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DEPARTMENT OF FISH AND WILDLIFE
Inland Deserts Region
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GAVIN NEWSOM, Governor
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Sue O'Strander, Planning Manager
County of San Bernardino
385 North Arrowhead Avenue, 1st Floor
San Bernardino, CA 92415

Lear Avenue Solar Project (PROJECT)
MITIGATED NEGATIVE DECLARATION (MND)
SCH# 2024110047

Dear Ms. O'Strander:

The California Department of Fish and Wildlife (CDFW) received a Notice of Intent to Adopt an MND from the County of San Bernardino for the Project pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines[1].

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

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, § 1802.) Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the project proponent may seek related take authorization as provided by the Fish and Game Code.

PROJECT DESCRIPTION SUMMARY

Proponent: RPCA Solar 15, LLC

Objective: The objective of the Project is to construct and operate the Lear Avenue Solar Project (Project), a single-axis tracker ground-mounted photovoltaic (PV) community solar and battery energy storage system (BESS) with up to 9.9 megawatts of alternating current (MWac) in capacity on 62 acres of an 80-acre parcel on undeveloped land. Primary Project activities include construction and operation of a 9.9-MW PV energy generation facility and a BESS facility.

Location: The Project Site is in southern San Bernardino County and is approximately 0.75-miles north of the City of Twentynine Palms generally located at the southeast corner

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

of the intersection of Mesa Drive and Lear Avenue. The Assessor's Parcel Number is 0612-131-01 and coordinates of the Project site are located at Latitude 34.177497 and Longitude -116.149167.

Timeframe: Project construction is anticipated to be completed over a period of approximately nine months, beginning as early as January 2025 and ending as early as October 2025.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the County of San Bernardino in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document.

I. Environmental Setting and Related Impact Shortcoming

Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS?

COMMENT 1:

Section: MND Section IV. BIOLOGICAL RESOURCES, Page 39

Issue: CDFW is concerned that the MND has not accurately described or fully established the biological resources present onsite, limiting the CEQA Lead Agency's and CFDW's ability to analyze the project's potential impacts, avoidance, and/or mitigation measures on candidate, sensitive, or special status species. The MND relies on non-specific surveys conducted concurrently for multiple species. This approach to surveys may fail to adequately inventory the full breadth of species, habitat, or burrows and therefore, the project may have possible significant impacts to candidate, protected furbearing mammals, or special status species including western burrowing owl (*Athene cunicularia*), desert kit fox (*Vulpes macrotis arsipus*), and American badger (*Taxidea taxus*).

Specific impact: Potential project impacts to candidate, protected furbearing mammals, or special status species may be mischaracterized, resulting in avoidable, unminimized, or unmitigated impacts not analyzed by the MND.

Why impact would occur: Project implementation could result in direct mortality and/or injury to special status species, missed through generalized surveys, through staging of construction equipment, vehicles, and foot traffic and in the loss of nesting and/or foraging habitat from grading, ground disturbance, and vegetation clearing.

Evidence impact would be significant: Given the presence of potentially suitable habitat, Project impacts to the species identified above are possible and the MND should incorporate avoidance, minimization, and mitigation measures for each species based on focused individual surveys, following professionally accepted methods (protocol level surveys), and incorporated in the MND. The species above include CESA-listed candidate species, California Species of Special Concern (CSSC), and California Code 14 CCR §460 protected species. Following the MND's analysis of protocol level surveys, the MND should require CESA permits in the event the MND anticipates take of western burrowing owl.

Recommended Potentially Feasible Mitigation Measure(s) (Regarding Environmental Setting and Related Impact Shortcoming):

The MND should include a Project impact analysis on each sensitive species based on professionally accepted survey methodologies, including but not limited to, western burrowing owl and desert kit fox. A complete, *recent* inventory of rare, threatened, endangered, and other sensitive species located within the Project footprint, including

CSSC and California Protected Species (California Code 14 CCR §460). Species to be addressed should include all those which meet the CEQA definition (CEQA Guidelines § 15380). Focused species-specific surveys, completed by a qualified biologist and conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required.

Where professionally accepted survey methodologies do not exist, acceptable species-specific survey procedures should be developed in consultation with CDFW and the U.S. Fish and Wildlife Service, where necessary. Note that CDFW generally considers biological field assessments for wildlife to be valid for a one-year period, and assessments for rare plants may be considered valid for a period of up to three years. Some aspects of the proposed Project may warrant periodic updated surveys for certain sensitive taxa, particularly if the Project is proposed to occur over a protracted time frame, or in phases, or if surveys are completed during periods of drought.

Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS?

COMMENT 2:

Section: MND Section IV. BIOLOGICAL RESOURCES, Pages 48-50

Issue: CDFW is concerned that the MND's proposed avoidance measures do not effectively avoid the full extent of ephemeral streams onsite and therefore could result in impacts to ephemeral streams subject to notification pursuant to Fish and Game Code section 1602.The The jurisdictional delineation does not identify the headwaters of the ephemeral streams mapped in the northwest portion of the property. Development facilitated by the Project could impact stream resources subject to notification pursuant to Fish and Game Code section 1602.

Specific impact: Project activities, including grading, solar panel installation, vehicle and equipment staging, and site access could divert or obstruct stream flows, substantially alter the bed, bank, or channel of a stream, use or deposit materials subject to notification pursuant to Fish and Game Code section 1602. Absent notification, the Project could result in impacts to stream resources that should otherwise be avoided, minimized, or addressed in an agreement with CDFW.

Why impact would occur: Project implementation will result in physical changes to the landscape (e.g., grading) and could physically alter lake or streambed resources.

Evidence impact would be significant: California places great value on streams and the resources they provide. CDFW has authority over activities in rivers, streams and lakes that may substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake (Fish and Game Code section 1602). For any such activities, the Project Applicant should provide written notification of Lake and Streambed Alteration to CDFW and obtain a Lake and Streambed Alteration Agreement pursuant to Fish and Game Code section 1602.

Recommended Potentially Feasible Mitigation Measure(s) (Regarding Mitigation Measure or Alternative and Related Impact Shortcoming):

CDFW recommends an inclusion of a revised jurisdictional delineation to identify stream resources subject to Fish and Game Code section 1602. Should the Project be unable to avoid impacts to stream resources, the Project applicant will need to notify CDFW per Fish and Game Code section 1602. Fish and Game Code section 1602 requires any entity to notify CDFW prior to commencing any activity that may do one or more of the following: substantially divert or obstruct the natural flow of any river, stream, or lake; substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or deposit debris, waste or other materials that could pass

into any river, stream, or lake. Please note that "any river, stream or lake" includes those that are episodic (i.e., those that are dry for periods of time) as well as those that are perennial (i.e., those that flow year-round). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow similar to those referenced above.

II. Mitigation Measure or Alternative and Related Impact Shortcoming

Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS?

COMMENT 3:

Section: MND Section IV. BIOLOGICAL RESOURCES, Pages 42-43

Issue: CDFW is concerned about the Project's potential impacts to special status species including desert tortoise (*Gopherus agassizii*), western burrowing owl (*Athene cunicularia*), and nesting birds given the Project site contains suitable habitat for these species.

Specific impact: Potential take of special status species and loss of habitat.

Why impact would occur: Project implementation could result in direct mortality and/or injury to special status species through staging of construction equipment, vehicles, and foot traffic and in the loss of nesting and/or foraging habitat from grading, ground disturbance, and vegetation clearing.

Evidence impact would be significant: The species above include federal Endangered Species Act (ESA) and CESA-listed species.

Recommended Potentially Feasible Mitigation Measure(s) to Minimize Significant Impacts: CDFW supports the inclusion of MM BIO-1 and MM BIO-2 with minor revisions in the final MND, as per below to avoid impacts to special status species (edits are in ~~strikethrough~~ and additions are in **bold**):

Mitigation Measure MM BIO-1:

Prior to the issuance of grading or building permits, and prior to decommissioning, the Project Proponent shall retain a Lead Biologist(s) (or Qualified Biologist) who **has experience and expertise in desert species** ~~meets the qualifications of an Authorized Biologist as defined by U.S. Fish and Wildlife Service~~ **and as approved in writing by CDFW** to oversee compliance with protection measures for all listed and other special-status species that may be affected by the construction, operation, and decommissioning of the Project **including, but not limited to, desert tortoise, western burrowing owl, desert kit fox, and nesting birds.** The contact information for the Lead Biologist(s) shall be provided in writing to **CDFW.** ~~the San Bernardino County Land Use Services Department.~~ **The Authorized Biologist will be required to be on site when all grading or building through all grading decommissioning activities. The Authorized Biologist will provide weekly compliance reports to the wildlife agencies.**

Mitigation Measure MM BIO-2:

Prior to any activity on-site and for the duration of construction activities, all personnel at the Project Site (including laydown areas and/or transmission routes) shall attend a Worker Education Awareness Program (WEAP) developed and presented by the Qualified Biologist **as approved in writing by CDFW**. New personnel shall receive WEAP training on the first day of work and prior to commencing work on the site. Any employee responsible for the operation and maintenance (O&M) of the Project facilities shall also attend WEAP training.

A discussion of the biology and general behavior of any sensitive species **including desert tortoise, western burrowing owl, desert kit fox, American badger, and nesting birds,** which may be in the area, how they may be encountered within the work area, and procedures to follow when they are encountered shall be included in the training. Special-status species, including legal protection, penalties for violations, and Project-specific protective measures shall also be discussed. Interpretation shall be provided for non-English speaking workers, and the same instruction shall be provided for any new workers prior to on-site Project activity. Copies of the training shall be maintained at the worksite with the construction supervisor, and a handout containing this information shall be distributed for workers to carry on-site. Upon completion of the program, employees shall sign an attendance log stating they attended the program and understand all protective measures. A sticker shall be placed on hard hats indicating that the worker has completed the WEAP training. Construction workers shall not be permitted to operate equipment within the construction areas unless they have attended the WEAP training and are wearing hard hats with the required sticker. A copy of the training transcript and/or training video, as well as a list of the names of all personnel who attended the WEAP training and **their** ~~copies of the~~ signed acknowledgement forms, shall be submitted to the San Bernardino County Planning and Community Development Department **and CDFW** upon the County's request.

COMMENT 4:

Section: MND Section IV Biological Resources, Pages 43-44

Issue: CDFW is concerned with the length and number of topics provided in MM BIO-3, as well as its ability to reduce impacts to biological resources to less than significant determinations.

Specific impact: MM BIO-3 is not focused and too general. Each of the measures included in MM BIO-3 should be separated into its own mitigation measure and compiled into a Mitigation, Monitoring, and Reporting Plan (MMRP) for enforceability and compliance of on-site personnel during Project activities.

Why impact would occur: Mitigation measures provided in the MND should be focused on a singular issue per measure, as opposed to listing several general measures. The purpose of mitigation and minimization measures is to reduce the impact of a project to less than significant for each separate issue or biological resource that is anticipated to be impacted.

Evidence impact would be significant: A blanket measure covering many topics is not effective for proper tracking in an MMRP, as each measure is required to be checked individually for compliance and may have a different party responsible for its compliance, depending on the subject of the measure.

Recommended Potentially Feasible Mitigation Measure(s) to Minimize Significant Impacts CDFW provides the following renumbering and editorial comments for MM BIO-3 for inclusion in the final MND to avoid impacts to special status species (edits are in ~~strikethrough~~ and additions are in **bold**):

Mitigation Measure MM BIO-3a – MM BIO-3h

MM BIO-3:

~~The following~~ **The** best management practices **listed below** shall be implemented **and supervised by the Authorized Biologist** during Project grading, construction, and decommissioning activities to further address potential impacts on biological resources**.**~~:~~

MM BIO-3a:

The contractor shall clearly delineate the construction limits and prohibit any construction related traffic outside these boundaries. Project-related vehicles shall observe a 15-mile-per-hour speed limit within unpaved roads **or access roads**. Project-related vehicles and construction equipment shall restrict off-road travel outside of the designated construction area. Cross-country travel is prohibited.

MM BIO-3b:

Project-related vehicles and construction equipment shall be cleaned before exiting the Project Site and track out controls shall be implemented at the entrance(s) and exit(s) of the Project Site to minimize the amount of sediment, dirt, mud, etc. from being tracked out of the Project Site. Project-related vehicles and construction equipment shall be cleaned before entering the Project Site to prevent the potential spread of invasive species.

MM BIO-3c:

~~All open trenches shall be fenced or sloped, and open pipes shall be capped or covered to prevent entrapment of wildlife species.~~ **No potential wildlife entrapments (e.g., trenches, bores) shall be left uncovered overnight. Any uncovered pitfalls will be excavated to a 3:1 slope at the ends to provide wildlife escape ramps. Alternatively, man-made ramps may be installed. Covered pitfalls will be covered completely to prevent access by small mammals or reptiles. All pipes, culverts, or other construction materials or supplies shall be covered or capped in storage or laydown areas, and at the end of each construction workday. No pipes or tubing of sizes or inside diameters ranging from 1 to 10 inches shall be left open either temporarily or permanently.** Openings should be inspected for the presence of wildlife species prior to fencing, sloping, capping, or covering.

MM BIO-3d:

All food-related trash items such as wrappers, cans, bottles, and food scraps generated during Project construction shall be cleaned up daily and disposed of in closed**, raven-proof** containers only. No deliberate feeding of wildlife shall be allowed.

MM BIO-3e:

No pets shall be allowed on the Project Site. Except for authorized personnel, no firearms shall be allowed on the Project Site.

MM BIO-3f:

Avoid nighttime construction lighting. If construction must occur at night (between dusk and dawn), all lighting shall be shielded and directed downward **or towards the interior of the Project site** to minimize the potential for glare or spillover onto adjacent properties ~~and to reduce impacts on local wildlife.~~

MM BIO-3g:
All equipment used on site shall be properly maintained such that no leaks of oil, fuel, or residues will take place. ~~Provisions shall be in place to remediate any accidental spills.~~ **Equipment and containers shall be inspected daily for leaks. Should a leak occur, contaminated soils and surfaces will be cleaned up and disposed of following the guidelines identified in the Stormwater Pollution Prevention Plan or equivalent, Materials Safety Data Sheets, and any specifications required by other permits issued for the project. The Contractor shall utilize off-site maintenance and repair shops as much as possible for maintenance and repair of equipment. If maintenance of equipment must occur onsite, fuel/oil pans, absorbent pads, or appropriate containment will be used to capture spills/leaks within all areas. Maintenance of equipment shall occur in upland areas where fuel cannot enter waters of the U.S. or areas subject to Fish and Game Code section 1602, and in areas that do not have potential to support federally threatened or endangered species.**

MM BIO-3h:

Any ~~observation of a~~ dead, injured, or entrapped ~~special-status species~~ **wildlife** shall immediately be reported to the construction foreman**,** ~~and~~ Qualified Biologist**, CDFW, or a CDFW-approved veterinary facility as soon as possible to determine the best course of action**. ~~The observation shall be reported to all appropriate communications with the regulatory agencies.~~ **For special-status species, the Project Biologist shall notify by phone or email the County, USFWS, and/or CDFW, as appropriate, within 24 hours of the discovery.**

COMMENT 5:

Section: MND Section IV Biological Resources, Page 44

Issue: The Project may impact Desert Tortoise, a California Endangered Species Act threatened species and its habitat.

Specific impact: Desert tortoise is a State and federally listed threatened species. This species is impacted by ongoing threats, including loss, degradation, and fragmentation of habitat, due to development. Staging of construction equipment, vehicles, and foot traffic may result in the collapse of occupied burrows and result in direct mortality and/or injury to desert tortoise. Project construction and operation may result in collision with or crushing by vehicles or heavy equipment; entrapment within open trenches and pipes; entrapment or entanglement within materials and equipment staged and moved; crushing or burial of individuals or eggs in burrows; destruction of burrows and refugia; and increased predation.

Why impact would occur: The Project site is located within suitable desert tortoise habitat. The CNDDB notes desert tortoise sightings on properties within 2.75 miles of the Project site. CDFW strongly encourages the Project proponent to apply for a CESA incidental take permit (ITP) for take of desert tortoise if full avoidance is not feasible.

Evidence impact would be significant: Desert tortoise is a California Endangered Species Act (CESA)-listed species. Take of any CESA listed species is prohibited except as authorized by state law (Fish and Game Code, §§ 2080 & 2085). Consequently, if a Project, including Project construction or any Project-related activity during the life of the Project results in take of CESA-listed species, CDFW recommends that the Project proponent seek appropriate authorization prior to Project implementation. This may include an incidental take permit or a consistency determination (Fish and Game Code, §§ 2080.1 & 2081).

Recommended Potentially Feasible Mitigation Measure(s) to Minimize Significant Impacts: CDFW recommends inclusion of the following changes to the mitigation measure BIO-4 for desert tortoise (edits are in ~~strikethrough~~ and additions are in **bold**):

Mitigation Measure MM BIO-4:

A CDFW-approved biologist (Authorized Biologist) shall conduct a presence/absence survey within the Project area and 500-foot buffer of suitable habitat, no more than 15 days prior to Project activities and after any pause in Project activities lasting 30 days or more, in accordance with U.S. Fish and Wildlife Service 2009 desert tortoise survey methodology. The survey shall have 100-percent visual coverage for desert tortoise and their sign. Preconstruction surveys cannot be combined with other surveys conducted for other species while using the same personnel. Results of the survey shall be submitted to CDFW prior to start of Project activities. If the survey confirms absence, the CDFW-approved biologist (Authorized Biologist) shall ensure desert tortoise do not enter the Project area. If the survey confirms presence, the Project proponent shall submit to CDFW for review and approval a desert tortoise-specific avoidance plan detailing the protective avoidance measures to be implemented

to ensure complete avoidance of take of desert tortoises. If complete avoidance cannot be achieved, the Project proponent shall not undertake Project activities and Project activities shall be postponed until the appropriate authorization [i.e., California Endangered Species Act (CESA) incidental take permit under the Fish and Game Code section 2081] is obtained.

~~A pre-construction desert tortoise presence/absence survey shall be conducted by a Qualified Biologist no more than 30 days in advance of Project development in accordance with USFWS survey protocols.~~ A discussion of survey results, including negative findings, shall be provided to the County **and CDFW** upon completion of the survey. If desert tortoise are not documented during the survey, no additional measures related to desert tortoise avoidance and minimization, or compensatory mitigation are required. If desert tortoise are documented inhabiting the Project Site during presence/absence surveys, MM BIO-5 shall be implemented.

COMMENT 6:

Section: MND Section IV. BIOLOGICAL RESOURCES, Pages 44-45

Issue: The Project site lies within range of and contains suitable habitat for Desert Tortoise, a CESA-threatened species (candidate endangered species).

Specific impact: Project activities may result in degradation and permanent loss of desert tortoise habitat and may also result in direct mortality and/or injury to desert tortoise onsite.

Why impact would occur: Staging of construction equipment, vehicles, and foot traffic may result in the collapse of occupied burrows and result in direct mortality and/or injury to desert tortoise. Project construction and operation may result in collision with or crushing by vehicles or heavy equipment; entrapment within open trenches and pipes; entrapment or entanglement within materials and equipment staged and moved; crushing or burial of individuals or eggs in burrows; destruction of burrows and refugia; and increased predation associated with increased anthropogenic activities.

Evidence impact would be significant: Desert tortoise was recently uplisted from a threatened to endangered species under CESA. Take of any CESA-listed species is prohibited except as authorized by state law (Fish and Game Code, §§ 2080 & 2085). Consequently, if a Project, including Project construction or any Project-related activity during the life of the Project results in take of CESA-listed species, CDFW recommends that the Project proponent seek appropriate authorization prior to Project implementation. This may include an incidental take permit (ITP) or a consistency determination (Fish and Game Code, §§ 2080.1 & 2081).

Further, desert tortoise is continuously impacted by ongoing loss, degradation, and fragmentation of habitat. Desert tortoise populations have declined significantly in recent decades as a result of human activities in their native habitat including land development, off-road vehicle use, overgrazing, agricultural development, military activities, predation, and the spread of invasive plant species (USFWS 2011). The desert tortoise population in the western Mojave Desert has declined by 90% since the 1980s. Desert tortoises can take up to 20 years to reach sexual maturity, which limits their ability to recover from even small losses in population numbers (USFWS 2011).

Recommended Potentially Feasible Mitigation Measure(s) to Minimize Significant Impacts: CDFW supports the inclusion of BIO MM-5 with minor revisions in the final MND, as per below to avoid impacts to special status species (edits are in ~~strikethrough~~ and additions are in **bold**):

Mitigation Measure MM BIO-5:

Implementation of any measures that would result in the "take" of desert tortoise cannot be undertaken without formal authorization from CDFW and USFWS. If pre-construction desert tortoise surveys (MM BIO-4) document that the species

is inhabiting the Project Site confirm presence, the Project Proponent shall develop and submit to CDFW for review and approval a desert tortoise-specific avoidance plan detailing the protective avoidance measures to be implemented to ensure complete avoidance of take of desert tortoises. If complete avoidance cannot be achieved, the Project proponent shall not undertake Project activities and Project activities shall be postponed until the appropriate authorization (i.e., CESA incidental take permit under the Fish and Game Code section 2081) is obtained. In addition, in consultation with USFW and CDFW the project proponent shall install exclusionary fencing following the specifications found in Chapter 8 Desert Tortoise Exclusion Fence of the Desert Tortoise (Mojave Population) Field Manual (USFWS). for desert tortoise translocation and monitoring prior to Project construction in accordance with USFWS guidelines. The plan shall provide the framework for implementing, but not limited to, the following measures, or similar measures deemed sufficient and approved during agency consultation (Note: any desert tortoise translocation plan must be reviewed and approved by CDFW and USFWS).

MM BIO-5a:

~~• If a tortoise-proof exclusion fence is practicable, a fence shall be installed around all non-linear construction areas prior to the initiation of ground disturbing activities, in coordination with a Qualified Biologist. The fence shall be constructed of 0.5-inch mesh hardware cloth and extend 18 inches above ground and 12 inches below ground. Where burial of the fence is not possible, the lower 12 inches shall be folded outward against the ground and fastened to the ground to prevent desert tortoise entry. The fence shall be supported sufficiently to maintain its integrity, be checked at least monthly during construction and operations, and maintained when necessary by the Project Proponent to ensure its integrity. Provisions shall be made for closing off the fence at the point of vehicle entry. Common raven (Corvus corax) perching deterrents shall be installed as part of the fence construction.~~

~~• After fence installation, a Qualified Biologist shall conduct a preconstruction survey in accordance with USFWS protocols for desert tortoise within the fenced construction site. Two surveys during the desert tortoise active periods (April through May or September through October) without finding any tortoises or new tortoise sign shall occur prior to declaring the site clear of tortoises.~~

~~• All burrows that could provide shelter for a desert tortoise shall be hand excavated prior to ground-disturbing activities.~~

~~• A Qualified Biologist or Qualified Biological Monitors shall remain onsite until all vegetation is cleared and, at a minimum, conduct site and fence inspections on a regular basis throughout construction in order to facilitate Project compliance with mitigation measures.~~

~~• A Qualified Biologist shall remain on-call throughout fencing and grading activities in the event a desert tortoise enters the Project Site.~~

~~• Compensatory habitat mitigation shall be secured in the form of a conservation easement or purchase of mitigation bank credits to compensate for the loss of occupied desert tortoise habitat at a minimum ratio of 1:1, with habitat of equal or greater value.~~

~~• The plan shall include participation in the interagency Raven Monitoring and Management Program to address indirect impacts to the species related to the potential increase in the raven population. The plan shall discuss payment of appropriate fees and reduction of raven attraction and implementation of appropriate measures including removing trash daily, limiting available food and water subsidies, and inadvertently creating habitat (for example, creation of perch/roost sites and nest or denning sites) within the Project Site.~~

COMMENT 7:

Section: MND Section IV. BIOLOGICAL RESOURCES, Page 45

Issue: The Project may have impacts on nesting birds, including CESA-listed birds, SSC, and common birds that are subject to Fish and Game Code Sections 3503, 3503.5, and 3513, and the Migratory Bird Treaty Act of 1918.

Specific impact: Project activities may result in degradation and permanent loss of nesting bird habitat and may also result in direct mortality and/or injury to nesting birds onsite

Why impact would occur: Direct take may result from vehicle and equipment strike and from predators attracted to the construction site. Indirect take may result from displacement, reduction of habitat and habitat quality associated with road infrastructure, and from impacted foraging and nesting habitat. Additionally, please note that construction during the breeding season of nesting birds could potentially result in the incidental loss of breeding success or otherwise lead to nest abandonment. Noise from road use, generators, and heavy equipment may disrupt nesting bird mating calls or songs, which could impact reproductive success.

Evidence impact would be significant: Fish and Game Code section 3503 makes it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by Fish and Game Code or any regulation made pursuant thereto. Fish and Game Code section 3513 makes it unlawful to take or possess any migratory nongame bird except as provided by the rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. § 703 et seq.). Fish and Game Code section 3503.5 makes it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by Fish and Game Code or any regulation adopted pursuant thereto**.**

Recommended Potentially Feasible Mitigation Measure(s) to Minimize Significant Impacts: CDFW supports the inclusion of MM BIO-6 with minor revisions in the final MND, as per below to avoid impacts to special status species (edits are in ~~strikethrough~~ and additions are in **bold**):

Mitigation Measure MM BIO-6:

~~If construction is scheduled to commence during the non-breeding season (September 1 to January 31), no pre-construction surveys or additional measures with regard to nesting birds and other raptors are required.~~ To **minimize** ~~avoid~~ impacts to nesting birds in the Project Site, the Lead Biologist or Qualified Biological Monitors shall conduct pre-construction surveys of all potential nesting habitat within the Project Site ~~for Project activities that are initiated during the breeding season (February 1 to August 31).~~ The raptor survey shall focus on potential nest sites (i.e., utility poles and trees) within a 300-foot buffer around the Project Site. These surveys shall be conducted no more than 14 days prior to ground-disturbing activities without prior agency approval. The Lead Biologist or Qualified Biological Monitors must be able to determine the status and stage of nesting migratory birds and all locally breeding raptor species without causing intrusive disturbance.

If active nests are found~~,~~ **within the Project area or within 500 feet of the Project area**, **the nest shall be flagged and mapped on the construction plans and** a suitable buffer **based on the species' sensitivity to disturbance, and** as determined by the Lead Biologist or Qualified Biological Monitors ~~(e.g., 200-300 feet for common raptors; 30-50 feet for passerines, 0.5 mile for golden eagle)~~ shall be established around active nests, and no construction within the buffer shall be allowed until the Lead Biologist or Qualified Biological Monitors has determined that the nest is no longer active (i.e., the nestlings have fledged and are no longer reliant on the nest). Buffers may be reduced at the discretion of the Lead Biologist or Qualified Biological

Monitors based on Project activity, line of sight, tolerance of individuals, and stage of the nest. **The nest area shall be demarcated in the field with flagging and stakes or construction fencing. On-site construction monitoring shall be conducted when construction occurs in close proximately to an active nest buffer. The buffer shall remain in place until determined by the qualified biologist that the nestlings have fledged, and the nest is no longer active. If an active nest is encountered during the Project construction, construction shall stop immediately until a qualified biologist can determine (1) the status of the nest, and (2) when work can proceed without risking violation to state or federal laws.**

COMMENT 8:

Section: MND Section IV. BIOLOGICAL RESOURCES, Pages 45-46

Issue: The Project occurs within the range of desert kit fox, a protected species pursuant to Title 14 of the California Code of Regulations Section 460.

Specific impact: Project activities may result in degradation and permanent loss of desert kit fox habitat and may also result in direct mortality and/or injury to desert kit fox onsite.

Why impact would occur: The staging of construction equipment, vehicles, and foot traffic may result in the collapse of occupied burrows and result in direct mortality and/or injury. Project-related vehicular activities may result in direct mortality or injury associated with collisions. Project construction may result in increased predator presence and depredation of desert kit fox.

Evidence impact would be significant: The desert kit fox is a species of special concern and is protected from take by CDFW Code 14 CCR section 460. CEQA provides protection not only for CESA-listed species, but for any species including but not limited to SSC which can be shown to meet the criteria for State listing. Desert kit fox is an SSC that meets the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines, § 15380).

Recommended Potentially Feasible Mitigation Measure(s) to Minimize Significant Impacts: CDFW recommends amending the measure for desert kit fox and American badger to occur as stand-alone pre-construction surveys. Reconnaissance surveys are not sufficient in identifying all biological resources and individuals of protected species that may be impacted by Project activities.

Mitigation Measure MM BIO-7:

Pre-construction surveys shall be conducted by the Lead Biologist ~~or Qualified Biological Monitors~~ for the presence of desert kit fox~~, burrowing owl,~~ and American badger prior to commencement of construction activities. **No more than forty-five (45) days and no less than thirty (30) days prior to the beginning of surface disturbance, the Designated Biologist shall conduct a pre-Project survey to attain 100% visual coverage within the Project area and a minimum 200-meter buffer to determine the presence or absence of desert kit fox individuals, dens, and sign. Permittee shall provide the results of the survey to CDFW prior to start of Project activities.**

If potential dens are located, they shall be monitored by the Designated Biologist. Trail cameras may be used to assist with observation but shall not be the sole basis upon which the status is determined. Permittee shall provide a determination if active dens can be avoided and buffered from Project activities to prevent take and disturbance with the survey results.

Should active dens be present within the Project area that cannot be avoided with an adequate buffer, the Permittee shall submit a monitoring and relocation plan for CDFW's review and approval. No disturbance or relocation of active

dens may take place when juveniles may be present and dependent on parental care.

Burrows that have been confirmed inactive within the Project site, that are not being excavated and filled, will be blocked with rocks and sticks to discourage use during Project activities and removed when construction is complete. The Designated Biologist shall periodically check that the inactive burrows remain blocked and are not reoccupied.

~~This survey shall be conducted no more than 30 days prior to ground disturbing activities. Surveys shall conform to CDFW guidelines for burrowing owl and to industry standards for desert kit fox and American badger. A report of all pre-construction survey efforts shall be submitted to the County within 30 days of completion of the survey effort to document compliance. The report shall include the dates, times, weather conditions, and personnel involved in the survey(s) and monitoring. The report shall also include, if applicable, observations of the species or potential dens/burrows, the Universal Transverse Mercator (UTM) coordinates and habitat descriptions, and a description of any passive relocation if applicable. Biological monitoring and WEAP training as described in MM BIO-2 shall include these species. If desert kit fox, burrowing owl, and/or American badger observations are not documented during the survey(s) or biological monitoring activities, no additional measures related the avoidance and minimization, or compensatory mitigation are required.~~

COMMENT 9:

Section: MND Section IV. BIOLOGICAL RESOURCES, Pages 45-46

Issue: The Project site contains suitable habitat for burrowing owl, a CESA-listed candidate species. Breeding surveys and non-breeding surveys were not performed for burrowing owl.

Specific impact: The MND does not analyze or identify mitigation for the loss of nesting burrows, satellite burrows, foraging habitat, dispersal and migration habitat, wintering habitat, and habitat linkages, including habitat supporting prey and host burrowers, and other essential habitat attributes.

Why impact would occur: Burrowing owls are dependent on burrows at all times of the year for survival and/or reproduction, evicting them from nesting, roosting, and satellite burrows may lead to indirect impacts or take. Loss of access to burrows will likely result in varying levels of increased stress on burrowing owls and could depress reproduction, increase predation, increase energetic costs, and introduce risks posed by having to find and compete for available burrows (CDFG, 2012). CDFW considers habitat to be occupied when at least one burrowing owl, or its sign at or near a burrow entrance, is observed within the last three years (CDFG, 2012). As written, the MND only requires replacement of burrows determined to be occupied at the time of pre-construction surveys. This MND does not analyze temporal consideration of species occupancy and their use of the surrounding landscape for survival.

Evidence impact would be significant: Habitat loss is a threat to burrowing owls (CDFG, 2012). Burrowing owls are dependent on burrows at all times of the year for survival and/or reproduction, evicting them from nesting, roosting, satellite burrows may lead to indirect impacts or take. Loss of access to burrows will likely result in varying levels of increased stress on burrowing owls and could depress reproduction, increase predation, increase energetic costs, and introduce risks posed by having to find and compete for available burrows (CDFG, 2012). Burrowing owls are also dependent on adjacent habitat, and forage within 600 meters of nest burrows (Rosenberg and Haley, 2004). As a candidate species, Western Burrowing Owl is granted full protection of a threatened species under CESA. Take is defined in Fish and Game Code section 86 as "hunt, pursue, catch, capture or kill, or attempt to hunt, pursue, catch, capture or kill." CESA allows CDFW to authorize project proponents to take state-listed threatened, endangered, or candidate species if certain conditions are met. Take must be incidental to an otherwise lawful activity. The issuance of a permit cannot jeopardize the

continued existence of the species, and the impacts must be minimized and fully mitigated. Similarly, take, possession or destruction of individual burrowing owls, their nests and eggs is prohibited under Fish and Game Code sections 3503, 3503.5 and 3513. Eviction of burrowing owls is a potentially significant impact under CEQA, and mitigation must be roughly proportional to the level of impacts, including cumulative impacts, in accordance with the provisions of CEQA (CEQA Guidelines, §§ 15126.4(a)(4)(B), 15064, 15065, and 16355). As stated in the *Staff Report on Burrowing Owl Mitigation* (CDFG, 2012), "the current scientific literature supports the conclusion that mitigation for permanent habitat loss necessitates replacement with an equivalent or greater habitat area for breeding, foraging, wintering, dispersal, presence of burrows, burrow surrogates, presence of fossorial mammal dens, well drained soils, and abundant and available prey within close proximity to the burrow".

Recommended Potentially Feasible Mitigation Measure(s) to Minimize Significant Impacts: CDFW supports the inclusion of MM BIO-7 with minor revisions in the final MND, as per below to avoid impacts to special status species (edits are in ~~strikethrough~~ and additions are in **bold**):

Mitigation Measure MM BIO-8:

CDFW recommends County of San Bernardino perform surveys per the guidance of the *Staff Report on Burrowing Owl Mitigation* (CDFG, 2012), assess the impact, and update the proposed mitigation measure to include avoidance, minimization, and mitigation for burrowing owls identified on-site, and these same measures be applied to any individuals found during take avoidance surveys as conditions by the proposed mitigation measure. CDFW recommends the guidance of mitigating impacts to burrowing owls in the Staff Report on Burrowing Owl Mitigation (CDFG, 2012) be followed, including (a) permanent impacts to nesting, occupied and satellite burrows and/or burrowing owl habitat such that the habitat acreage, number of burrows and burrowing owls impacted are replaced with permanent conservation of similar vegetation communities (grassland, scrublands, desert, urban, and agriculture) to provide for burrowing owl nesting, foraging, wintering, and dispersal (i.e., during breeding and non-breeding seasons) comparable to or better than that of the impact area, and (b) sufficiently large acreage, and presence of fossorial mammals.

COMMENT 10:

Section: MND Section IV. BIOLOGICAL RESOURCES, Page 47

Issue: The Project has the potential to result in permanent and temporary loss, degradation, and impacts to burrowing owl habitat. The Project may result in the take of burrowing owl, a CESA listed candidate species, during construction of the Project and life of the Project.

Specific impact: The MND describes that one burrow was located on the site although no sign of burrowing owl was observed, however since the time of surveying, burrowing owl could have potentially inhabited the site. If burrowing owl has inhabited the site the potential for the collapsing of burrows, entombment, displacement, direct take associated with vehicle and equipment strike, indirect take associated with Project operations such as attracting predators, reduction of habitat and habitat quality could occur. The Project as described will potentially cause permanent and temporary impacts to burrowing owl foraging and nesting habitat.

Why impact would occur: On page 39 of the MND, the Project site contains habitat that may support burrowing owls. Although the MND states that no active sign of burrowing own was found throughout the site, the most recent
CNDDB occurrence for burrowing owl is 8.75 miles west of the Project site is from 2005 however, this outdated occurrence does not preclude the potential that burrowing owl could inhibit the area. Lastly, the MND concludes that burrowing owl has a moderate potential to occur within the Project area and because the Project area contains suitable habitat for burrowing owl, the loss of burrowing owl habitat could result in significant impacts.

Evidence impact would be significant: The Project, as described, may result in injury, direct mortality, indirect mortality, disruption of breeding behavior, and/or may reduce reproductive capacity of the species. CDFW considers the direct and indirect take of burrowing owl, and the loss of the species' habitat as a significant impact, unless mitigated to a level of less than significant and in compliance with State (i.e., Fish and Game Code sections 3503.5, etc.) and Federal laws (i.e., Migratory Bird Treaty Act). Furthermore, following the Fish and Game Commission's decision to list burrowing owl as a candidate species under CESA, CDFW considers the take of burrowing owl and the loss of the species' habitat as a significant impact, unless mitigated to a level of less than significant which may include that ground disturbing activities be postponed until appropriate authorization (i.e., a finalized CESA ITP under Fish and Game Code section 2081) is obtained.

Recommended Potentially Feasible Mitigation Measure(s) to Minimize Significant Impacts: CDFW appreciates that the MND provides a measure to minimize the Project's impacts to burrowing owl. CDFW offers the following revisions to MM-BIO-9 (edits are in strikethrough and bold) for inclusion in the MND.

Mitigation Measure MM BIO-9:

~~Two potential mitigation scenarios are applicable to mitigate potential impacts to the burrowing owl:~~

~~1) If burrowing owl are detected on-site, a non-disturbance buffer shall be established, restricting all ground-disturbing activities, such as vegetation clearance or grading, from occurring within the buffer. The buffer should be demarcated using brightly colored flagging and the buffer may only be reduced at the discretion of the Lead Biologist or Qualified Biological Monitor. Removal of the buffer shall only occur if a Qualified Biologist determines burrowing owl are not present in the Project Site and any potential burrows are inactive. Typical avoidance buffer distances for burrowing owl range from 100 meters (330 feet) to 250 meters (825 feet) depending on Project activity, line of sight, and local topography during the breeding season (February 1 to August 31). During the non-breeding (winter) season (September 1 to January 31), typical avoidance buffers range from 50 meters (165 feet) to 100 meters (330 feet) from the burrow. Depending on the level of disturbance, a smaller buffer may be established as determined by the Qualified Biologist based on the factors listed above and potential use of sound and visual barriers such as hay bales.~~

~~2) If burrowing owl burrow avoidance is infeasible during the non-breeding season or during the breeding season (February 1 through August 31), where resident owls have not yet begun egg laying or incubation, or where the juveniles are foraging independently and capable of independent survival, the Lead Biologist or Qualified Biological Monitor shall implement a passive relocation program consistent with Appendix E1 (i.e., Example Components for Burrowing Owl Artificial Burrow and Exclusion Plans) of the 2012 CDFW Staff Report on Burrowing Owl Mitigation (CDFW 2012) in consultation with CDFW under CESA. A 2081 ITP shall be obtained from CDFW prior to passive relocation of burrowing owl(s).~~

~~A habitat mitigation plan shall be developed in coordination with the County and CDFW for loss of active burrowing owl burrow sites if implementation of a passive relocation plan is necessary and/or burrowing owl are documented to nest on-site or within 500 feet of the Project Site. This would be based upon the portion of the Project that overlaps with the owl(s) primary foraging area around the burrow site (approximately 500 foot buffer) to be replaced a minimum 1:1 ratio.~~

Burrowing Owl. If complete avoidance cannot be achieved **an Incidental Take Permit (ITP) for Burrowing owl (*Athene cunicularia*) shall be obtained prior to initiation of ground disturbing activities. The Project proponent shall adhere to measures and conditions set forth within the ITP. Compensatory mitigation for direct impacts to 62 acres shall be fulfilled through conservation of suitable Burrowing owl habitat.**

MM-BIO-9.1 At least 45 days prior to construction the Project proponent shall conduct a survey of the project site to determine if burrowing owls are present. If present the Project proponent shall prepare a Burrowing Owl Plan that shall be submitted to CDFW for review and approval at least 30 days prior to initiation of ground disturbing activities. The Burrowing Owl Plan shall include 1) impact assessment that details the number and location of occupied burrow sites, and acres of burrowing owl habitat; 2) if avoidance of impacts is proposed, details on avoidance actions and monitoring such as proposed buffers, visual barriers and other actions; 3) site monitoring to be conducted prior to, during, and after any exclusion of burrowing owls from their burrows sufficient to ensure take is avoided, daily monitoring with cameras and direct observation for one week to confirm young of the year have fledged if the exclusion will occur immediately after the end of the breeding season, and process to document any excluded burrowing owls use of artificial or natural burrows on an adjoining mitigation site (if able to confirm by band resight), 4) details of mitigation for impacts to occupied burrows and habitat. The proposed implementation of burrow exclusion and closure should only be considered as a last resort. If impacts to occupied burrows cannot be avoided, information shall be provided regarding adjacent or nearby suitable habitat available to owls. If no suitable habitat is available nearby, details regarding the creation and funding of artificial burrows (numbers, location, and type of burrows) and management activities for relocated owls shall also be included in the Burrowing Owl Plan. The Project proponent shall implement the Burrowing Owl Plan following CDFW review and approval.

MM-BIO-9.2: Burrowing Owl Avoidance. If burrowing owls are detected on-site, a Designated Biologist, knowledgeable of burrowing owl habitat and behavior, shall establish a no-disturbance buffer following the 20121 Staff Report around all burrowing owl burrows such as roosting and satellite burrows within the Project area and an appropriate buffer determined by the Designated Biologist, with posted signs demarking the area to avoid, using stakes, flags, and/or rope or cord to minimize the disturbance of burrowing owl habitat. The Designated Biologist shall delineate burrows with different materials than those used to delineate the Project area. Project proponent shall remove and properly dispose of all materials used for delineation immediately upon completion of the Project.

MM-BIO-9.3 To ensure that the Project avoids impacts to burrowing owl, a qualified biologist shall complete a take avoidance survey no less than 14 days prior to initiating ground disturbance activities using the recommended methods described in the 2012 Staff Report. Burrowing owls may re-colonize a site after only a few days. Time lapses or a break in construction activities of 3 days will trigger subsequent take avoidance surveys including but not limited to a final survey conducted within 24 hours prior to ground disturbance.

MM-BIO-9.4 During take avoidance surveys the Project proponent shall have a Designated Biologist(s), pre-approved by CDFW, inspect all burrows that exhibit typical characteristics of owl activity prior to any site-preparation activities. Evidence of owl activity may include presence of owls themselves, burrows, and owl sign at burrow entrances such as pellets, whitewash or other "ornamentation," feathers, prey remains, etc. If it is evident that the burrows are actively being used, the Project proponent shall follow the guidelines in the CDFW approved Burrowing Owl Plan. If no Plan has been approved the Project proponent shall not commence activities until owls have been confirmed absent and the burrows are no longer in use by adult or juvenile owls or until a Burrowing Owl Plan has been submitted and approved.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).)

Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNNDB field survey form can be filled out and submitted online at the following link: https://wildlife.ca.gov/Data/CNDDB/Submitting-Data. The types of information reported to CNDDB can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

ENVIRONMENTAL DOCUMENT FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of environmental document filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the environmental document filing fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

CONCLUSION

CDFW appreciates the opportunity to comment on the MND to assist the County of San Bernardino in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Austin Gutierrez, Environmental Scientist at (909) 544-2525 or Austin.Gutierrez@Wildlife.ca.gov.

Sincerely,

DocuSigned by:
Brandy Wood
4D759253408941E...

Brandy Wood
Environmental Program Manager

ec: Office of Planning and Research, State Clearinghouse, Sacramento
state.clearinghouse@opr.ca.gov

ATTACHMENTS

Attachment A: Mitigation, Monitoring, and Reporting Program (MMRP) for CDFW-Proposed Mitigation Measures

REFERENCES

California Department of Fish and Game (CDFG). 2012. Staff report on burrowing owl mitigation. State of California, Natural Resources Agency. Available for download at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843&inline

U.S. Fish and Wildlife Service. 2019. Preparing for any action that may occur within the range of the Mojave desert tortoise (*Gopherus agassizii*). USFWS Desert Tortoise Recovery Office. Reno, NV.

U.S. Fish and Wildlife Service. 2009. Desert Tortoise (Mojave Population) Field Manual: (Gopherus agassizii). Region 8, Sacramento, California.

Attachment A
Draft Mitigation, Monitoring, and Reporting Program

Draft Mitigation, Monitoring, and Reporting Program (MMRP)
CDFW provides the following language to be incorporated into the MMRP for the Project.

Biological Resources (BIO)		
Mitigation Measure (MM) Description	**Implementation Schedule**	**Responsible Party**
MM BIO-1: Prior to the issuance of grading or building permits, and prior to decommissioning, the Project Proponent shall retain a Lead Biologist(s) (or Qualified Biologist) who has experience and expertise in desert species meets the qualifications of an Authorized Biologist as defined by U.S. Fish and Wildlife Service and as approved in writing by CDFW to oversee compliance with protection measures for all listed and other special-status species that may be affected by the construction, operation, and decommissioning of the Project including, but not limited to, desert tortoise, western burrowing owl, desert kit fox, and nesting birds. The contact information for the Lead Biologist(s) shall be provided in writing to CDFW. the San Bernardino County Land Use Services Department. The Authorized Biologist will be required to be on site when all grading or building through all grading decommissioning activities. The Authorized Biologist will provide weekly compliance reports to the wildlife agencies.	Prior to the start of & during Project related activities	Project Proponent
MM BIO-2: Prior to any activity on-site and for the duration of construction activities, all personnel at the Project Site (including laydown areas and/or transmission routes) shall attend a Worker Education Awareness Program (WEAP) developed and presented by the Qualified Biologist as approved in writing by CDFW. New personnel shall receive WEAP training on the first day of work and prior to commencing work on the site. Any employee responsible for the operation and maintenance (O&M) of the Project facilities shall also attend WEAP training. A discussion of the biology and general behavior of any sensitive species including desert tortoise, western burrowing owl, desert kit fox, American badger, and nesting birds, which may be in the area, how they may be encountered within the work area, and procedures to follow when they are encountered shall be included in the training. Special-status species, including legal protection, penalties for violations, and Project-specific protective measures shall also be discussed. Interpretation shall be provided for non-English speaking workers, and the same instruction shall be provided for any new workers prior to on-site Project activity. Copies of the training shall be maintained at the worksite with the construction supervisor, and a handout containing this information shall be distributed for workers to carry on-site. Upon completion of the program, employees shall sign an attendance log stating they attended the program and understand all protective measures. A sticker shall be placed on hard hats indicating that the worker has completed the WEAP training. Construction workers shall not be permitted to operate equipment within the construction areas unless they have attended the WEAP training and are wearing hard hats with the required sticker. A copy of the training transcript and/or training video, as well as a list of the names of all personnel who attended the WEAP training and	Prior to the start of & during Project related activities	Project Proponent

their copies of the signed acknowledgement forms, shall be submitted to the San Bernardino County Planning and Community Development Department and CDFW upon the County's request.		
MM BIO-3: The best management practices listed below shall be implemented and supervised by the Authorized Biologist during Project grading, construction, and decommissioning activities to further address potential impacts on biological resources.	During Project related activities	Project Proponent
MM BIO-3a: The contractor shall clearly delineate the construction limits and prohibit any construction related traffic outside these boundaries. Project-related vehicles shall observe a 15-mile-per-hour speed limit within unpaved roads or access roads. Project-related vehicles and construction equipment shall restrict off-road travel outside of the designated construction area. Cross-country travel is prohibited.	During Project related activities	Project Proponent
MM BIO-3b: Project-related vehicles and construction equipment shall be cleaned before exiting the Project Site and track out controls shall be implemented at the entrance(s) and exit(s) of the Project Site to minimize the amount of sediment, dirt, mud, etc. from being tracked out of the Project Site. Project-related vehicles and construction equipment shall be cleaned before entering the Project Site to prevent the potential spread of invasive species.	During Project related activities	Project Proponent
MM BIO-3c: No potential wildlife entrapments (e.g., trenches, bores) shall be left uncovered overnight. Any uncovered pitfalls will be excavated to a 3:1 slope at the ends to provide wildlife escape ramps. Alternatively, man-made ramps may be installed. Covered pitfalls will be covered completely to prevent access by small mammals or reptiles. All pipes, culverts, or other construction materials or supplies shall be covered or capped in storage or laydown areas, and at the end of each construction workday. No pipes or tubing of sizes or inside diameters ranging from 1 to 10 inches shall be left open either temporarily or permanently. Openings should be inspected for the presence of wildlife species prior to fencing, sloping, capping, or covering.	During Project related activities	Project Proponent
MM BIO-3d: All food-related trash items such as wrappers, cans, bottles, and food scraps generated during Project construction shall be cleaned up daily and disposed of in closed**,** raven-proof containers only. No deliberate feeding of wildlife shall be allowed.	During Project related activities	Project Proponent
MM BIO-3e: No pets shall be allowed on the Project Site. Except for authorized personnel, no firearms shall be allowed on the Project Site.	During Project related activities	Project Proponent
MM BIO-3f: Avoid nighttime construction lighting. If construction must occur at night (between dusk and dawn), all lighting shall be shielded and directed downward or towards the interior of the Project site to minimize the potential for glare or spillover onto adjacent properties.	During Project related activities	Project Proponent
MM BIO-3g: All equipment used on site shall be properly maintained such that no leaks of oil, fuel, or residues will take place. Equipment and containers shall be inspected daily for leaks. Should a leak occur, contaminated soils and surfaces will be cleaned up and disposed of following the guidelines identified in the Stormwater Pollution Prevention Plan or equivalent, Materials Safety Data Sheets, and any specifications	During Project related activities	Project Proponent

required by other permits issued for the project. The Contractor shall utilize off-site maintenance and repair shops as much as possible for maintenance and repair of equipment. If maintenance of equipment must occur onsite, fuel/oil pans, absorbent pads, or appropriate containment will be used to capture spills/leaks within all areas. Maintenance of equipment shall occur in upland areas where fuel cannot enter waters of the U.S. or areas subject to Fish and Game Code section 1602, and in areas that do not have potential to support federally threatened or endangered species.		
MM BIO-3h: Any dead, injured, or entrapped wildlife shall immediately be reported to the construction foreman, ~~and~~ Qualified Biologist, CDFW, or a CDFW-approved veterinary facility as soon as possible to determine the best course of action. For special-status species, the Project Biologist shall notify by phone or email the County, USFWS, and/or CDFW, as appropriate, within 24 hours of the discovery.	During Project related activities	Project Proponent
MM BIO-4: A CDFW-approved biologist (Authorized Biologist) shall conduct a presence/absence survey within the Project area and 500-foot buffer of suitable habitat, no more than 15 days prior to Project activities and after any pause in Project activities lasting 30 days or more, in accordance with U.S. Fish and Wildlife Service 2009 desert tortoise survey methodology. The survey shall have 100-percent visual coverage for desert tortoise and their sign. Preconstruction surveys cannot be combined with other surveys conducted for other species while using the same personnel. Results of the survey shall be submitted to CDFW prior to start of Project activities. If the survey confirms absence, the CDFW-approved biologist (Authorized Biologist) shall ensure desert tortoise do not enter the Project area. If the survey confirms presence, the Project proponent shall submit to CDFW for review and approval a desert tortoise-specific avoidance plan detailing the protective avoidance measures to be implemented to ensure complete avoidance of take of desert tortoises. If complete avoidance cannot be achieved, the Project proponent shall not undertake Project activities and Project activities shall be postponed until the appropriate authorization [i.e., California Endangered Species Act (CESA) incidental take permit under the Fish and Game Code section 2081] is obtained. A discussion of survey results, including negative findings, shall be provided to the County and CDFW upon completion of the survey. If desert tortoise are not documented during the survey, no additional measures related to desert tortoise avoidance and minimization, or compensatory mitigation are required. If desert tortoise are documented inhabiting the Project Site during presence/absence surveys, MM BIO-5 shall be implemented.	Prior to the start of Project related activities	Project Proponent
MM BIO-5: Implementation of any measures that would result in the "take" of desert tortoise cannot be undertaken without formal authorization from CDFW and USFWS. If pre-construction desert tortoise surveys (MM BIO-4) document that the species is inhabiting the Project Site confirm presence, the Project Proponent shall develop and submit to CDFW for review and approval a desert tortoise-specific avoidance plan detailing the protective avoidance measures to be implemented to ensure complete avoidance of take of desert tortoises. If complete avoidance cannot be achieved, the Project proponent shall not undertake Project activities and Project activities shall be	Prior to the start of & during Project related activities	Project Proponent

postponed until the appropriate authorization (i.e., CESA incidental take permit under the Fish and Game Code section 2081) is obtained. In addition, in consultation with USFW and CDFW the project proponent shall install exclusionary fencing following the specifications found in Chapter 8 Desert Tortoise Exclusion Fence of the Desert Tortoise (Mojave Population) Field Manual (USFWS). for desert tortoise translocation and monitoring prior to Project construction in accordance with USFWS guidelines. The plan shall provide the framework for implementing, but not limited to, the following measures, or similar measures deemed sufficient and approved during agency consultation (Note: any desert tortoise translocation plan must be reviewed and approved by CDFW and USFWS).		
MM BIO-6: To minimize avoid impacts to nesting birds in the Project Site, the Lead Biologist or Qualified Biological Monitors shall conduct pre-construction surveys of all potential nesting habitat within the Project. The raptor survey shall focus on potential nest sites (i.e., utility poles and trees) within a 300-foot buffer around the Project Site. These surveys shall be conducted no more than 14 days prior to ground-disturbing activities without prior agency approval. The Lead Biologist or Qualified Biological Monitors must be able to determine the status and stage of nesting migratory birds and all locally breeding raptor species without causing intrusive disturbance. If active nests are found, within the Project area or within 500 feet of the Project area, the nest shall be flagged and mapped on the construction plans and a suitable buffer based on the species' sensitivity to disturbance, and as determined by the Lead Biologist or Qualified Biological shall be established around active nests, and no construction within the buffer shall be allowed until the Lead Biologist or Qualified Biological Monitors has determined that the nest is no longer active (i.e., the nestlings have fledged and are no longer reliant on the nest). Buffers may be reduced at the discretion of the Lead Biologist or Qualified Biological Monitors based on Project activity, line of sight, tolerance of individuals, and stage of the nest. The nest area shall be demarcated in the field with flagging and stakes or construction fencing. On-site construction monitoring shall be conducted when construction occurs in close proximately to an active nest buffer. The buffer shall remain in place until determined by the qualified biologist that the nestlings have fledged, and the nest is no longer active. If an active nest is encountered during the Project construction, construction shall stop immediately until a qualified biologist can determine (1) the status of the nest, and (2) when work can proceed without risking violation to state or federal laws.	Prior to the start of & during Project related activities	Project Proponent
MM BIO-7: Pre-construction surveys shall be conducted by the Lead Biologist for the presence of desert kit fox~~,~~ and American badger prior to commencement of construction activities. No more than forty-five (45) days and no less than thirty (30) days prior to the beginning of surface disturbance, the Designated Biologist shall conduct a pre-Project survey to attain 100% visual coverage within the Project area and a minimum 200-meter buffer to determine the presence or absence of desert kit fox individuals, dens, and sign. Permittee shall provide the results of the survey to CDFW prior to start of Project activities. If potential dens are located, they shall be monitored by the Designated Biologist. Trail cameras may be used to assist with observation but shall not be the sole basis upon which the	Prior to the start of & during Project related activities	Project Proponent

status is determined. Permittee shall provide a determination if active dens can be avoided and buffered from Project activities to prevent take and disturbance with the survey results. Should active dens be present within the Project area that cannot be avoided with an adequate buffer, the Permittee shall submit a monitoring and relocation plan for CDFW's review and approval. No disturbance or relocation of active dens may take place when juveniles may be present and dependent on parental care. Burrows that have been confirmed inactive within the Project site, that are not being excavated and filled, will be blocked with rocks and sticks to discourage use during Project activities and removed when construction is complete. The Designated Biologist shall periodically check that the inactive burrows remain blocked and are not reoccupied.		
MM BIO-8: CDFW recommends County of San Bernardino perform surveys per the guidance of the *Staff Report on Burrowing Owl Mitigation* (CDFG, 2012), assess the impact, and update the proposed mitigation measure to include avoidance, minimization, and mitigation for burrowing owls identified on-site, and these same measures be applied to any individuals found during take avoidance surveys as conditions by the proposed mitigation measure. CDFW recommends the guidance of mitigating impacts to burrowing owls in the Staff Report on Burrowing Owl Mitigation (CDFG, 2012) be followed, including (a) permanent impacts to nesting, occupied and satellite burrows and/or burrowing owl habitat such that the habitat acreage, number of burrows and burrowing owls impacted are replaced with permanent conservation of similar vegetation communities (grassland, scrublands, desert, urban, and agriculture) to provide for burrowing owl nesting, foraging, wintering, and dispersal (i.e., during breeding and non-breeding seasons) comparable to or better than that of the impact area, and (b) sufficiently large acreage, and presence of fossorial mammals.	Prior to the start of Project related activities	Project Proponent
MM BIO-9: Burrowing Owl. If complete avoidance cannot be achieved an Incidental Take Permit (ITP) for Burrowing owl (*Athene cunicularia*) shall be obtained prior to initiation of ground disturbing activities. The Project proponent shall adhere to measures and conditions set forth within the ITP. Compensatory mitigation for direct impacts to 62 acres shall be fulfilled through conservation of suitable Burrowing owl habitat.	Prior to the start of Project related activities	Project Proponent
MM-BIO-9.1 At least 45 days prior to construction the Project proponent shall conduct a survey of the project site to determine if burrowing owls are present. If present the Project proponent shall prepare a Burrowing Owl Plan that shall be submitted to CDFW for review and approval at least 30 days prior to initiation of ground disturbing activities. The Burrowing Owl Plan shall include 1) impact assessment that details the number and location of occupied burrow sites, and acres of burrowing owl habitat; 2) if avoidance of impacts is proposed, details on avoidance actions and monitoring such as proposed buffers, visual barriers and other actions; 3) site monitoring to be conducted prior to, during, and after any exclusion of burrowing owls from their burrows sufficient to ensure take is avoided, daily monitoring with cameras and direct observation for one week to confirm young of the year have fledged if the exclusion	Prior to the start of Project related activities	Project Proponent

will occur immediately after the end of the breeding season, and process to document any excluded burrowing owls use of artificial or natural burrows on an adjoining mitigation site (if able to confirm by band resight), 4) details of mitigation for impacts to occupied burrows and habitat. The proposed implementation of burrow exclusion and closure should only be considered as a last resort. If impacts to occupied burrows cannot be avoided, information shall be provided regarding adjacent or nearby suitable habitat available to owls. If no suitable habitat is available nearby, details regarding the creation and funding of artificial burrows (numbers, location, and type of burrows) and management activities for relocated owls shall also be included in the Burrowing Owl Plan. The Project proponent shall implement the Burrowing Owl Plan following CDFW review and approval.		
MM-BIO-9.2: Burrowing Owl Avoidance. If burrowing owls are detected on-site, a Designated Biologist, knowledgeable of burrowing owl habitat and behavior, shall establish a no-disturbance buffer following the 20121 Staff Report around all burrowing owl burrows such as roosting and satellite burrows within the Project area and an appropriate buffer determined by the Designated Biologist, with posted signs demarking the area to avoid, using stakes, flags, and/or rope or cord to minimize the disturbance of burrowing owl habitat. The Designated Biologist shall delineate burrows with different materials than those used to delineate the Project area. Project proponent shall remove and properly dispose of all materials used for delineation immediately upon completion of the Project.	Prior to the start of Project related activities	Project Proponent
MM-BIO-9.3 To ensure that the Project avoids impacts to burrowing owl, a qualified biologist shall complete a take avoidance survey no less than 14 days prior to initiating ground disturbance activities using the recommended methods described in the 2012 Staff Report. Burrowing owls may re-colonize a site after only a few days. Time lapses or a break in construction activities of 3 days will trigger subsequent take avoidance surveys including but not limited to a final survey conducted within 24 hours prior to ground disturbance.	Prior to the start of Project related activities	Project Proponent
MM-BIO-9.4 During take avoidance surveys the Project proponent shall have a Designated Biologist(s), pre-approved by CDFW, inspect all burrows that exhibit typical characteristics of owl activity prior to any site-preparation activities. Evidence of owl activity may include presence of owls themselves, burrows, and owl sign at burrow entrances such as pellets, whitewash or other "ornamentation," feathers, prey remains, etc. If it is evident that the burrows are actively being used, the Project proponent shall follow the guidelines in the CDFW approved Burrowing Owl Plan. If no Plan has been approved the Project proponent shall not commence activities until owls have been confirmed absent and the burrows are no longer in use by adult or juvenile owls or until a Burrowing Owl Plan has been submitted and approved.	Prior to the start of Project related activities	Project Proponent