64-16
- Aggregate Base (AB) shall be Class 2 conforming to Section 26 of the May 2010 Standard Specifications

- Tack Coat shall be applied to the existing AC surface and between successive layers of HMA

8.0 REFERENCE

- Materials Report for EA: 0F660, prepared by the District 8 Caltrans Materials Engineering Branch, dated November 19, 2009.
- AC Pavement Deflection Study Report for project EA 00641K, prepared by the Office of Materials Engineering & Testing Services, dated February 7, 1995 (Route SBd-247 PM 2.2/13.8).
- Highway Design Manual – Sixth Edition 2006, California Department of Transportation.
- CalFP Version 1.1, a computer program for flexible pavement design.
- Ground Penetration Radar (iGPR) structural section thickness dated October 15, 2010.

If you have any questions, you may call Ali Taha of my staff at (909)806-3979, or myself at 888-2029.

BWK:AT

**CALIFORNIA DEPARTMENT OF TRANSPORTATION
PROJECT NO. 0800020175**

**Shoulder Widening
IN LANDERS, IN SAN BERNARDINO COUNTY**

Water Source Information

To be used with SSP 2-1.06B.

Water Purveyor	* Approximate Distance from Project Site	Construction Water Availability		Contact Information
		Non-potable (gallons)	Potable (gallons)	
Big Horn - Desert View	1.5 Miles Outside Project Limits SR-247 Post Mile 8.1 (water hydrant)	Unknown	Unknown	Big Horn - Desert View Water Agency 622 Jemez Trail, Yucca Valley, CA 92284 Phone: (760) 364-2315 Email: bdvwa@mindspring.com http://www.bdvwa.org/
Unkown	Within Project Limits SR-247 Post Mile 11.7 (fire station water hydrant)	Unknown	Unknown	San Bernardino County Fire Department Station 19 55481 Jessie Road, Landers, CA 92284 Phone: (760) 364-3211 http://www.sbcfire.org/default.aspx

** Potential construction water supply source within 50 miles of project site.*

The water source information shown above is for information only. The Contractor will need to conduct an independent search for construction water supply.