

Mitigation Monitoring and Reporting Program

Imperial Solar Energy Center South

State Clearinghouse No. 2010061038

Conditional Use Permit: CUP #10-0011

Variance: #V10-006

BLM Right-of-Way: CACA-51645/CACA-52359

EA Number: 2010-64/2011-0007

Lead Agency:
County of Imperial
801 Main Street
El Centro, CA 92243

and

Bureau of Land Management
1661 South 4th Street
El Centro, CA 92243

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April 2011

MITIGATION MONITORING AND REPORTING PROGRAM

County of Imperial and Bureau of Land Management

Imperial Solar Energy Center South

The County of Imperial will adopt this Mitigation Monitoring and Reporting Program (MMRP) in accordance with Public Resources Code (PRC) Section 21081.6 and Section 15097 of the California Environmental Quality Act (CEQA) Guidelines. The purpose of the MMRP is to ensure that the Imperial Solar Energy Center South Project, which is the subject of the Environmental Impact Report (EIR)/Environmental Assessment (EA), complies with all applicable environmental mitigation requirements. The mitigation measures for the project will be adopted by the County of Imperial, in conjunction with the adoption of the EIR/EA. The mitigation measures have been integrated into this MMRP. Within this document, the approved mitigation measures are organized and referenced by subject category and include: Air Quality, Greenhouse Gases, Cultural Resources, Agricultural Resources, Health, Safety and Hazardous Materials/Fuels Management, Hydrology and Water Quality, Biological Resources, Paleontological Resources, and Cumulative Impacts. The mitigation measures are provided in Table 1. The specific mitigation measures are identified, as well as the monitoring method, responsible monitoring party, monitoring phase, verification/approval party, date mitigation measure verified or implemented, location of documents (monitoring record), and completion requirement for each mitigation measure.

The mitigation measures applicable to the project include avoiding certain impacts altogether, minimizing impacts by limiting the degree or magnitude of the action and its implementation, and/or reducing or eliminating impacts over time by maintenance operations during the life of the action.

Public Resources Code Section 21081.6 requires the Lead Agency, for each project that is subject to CEQA, to monitor performance of the mitigation measures included in any environmental document to ensure that implementation does, in fact, take place. The County of Imperial is the designated lead agency for the Mitigation Monitoring and Reporting Program. The County of Imperial and/or Bureau of Land Management are responsible for review of all monitoring reports, enforcement actions, and document disposition. The County of Imperial and/or Bureau of Land Management will rely on information provided by the monitor as accurate and up to date and will field check mitigation measure status as required.

A record of the MMRP will be maintained at County of Imperial, Department of Planning and Development Services, 801 Main Street, El Centro, CA 92243. All mitigation measures contained in the EIR/EA shall be made conditions of the project as may be further described below.

TABLE 1
Imperial Solar Energy Center South
Mitigation, Monitoring, And Reporting Program Checklist

MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
Section 4.4 -Air Quality								
AQ1	<p>All off-road construction diesel engines not registered under CARB's Statewide Portable Equipment Registration Program, which have a rating of 50 horsepower (hp) or more, will meet, at a minimum, the Tier 2 California Emissions Standards for Off-Road Compression-Ignition Engines as specified in California Code of Regulations, Title 13, section 2423(b)(1) unless such engine is not available for a particular item of equipment. If a Tier 2 engine is not available for any off-road engine larger than 50 hp, that engine will have tailpipe retrofit controls that reduce exhaust emissions of NO_x and PM to no more than Tier 2 emission levels. Tier 1 engines will be allowed on a case-by-case basis only when the Project owner has documented that no Tier 2 equipment or emissions equivalent retrofit equipment is available for a particular equipment type that must be used to complete the Project's construction. This will be documented with signed written correspondence by the appropriate construction contractor, along with documented correspondence with at least two construction equipment rental firms.</p> <p>A list of the construction equipment and the associated EPA Tier shall be submitted to the County Planning and Development Department prior to the issuance of a grading permit to verify implementation of measure.</p>	<p>Prior to the issuance of a grading permit, the County Planning and Development Services shall verify that construction equipment are equipped with an engine designation of EPA Tier 2 or better.</p>	<p>Department of Planning and Development Services</p>	<p>Prior to the issuance of a grading permit</p>	<p>Department of Planning and Development Services</p>			
AQ2	<p>Pursuant to Imperial County's APCD, all construction sites, regardless of size, must comply with the requirements contained within Regulation VIII-Fugitive Dust Control Measures. These mitigation measures listed below shall be implemented prior to and during construction. The County Department of Public Works will verify implementation and compliance with these measures.</p>	<p>Prior to and during construction, the Department of Planning and Development Services will verify</p>	<p>Department of Planning and Development Services</p>	<p>Prior to and during construction</p>	<p>Department of Planning and Development Services</p>			

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	<p><i>ICAPCD Standard Measures for Fugitive Dust (PM₁₀) Control</i></p> <ul style="list-style-type: none"> • All disturbed areas, including Bulk Material storage which is not being actively utilized, shall be effectively stabilized and visible emissions shall be limited to no greater than 20% opacity for dust emissions by using water, chemical stabilizers, dust suppressants, tarps or other suitable material such as vegetative ground cover. • All on site and off site unpaved roads will be effectively stabilized and visible emissions shall be limited to no greater than 20% opacity for dust emissions by paving, chemical stabilizers, dust suppressants and/or watering. • All unpaved traffic areas one (1) acre or more with 75 or more average vehicle trips per day will be effectively stabilized and visible emission shall be limited to no greater than 20% opacity for dust emissions by paving, chemical stabilizers, dust suppressants and/or watering. • The transport of Bulk Materials shall be completely covered unless six inches of freeboard space from the top of the container is maintained with no spillage and loss of Bulk Material. In addition, the cargo compartment of all Haul Trucks is to be cleaned and/or washed at delivery site after removal of Bulk Material. • All Track-Out or Carry-Out will be cleaned at the end of each workday or immediately when mud or dirt extends a cumulative distance of 50 linear feet or more onto a paved road within an Urban area. • Movement of Bulk Material handling or transfer shall be stabilized prior to handling or at points of transfer with application of sufficient water, chemical stabilizers or by sheltering or enclosing the operation and transfer line. • The construction of any new Unpaved Road is prohibited within any area with a population of 500 or more unless the road meets the definition of a Temporary Unpaved Road. Any temporary unpaved road shall be effectively stabilized 	<p>that the project is in compliance with Regulation VIII- Fugitive Dust Control Measures.</p>						

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	<p>and visible emissions shall be limited to no greater than 20% opacity for dust emission by paving, chemical stabilizers, dust suppressants and/or watering.</p> <p><i>ICAPCD Standard Measures for Construction Combustion Equipment</i></p> <ul style="list-style-type: none"> • Use of alternative fueled or catalyst equipped diesel construction equipment, including all off-road and portable diesel powered equipment. • Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes as a maximum. • Limit, to the extent feasible, the hours of operation of heavy duty equipment and/or the amount of equipment in use. • Replace fossil fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set). • Construction equipment operating onsite should be equipped with two to four degree engine timing retard or precombustion chamber engines. • Construction equipment used for the project should utilize EPA Tier 2 or better engine technology. • Keep vehicles well maintained to prevent leaks and minimize emissions, and encourage employees to do the same. <p><i>ICAPCD "Discretionary" Measures for Fugitive Dust (PM₁₀) Control</i></p> <ul style="list-style-type: none"> • Water exposed soil with adequate frequency for continued moist soil, including a minimum of three wettings per day during grading activities. • Replace ground cover in disturbed areas as quickly as possible. • Automatic sprinkler system installed on all soil piles. • Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site. 							

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	<ul style="list-style-type: none"> Implement the trip reduction plan to achieve a 1.5 AVR for construction employees. Implement a shuttle service to and from retail services and food establishments during lunch hours. <p><i>Enhanced Mitigation Measures for Construction Equipment</i></p> <ul style="list-style-type: none"> Curtail construction during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak hour of vehicular traffic on adjacent roadways. Implement activity management (e.g. rescheduling activities to reduce short-term impacts). 							
AQ3	Prior to the issuance of a building permit, the project applicant shall comply with the ICAPCD Rule 310. All project proponents shall consult with ICAPCD to select and implement off-site mitigation measures, pay an operational development fee, or a combination of both.	Prior to issuance of a building permit, the Department of Planning and Development Services will verify that the project is in compliance with ICAPCD Rule 310.	Department of Planning and Development Services	Prior to issuance of a building permit	Department of Planning and Development Services			
Section 4.5-Greenhouse Gas Emissions								
GHG1	<p>Diesel Equipment (Compression Ignition) Offset Strategies (40% to 60% Reduction):</p> <ol style="list-style-type: none"> Use electricity from power poles rather than temporary diesel power generators. Construction equipment operating onsite should be equipped with two to four degree engine timing retard or precombustion chamber engines. Construction equipment used for the project should utilize EPA Tier 2 or better engine technology (Requirement under Mitigation Measure AQ1 as described in Section 4.4 of this EIR/EA). 	Prior to the issuance of a grading permit, the Applicant shall identify measures to reduce greenhouse gas emissions as listed in Mitigation Measure GHG1.	Department of Planning and Development Services	Prior to issuance of a grading permit	Department of Planning and Development Services			

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GHG2	<p>Vehicular Trip (Spark Ignition) Offset Strategies (30% to 70% Reduction):</p> <p>4) Encourage commute alternatives by informing construction employees and customers about transportation options for reaching your location (i.e. post transit schedules/routes).</p> <p>5) Help construction employees rideshare by posting commuter ride sign-up sheets, employee home zip code map, etc.</p> <p>6) When possible, arrange for a single construction vendor who makes deliveries for several items.</p> <p>7) Plan construction delivery routes to eliminate unnecessary trips.</p> <p>8) Keep construction vehicles well maintained to prevent leaks and minimize emissions, and encourage employees to do the same.</p>	<p>Prior to issuance of a grading permit, the Applicant shall identify measures to reduce greenhouse gas emissions as listed in Mitigation Measure GHG2.</p>	<p>Department of Planning and Development Services</p>	<p>Prior to issuance of a grading permit</p>	<p>Department of Planning and Development Services</p>			
Section 4.6- Geology/Soils and Mineral Resources								
GS1	<p>Prior to approval of final engineering and grading plans for the Imperial Solar Energy Center South project site, the County shall verify that all recommendations contained in the <i>Geotechnical Investigation Report, Imperial Solar Energy Center South</i>, prepared by Landmark Consultants, Inc. (May 2010) has been incorporated into all final engineering and grading plans. This report identifies specific measures for mitigating geotechnical conditions on the project site, and addresses site preparation, foundations and settlements, slabs-on-grade, concrete mixes and corrosivity, seismic design, and pavement design. The County's soil engineer and engineering geologist shall review grading plans prior to finalization, to verify plan compliance with the recommendations of the report. All development on the project site shall be in accordance with Title 24, California Code of Regulations.</p>	<p>Prior to approval of final engineering and grading plans for the project site, the County's soil engineer and engineering geologist shall verify that all recommendations contained in the geotechnical report have been incorporated into all final engineering and grading plans.</p>	<p>Department of Public Works</p>	<p>Prior to approval of final engineering and grading plans</p>	<p>Department of Public Works</p>			

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Section 4.7- Cultural Resources								
CR1	<p>The sites, which would be impacted during project construction, are broken down by alternative in Section 4.7.1 above. For those sites subject to the preliminary surveys and which would be directly impacted due to the construction of access roads, towers, pull sites, or solar fields, a formal testing and evaluation program is required. The evaluation program for such sites shall document the presence or absence of subsurface deposits and the specific research potential for each site. In addition, the evaluation program shall be consistent with the <i>Secretary of Interior Standards for the Treatment of Historic Properties and the Secretary of Interior Standards and Guidelines for Archaeology and Historic Preservation</i>. Should these sites be determined eligible for listing on the NRHP, CRHR, and/or local register, best management practices consistent with the <i>Secretary of Interior Standards for the Treatment of Historic Properties and the Secretary of Interior Standards and Guidelines for Archaeology and Historic Preservation</i> shall be required including:</p> <p>a) Preservation in Place:</p> <p>(1) Avoidance of the resource through project redesign in a manner that is technically possible, operationally possible, does not cause a new significant environmental impact or increase the severity of a significant environmental impact, and does not cause the loss or more than 1 MW of production.</p> <p>(2) Covering the archaeological sites with a layer of chemically stable soil before constructing facilities on site so long as covering can be done in a manner that is technically possible, does not cause a new significant environmental impact or increase the severity of a significant environmental impact, and does not cause the loss or more than 1 MW of production.</p>	<p>Prior to construction, a formal testing and evaluation program shall document the presence or absence of subsurface deposits and the specific research potential for each site.</p> <p>If the sites are determined to be eligible for listing on the NRHP, CRHR, and/or local register, best management practices shall be implemented to ensure avoidance of project impacts.</p>	Department of Planning and Development Services	Prior to construction	Department of Planning and Development Services			

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	<p>b) Minimizing impacts by limiting the degree of impacts or reducing the impact through best management practices identified in a data recovery, excavation and/or construction monitoring plan. The content of this plan must be consistent with <i>the Secretary of Interior's Standards for the Treatment of Historic Properties and Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation</i> and include a description of areas to be monitored during construction, a discovery plan that will address unanticipated cultural resources, and provisions for the education of construction workers.</p>							
CR2	<p>There are additional sites which may be impacted due to their proximity to construction areas (see Section 4.7.1 above). Because these sites are located near areas being impacted by project construction, temporary fencing around their perimeters will be required to ensure that project impacts remain within the proposed impact area and that cultural resources are avoided by project personnel. In addition, grading within the construction area shall be performed in a manner that incorporates sheet flow and water runoff diversion techniques to prevent surface water from damaging off-site cultural sites.</p>	<p>Prior to construction, temporary fencing shall be required around the perimeters of cultural sites to avoid project impacts.</p> <p>Prior to grading, grading plans must be verified and approved by the Engineering Department.</p>	Department of Planning and Development Services	Prior to construction	Department of Planning and Development Services			
CR3	<p>Pursuant to CEQA Guidelines § 15064.5(f), in the event that unknown historic or unique archaeological resources are encountered during construction or operational repairs, archaeological monitors will be authorized to temporarily divert construction work within 100 feet of the area of discovery until the significance and the appropriate mitigation measures are determined by a Registered Professional Archaeologist familiar with the resources of the region. Applicant shall notify the County within 24 hours. Applicant shall provide contingency</p>	<p>The Applicant shall notify the County within 24 hours if unknown historic or unique archaeological resources are encountered. The County shall</p>	Department of Planning and Development Services	During and post-construction	Department of Planning and Development Services			

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	funding sufficient to allow for implementation of avoidance measures or appropriate mitigation.	verify that the Applicant has provided contingency funding sufficient to allow for implementation of avoidance measures or appropriate mitigation.						
CR4	If human remains are discovered, work will be halted in that area, and the procedures set forth in the CEQA Guidelines Sec. 15064.5 (d) and (e), California PRC Sec. 5097.98 and state HSC Sec. 7050.5 and the Native American Graves Protection and Repatriation Act (NAGPRA) shall be followed, as applicable.	The Applicant shall notify the County within 24 hours if unknown human remains are discovered and work shall be halted. The procedures set forth in the CEQA Guidelines Sec. 15064.5 (d) and (e), California PRC Sec. 5097.98 and state HSC Sec. 7050.5 and the Native American Graves Protection and Repatriation Act (NAGPRA) shall be followed and implemented, as applicable.	Department of Planning and Development Services	During construction	Department of Planning and Development Services			

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Section 4.9-Agricultural Resources								
AR1	<p>Prior to the issuance of a grading permit or building permit (whichever permit comes first) for the Proposed Action, the mitigation of impact to agricultural lands shall be accomplished via one of the following as determined by the Permittee:</p> <p>The "Imperial Solar Energy Center South" project will result in the permanent loss of 820.7 acres of agricultural lands (prime farmland and farmland of statewide importance) and the following mitigation measures shall apply:</p> <p>Option 1: The Permittee shall procure Agricultural Conservation Easements on a 2 to 1 basis for all 820.7 acres, of similar quality farmland, outside of the path of development. The Conservation Easement shall meet the State Department of Conservation's regulations and shall be recorded prior to issuance of any grading or building permits.</p> <p>Option 2: The Permittee shall pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 20% of the fair market value per acre for the 820.7 acres based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program costs on a cost recovery/time and material basis. The Agricultural In-Lieu Mitigation Fee, will be placed in a trust account administered by the Planning and Development Services Department and will be used for such purposes as the acquisition, stewardship, preservation and enhancement of agricultural lands within Imperial County.</p> <p>Option 3: The Permittee shall submit to the County of Imperial a reclamation plan to return the property to its current agricultural condition prior to the issuance of any building permits. The reclamation plan shall include a reclamation cost estimate prepared by a licensed general contractor or civil engineer. The</p>	<p>Prior to the issuance of a grading permit or building permit, Planning and Development Services shall verify that the Permittee has either procured a conservation easement or paid an agricultural in-lieu mitigation fee.</p>	<p>Department of Planning and Development Services</p>	<p>Prior to the issuance of a grading permit or building permit (whichever comes first)</p>	<p>Department of Planning and Development Services</p>			

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	Applicant shall provide financial assurance in the amount equal to the reclamation cost estimate to return the land to its current agricultural condition prior to the issuance of any building permits.							
Section 4.10- Health, Safety and Hazardous Materials/Fire and Fuels Management								
HM1	Prior to the issuance of a grading permit or Notice to Proceed (NTP), all trash and debris within the project site (solar energy facility site, transmission line corridor and access road) shall be disposed of off-site, in accordance with current, local, state, and federal disposal regulations. Compliance with this measure shall be verified by the BLM and the Planning and Development Services Department before issuance of a NTP or grading permit.	Prior to the issuance of a grading permit, Department of Planning and Development Services shall verify that all trash and debris within the project site has been disposed of properly off-site.	Department of Planning and Development Services	Prior to the issuance of a grading permit	Department of Planning and Development Services			
HM2	Prior to the application of herbicides on the solar facility for weed management, a weed control plan shall be developed and approved by the BLM and reviewed and commented on by the County of Imperial Agricultural Commissioner. The weed control plan shall provide: 1) monitoring, preventative and management strategies for weed control during construction activities at the project; 2) control and management of weeds in areas temporarily disturbed during construction where native seed will aid in site revegetation; and, 3) a long-term strategy for weed control and management during the operation of the project.	The County of Imperial Agricultural Commissioner shall approve a weed control plan prior to the application of herbicides on the solar facility.	Department of Planning and Development Services and Agricultural Commissioner	Prior to application of herbicides on the solar facility	Department of Planning and Development Services and Agricultural Commissioner			
4.11- Hydrology and Water Quality								
HWQ1	Prior to the recordation of the first final map and/or issuance of the first grading permit, the developer shall submit and receive a NPDES permit from the RWQCB in accordance with a SWPPP approved by the County of Imperial. The SWPPP shall include	Prior to the recordation of the first final map and/or issuance of	Department of Public Works	Prior to the recordation of the first final map	Department of Public Works			

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	<p>source control and treatment control BMPs. Possible source control BMPs include, but are not limited to:</p> <ul style="list-style-type: none"> • trash storage; • integrated pest management; • efficient irrigation and landscape design; and, • property owner educational materials regarding source control management. <p>Treatment control BMPs will comprise of detention basins to remove trash and pollutants such as sediment, nutrients, metals, bacteria, oil and grease, and organics.</p> <p>BMP Maintenance</p> <p>Proper maintenance is required to insure optimum performance of the detention basins. Maintenance will be the responsibility of the owner throughout the life of the project. The owner will instruct any future owner of the maintenance responsibility. The operational and maintenance needs of the proposed detention basins and under-panel detention basins include:</p> <ul style="list-style-type: none"> • Periodic sediment removal. • Monitoring of the basin to ensure it is completely and properly drained. • Outlet structure cleaning. • Vegetation management. • Removal of weeds, tree pruning, leaves, litter, and debris. • Vegetative stabilization of eroding banks. <p>Inspection Frequency</p> <p>The facility will be inspected and inspection visits will be completely documented:</p> <ul style="list-style-type: none"> • Once during the rainy season and once between each rainy season at a minimum, • After every large storm (after every storm monitored or those storms with more than 0.50 inch of precipitation). 	<p>the first grading permit, the County's Engineering Department shall review and approve the SWPPP to ensure that pollutants will be controlled.</p>		<p>and/or issuance of the first grading permit</p>				

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	<p>Aesthetic and Functional Maintenance</p> <p>Functional maintenance is important for performance and safety reasons. Aesthetic maintenance is important for public acceptance of storm water facilities.</p> <p>Aesthetic Maintenance- The following activities will be included in the aesthetic maintenance program:</p> <ul style="list-style-type: none"> • Weed Control: Weeds will be removed through mechanical means. <p>Functional Maintenance has two components:</p> <ul style="list-style-type: none"> • Preventative maintenance. • Corrective maintenance. <p>Preventative Maintenance</p> <p>Preventative maintenance will be done on a regular basis. Preventative maintenance activities to be instituted at the basin are:</p> <ul style="list-style-type: none"> • Trash and Debris: During each inspection and maintenance visit to the site, debris and trash removal will be conducted to reduce the potential for inlet and outlet structures and other components from becoming clogged and inoperable during storm events. • Sediment management: Alluvial deposits at the inlet structures may create zones of ponded water. Upon these occurrences these deposits will be graded within the basin in an effort to maintain the functionality of the BMP. Sediment grading will be accomplished by manually raking the deposits. • Sediment removal: Surface sediments will be removed when sediment accumulation is greater than 18-inches, or 10 percent of the basin volume, whichever is less. Vegetation removed with any surface sediment excavation activities will be replaced through reseeded. 							

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	<ul style="list-style-type: none"> • Mechanical Components: Regularly scheduled maintenance will be performed on valves, fence gates, locks, and access hatches in accordance with the manufacturers' recommendations. Mechanical components will be operated during each maintenance inspection to assure continued performance. • Elimination of Mosquito Breeding Habitats: The most effective mosquito control program is one that eliminates potential breeding habitats. <p>Corrective Maintenance Corrective maintenance is required on an emergency or non-routine basis to correct problems and to restore the intended operation and safe function of a basin. Corrective maintenance activities include:</p> <ul style="list-style-type: none"> • Removal of Debris and Sediment: Sediment, debris, and trash, which threaten the ability of a basin to store or convey water, will be removed immediately and properly disposed of. • Structural Repairs: Repairs to any structural component of a basin will be made promptly (e.g., within 10 working days). Designers and contractors will conduct repairs where structural damage has occurred. • Embankment and Slope Repairs: Damage to the embankments and slopes will be repaired quickly (e.g., within 10 working days). • Erosion Repair: Where a reseeding program has been ineffective, or where other factors have created erosive conditions (i.e., pedestrian traffic, concentrated flow, etc.), corrective steps will be taken to prevent loss of soil and any subsequent danger to the performance of a basin. There are a number of corrective actions that can be taken. These include erosion control blankets, riprap, sodding, or reduced flow through the area. Design engineers will be 							

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	<p>consulted to address erosion problems if the solution is not evident.</p> <ul style="list-style-type: none"> • Fence Repair: Timely repair of fences (e.g., within 10 working days) will be done to maintain the security of the site. • Elimination of Trees and Woody Vegetation: Woody vegetation will be removed from embankments. • Elimination of Animal Burrows: Animal burrows will be filled and steps taken to remove the animals if burrowing problems continue to occur (filling and compacting). If the problem persists, vector control specialists will be consulted regarding removal steps. This consulting is necessary as the threat of rabies in some areas may necessitate the animals being destroyed rather than relocated. • General Facility Maintenance: In addition to the above elements of corrective maintenance, general corrective maintenance will address the overall facility and its associated components. If corrective maintenance is being done to one component, other components will be inspected to see if maintenance is needed. <p>Maintenance Frequency</p> <p>Maintenance indicators, described above, will determine the schedule of maintenance activities to be implemented at the basin. These basins should not require a rigorous maintenance schedule, once the landscaping is established. The inspection frequency and regular preventative maintenance will indicate when corrective maintenance is necessary.</p> <p>The detention basins must be inspected at least once during the rainy season and at least once between each rainy season. These basins must be maintained so that they continue to function as designed. All inspections and maintenance activities will be documented for submittal to the County of Imperial and the Regional Water Quality Control Board if requested.</p>							

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4.12-Biological Resources								
B1	<p>Vegetation Communities</p> <p>Mitigation for the permanent and temporary impacts to creosote bush-white burr sage scrub, desert saltbush scrub, arrow weed thicket, and desert wash shall be accomplished through required mitigation acres. Table 4.12-10 identifies the mitigation ratio/requirement and required mitigation for each vegetation community.</p>	<p>Prior to the issuance of a grading permit, the Applicant shall pay mitigation fees for impacts to vegetation communities.</p>	<p>Department of Planning and Development Services</p>	<p>Prior to the issuance of a grading permit</p>	<p>Department of Planning and Development Services</p>			
B2	<p>Noxious, Invasive and Non-Native Weeds</p> <p>To minimize the introduction and spread of weed species a Weed Management Plan will be developed and implemented. The weed management plan will include a discussion of specific weeds identified on site that will be targeted for eradication or control as well as a variety of measures that will be undertaken during construction and O&M activities to prevent the introduction and spread of new weed species as a result of the project.</p> <p>General measures to prevent the spread of weeds include:</p> <ul style="list-style-type: none"> • Limiting disturbance areas during construction to the minimal required to perform work and limiting ingress and egress to defined routes • Maintaining vehicle wash and inspection stations, and closely monitoring the types of materials brought onto the site to minimize the potential for weed introduction • Use of certified weed free mulch, straw wattles, hay bales and seed mixes • Reestablishing native vegetation along the transmission line and within the southwestern corner of the solar field as quickly as practicable on disturbed sites is the most effective long-term strategy to avoid weed invasions 	<p>Prior to and during construction and during operation, the Applicant shall develop and implement a Weed Management Plan.</p>	<p>Department of Planning and Development Services</p>	<p>Prior to and during construction and during operation</p>	<p>Department of Planning and Development Services</p>			

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	<ul style="list-style-type: none"> Monitoring and rapid implementation of control measures to ensure early detection and eradication for need weed invasions <p>Weed control methods that may be used include both physical and chemical control. Physical control methods include manual hand pulling of weeds, or the use of hand and power tools to uproot, girdle, or cut plants. Herbicide applications are a widely used, effective control method for removing infestations of invasive weed species. However, inadvertent application of herbicide to adjacent native plants must be avoided, which can often be challenging when weeds are interspersed with native cover. Before applying herbicide, contractors will be required to obtain any required permits from state and local authorities. Only a State of California and federally certified contractor will be permitted to perform herbicide applications. All herbicides will be applied in accordance with applicable laws, regulations, and permit stipulations. Only herbicides and adjuvants approved by the State of California and federal agency for use on public lands will be used within or adjacent to the project site.</p> <p>Invasive plants species on BLM lands would be prevented, controlled, and treated through an Integrated Pest Management approach per the <i>Vegetation Treatments on Bureau of Land Management Lands in 17 Western States Programmatic Environmental Report (PER 2007)</i>.</p> <p>A <i>Final Vegetation Treatments Using Herbicides on Bureau of Land Management Lands in 17 Western States Programmatic Environmental Impact Statement (PEIS)</i> was released to the public on June 29, 2007. The Record of Decision (ROD) for the PEIS includes standard operating procedures (SOPs) for applying herbicides (summarized in Appendix B, Table B-2 pages B-9 to B-</p>							

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	<p>14 of the ROD) and mitigation measures (summarized in Table 2, pages 2-4 to 2-6 of the ROD) that were adopted to ensure that all practicable means to avoid or minimize environmental harm is implemented in these vegetation treatment projects. The Human Health Risk Assessment (PEIS, Appendix B) and Ecological Risk Assessment (PEIS, Appendix C) include an analysis of impacts to resources and human health. This EA tiers to the both the human health and ecological risk assessments, the resource analyses related to the SOPs, and resource analyses related to the mitigation measures in the PEIS.</p> <p>Only herbicides approved by BLM in California will be used on BLM lands. Herbicide application can only occur on BLM lands with an approved Pesticide Use Proposal (PUP).</p>							
B3	<p>Burrowing Owls</p> <p>Burrowing owls have been observed in the active agricultural fields within the proposed solar energy facility. The following measures will avoid, minimize, or mitigate potential impact to burrowing owl during construction activities:</p> <ol style="list-style-type: none"> 1) Initial grading of the agricultural fields project footprint should take place between September 1 and January 31 to avoid impacts to any breeding burrowing owls. If construction is to begin during the breeding season, the following measures will be implemented prior to February 1 to discourage the nesting of the burrowing owls within the area of impact. As construction continues, any area where owls are sighted would be subject to frequent surveys by the Designated Biologist or Biological Monitor for burrows before the breeding season begins, so that owls can be properly relocated before nesting occurs. 2) Within 30-days prior to initiation of construction, pre-construction clearance surveys for this species shall be conducted by qualified and agency-approved biologists 	<p>Prior to construction, Planning and Development Services shall verify that pre-construction surveys were conducted.</p> <p>If active burrows are present, the measures as provided in Mitigation Measure B4 shall be implemented.</p>	<p>Department of Planning and Development Services and Designated Biologist</p>	<p>Prior to and during construction</p>	<p>Department of Planning and Development Services and California Department of Fish and Game</p>			

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	<p>to determine the presence or absence of this species within the construction area. This is necessary, as burrowing owls may not use the same burrow every year; therefore, numbers and locations of burrowing owl burrows at the time of construction may differ from the data collected during previous focused surveys. The proposed construction areas shall be clearly demarcated in the field by the project engineers and Designated Biologist prior to the commencement of the pre-construction clearance survey. The surveys shall follow the protocols provided in the <i>Burrowing Owl Survey Protocol and Mitigation Guidelines</i>.</p> <p>3) If active burrows are present within the project footprint, the following mitigation measures shall be implemented. Passive relocation methods are to be used by the biological monitors to move the owls out of the impact zone. Passive relocation should only be done in the non-breeding season. This includes covering or excavating all burrows and installing one-way doors into occupied burrows. This will allow any animals inside to leave the burrow, but will exclude any animals from re-entering the burrow. A period of at least one week is required after the relocation effort to allow the birds to leave the impacted area before construction of the area can begin. The burrows should then be excavated and filled in to prevent their reuse. The destruction of the active burrows on-site requires construction of new burrows at a mitigation ratio of 2:1 at least 50 meters from the impacted area and must be constructed as part of the above-described relocation efforts. The construction of new burrows will take place on BLM land to the north or south of the solar field, and outside of the proposed transmission corridor; any relocated burrows onto BLM lands will be approved by the</p>							

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	<p>agencies to prevent conflicts in future land use.</p> <p>4) As the project construction schedule and details are finalized, an approved biologist shall prepare a BUOW Mitigation and Monitoring Plan that will detail the approved, site-specific methodology proposed to minimize and mitigate impacts to this species. Passive relocation, destruction of burrows, and construction of artificial burrows can only be completed upon prior approval by and in cooperation with the CDFG.</p> <p>Compensation CDFG's mitigation guidelines for burrowing owl (1995), requires a minimum of 6.5 acres of foraging habitat per pair or unpaired resident bird to be acquired and protected to offset the loss of foraging and burrow habitat on the project site.</p> <p>Assuming project impacts to four active burrows, a minimum of 26 acres would be permanently protected to offset this loss. This mitigation would be implemented locally to provide at least 26 acres of the FTHL mitigation contains suitable habitat for burrowing owl and is approved by CDFG. If FTHL mitigation is in the form of an in lieu fee to be used within the Yuha MA, which also provides suitable habitat for BUOW, it is assumed that the BLM or ICC's use of the funds within the MA will also improve or increase habitat for BUOW and will therefore fulfill the BUOW mitigation requirement.</p>							
B4	<p>General O&M Mitigation Measures A number of general mitigation measures, designed to reduce potential direct and indirect impacts to resources in the project area will be implemented after construction as standard Operation and Maintenance protocols. In order to reduce the potential impact to biological resources during operations and maintenance, the following will be implemented:</p>	After construction, a brief Annual Report will be submitted to the relevant resource agencies documenting the	Department of Planning and Development Services and Bureau of	Post-construction	Department of Planning and Development Services and Bureau of			

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	<ul style="list-style-type: none"> • A brief Annual Report will be submitted to the relevant resource agencies documenting the implementation of the following general measures as well as any resource-specific measures such as habitat restoration and/or compensation: <ul style="list-style-type: none"> – Speed limits along all transmission access roads and within the solar energy facility will not exceed 15 miles per hour. Transmission access for O&M activities shall be kept to the minimum necessary for operations and be accomplished during the winter months when feasible. This limited access and annual timing is designed to prevent FTHL mortality. – Annual formal Worker Education Training shall be established for all employees and any subcontractors at the ISEC South to provide instruction on sensitive species identification; measures to avoid contact, disturbance, and injury; and reporting procedures in the case of dead and/or injured wildlife species. The USFWS and the BLM shall be notified per approved guidelines and channels of authority if mortality should occur. – A <i>Raven Control Plan</i> will be prepared and implemented that details specific measures for storage and disposal of all litter and trash produced by the solar energy facility and its employees. This plan is designed to discourage scavengers that may also prey on wildlife in the vicinity. All employees will be familiar with this plan and littering will not be tolerated. This plan will be approved by the BLM and CDFG. – A <i>Weed Management Plan</i> will be prepared and 	<p>implementation of the standard Operation and Maintenance mitigation measures as provided in Mitigation Measure B3.</p>	<p>Land Management</p>		<p>Land Management</p>			

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	<p>implemented that describes specific on-going measures to remove weedy plant species from the solar energy facility and encourages native plant growth. This plan should be prepared in conformance with herbicide and native seed/planting guidelines outlined in the project's Habitat Restoration Plan, and will be approved by the BLM.</p> <ul style="list-style-type: none"> - A <i>Wildlife Mortality Reporting Program</i> will be prepared and implemented to identify and report any dead or injured animals observed by personnel conducting O&M activities within the solar energy facility and along the transmission line. An appropriate reporting format for dead or injured wildlife observed within the solar energy facility and along the transmission line will be developed in coordination with the USFWS and the BLM. In addition, reporting of any dead or injured avian species found along the transmission line will follow the existing USFWS Bird Fatality/Injury Reporting Program (https://birdreport.fws.gov/). - An Avian and Bat Protection Plan (ABPP) will be prepared that will outline conservation measures for construction and O&M activities that might reduce potential impacts to bird populations. These measures incorporate APLIC design guidelines for overhead utilities (2006) by incorporating recommended or other methods that enhance the visibility of the lines to avian species. The ABPP will also address disturbance minimization, timing of construction, minimization of activities that would attract prey and predators, and incorporation of the Wildlife Mortality Reporting Program and Raven 							

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	Control Plan discussed above.							
B5	<p>Flat Tailed Horned Lizard</p> <p>Mitigation Measures</p> <p>In accordance with the <i>FTHL Rangewide Management Strategy</i> (ICC 2003), the measures proposed below are designed to avoid, minimize, and/or compensate for potential direct and indirect effects construction of the proposed project may have on FTHL. The following will be implemented when conducting construction activities on the transmission line and within the creosote bush-white burr sage scrub vegetation in the southwestern corner of the solar energy facility:</p> <ol style="list-style-type: none"> 1. Prior to ground-disturbing activities, an individual shall be designated and approved by the USFWS and BLM as the Designated Biologist¹ (i.e. field contact representative) along with approved Biological Monitors as needed for construction, particularly within the Yuha MA. The Designated Biologist will be designated for the period during which on-going construction and post-construction monitoring and reporting by an approved biologist is required, such as annual reporting on habitat restoration. Each successive Designated Biologist will be approved by the BLM's Authorized Officer (i.e., BLM field manager, El Centro). The Designated Biologist will have the authority to ensure compliance with the conservation measures for the FTHL and will be the primary agency contact for the implementation of these measures. The Designated Biologist will organize and oversee the work of the biological monitors and have the authority and 	<p>During construction and operation of the proposed project, the measures listed in Mitigation Measure B4 will be implemented.</p>	<p>Department of Planning and Development Services and Bureau of Land Management</p>	<p>During and post-construction</p>	<p>Department of Planning and Development Services and Bureau of Land Management</p>			

¹ A qualified Designated Biologist must have (1) a bachelor's degree with an emphasis in ecology, natural resource management, or related science; (2) three years of experience in field biology or current certification of a nationally recognized biological society, such as The Ecological Society of America or the Wildlife Society (3) previous experience with applying terms and conditions of a biological opinion; and, (4) the appropriate permit and/or training if conducting focused or protocol surveys for listed or proposed species.

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	<p>responsibility to halt activities that are in violation of the conservation measures. An organizational chart shall be provided to BLM prior to ground-disturbing activities with a clear chain of command and contact information (cell phones). A detailed list of responsibilities for the Designated Biologist is summarized below. To avoid and minimize impacts to biological resources, the Designated Biologist will:</p> <ul style="list-style-type: none"> • Notify BLM's Authorizing Officer and the USFWS at least 14 calendar days before initiating ground disturbing activities. • Immediately notify BLM's Authorized Officer and the USFWS in writing if the Project applicant is not in compliance with any conservation measures, including but not limited to any actual or anticipated failure to implement conservation measures within the time periods specified. • Conduct compliance inspections at a minimum of once per month during on-going construction after clearing, grubbing, and grading are completed, and submit a monthly compliance report to BLM's Authorized Officer until construction is complete. <p>2. The boundaries of all areas to be disturbed (including staging areas, access roads, and sites for temporary placement of spoils) will be delineated with stakes and flagging prior to construction activities. Where feasible, the areas shall be cleared of FTHL and fenced (according to the Strategy) to exclude FTHL from re-entering these construction areas, particularly in the MA and other high-use areas such as for staging of equipment or parking areas. Spoils will be stockpiled in disturbed areas lacking</p>							

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	<p>native vegetation or where habitat quality is poor, such as the agricultural fields rather than native desert. To the extent possible, disturbance of shrubs and surface soils due to stockpiling will be minimized. All disturbances, vehicles, and equipment will be confined to the flagged and cleared areas. To the extent possible, surface disturbance will be timed to minimize mortality to FTHL (see FTHL Construction Measure #7 below).</p> <p>3. Approved Biological monitor(s) will assist the Designated Biologist in conducting pre-construction surveys and in monitoring of mobilization, ground disturbance, grading, construction, operation, closure, and restoration activities. The biological monitor(s) will have experience conducting FTHL field monitoring, have sufficient education and field experience to understand FTHL biology, be able to identify FTHL scat, and be able to identify and follow FTHL tracks. The Designated Biologist will submit the resume, at least three references, and contact information of the proposed biological monitors to the BLM, CDFG, and USFWS for approval. To avoid and minimize impacts to biological resources, the Biological Monitors will assist the Designated Biologist with the following:</p> <ul style="list-style-type: none"> • Be present during construction (e.g., grubbing, grading, solar panel installation) activities that take place in FTHL habitat to avoid or minimize take of FTHL. Activities include, but are not limited to, ensuring compliance with all impact avoidance and minimization measures, monitoring for FTHLs and removing lizards from harm's way, and checking avoidance areas (e.g., washes) to ensure that signs, and stakes are intact and that human activities are restricted in these avoidance zones. 							

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	<ul style="list-style-type: none"> • At the end of each work day, inspect all potential wildlife pitfalls (trenches, bores and other excavations) for wildlife and then backfill. If backfilling is not feasible, all trenches, bores, and other excavations will be contoured at a 3:1 slope at the ends to provide wildlife escape ramps, or completely and securely covered to prevent wildlife access. • During construction, examine areas of active surface disturbance periodically, at least hourly, when surface temperatures exceed 29°Celsius (C; 85°F) for the presence of FTHL. <p>4. Prior to Project initiation, a worker environmental awareness program (WEAP) will be developed and implemented, and will be available in both English and Spanish. Wallet-sized cards summarizing this information will be provided to all construction, operation, and maintenance personnel. The education program will include the following aspects:</p> <ul style="list-style-type: none"> • biology and status of the FTHL, • protection measures designed to reduce potential impact to the species, • function of flagging designating authorized work areas, • reporting procedures to be used if a FTHL is encountered in the field, and • driving procedures and techniques, for commuting to, and driving on, the Project site, to reduce 							

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	<p>mortality of FTHL on roads.</p> <p>5. FTHLs will be removed from harm's way during all construction activities, per conservation measure #6 below. FTHL removal will be conducted by two or more biological monitors when construction activities are being conducted in suitable FTHL habitat. To the extent feasible, methods to find FTHLs will be designed to achieve a maximal capture rate and will include, but not be limited to using strip transects, tracking, and raking around shrubs. During construction, the minimum survey effort will be 30 minutes per 0.40 ha (30 minutes per 1 ac). Persons that handle FTHLs will first obtain all necessary permits and authorization from the CDFG. If the species is federally listed, only persons authorized by both CDFG and the USFWS will handle FTHLs. FTHL removal surveys will also include:</p> <ul style="list-style-type: none"> • A Horned Lizard Observation Data Sheet and a Project Reporting Form, per Appendix 8 of the RMS, will be completed. During construction, quarterly reports describing FTHL removal activity, per the reporting requirements described in Conservation Measure #1 above, will be submitted to the USFW, BLM, CDFG. <p>6. The removal of FTHLs out of harm's way will include relocation to nearby suitable habitat in low-impact (e.g., away from roads and solar panels) areas of the Yuha MA. Relocated FTHLs will be placed in the shade of a large shrub in undisturbed habitat. If surface temperatures in the sun are less than 24° Celsius (C) 75° Fahrenheit (F) or exceed 38°C (100° F), the Designated Biologist or biological monitor, if authorized, will hold the FTHL for later</p>							

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	<p>release. Initially, captured FTHLs will be held in a cloth bag, cooler, or other appropriate clean, dry container from which the lizard cannot escape. Lizards will be held at temperatures between 75° F and 90° F and will not be exposed to direct sunlight. Release will occur as soon as possible after capture and during daylight hours. The Designated Biologist or biological monitor will be allowed some judgment and discretion when relocating lizards to maximize survival of FTHLs found in the Project area.</p> <p>7. To the maximum extent practicable, grading in FTHL habitat will be conducted during the active season, which is defined as March 1 through September 30, or if ground temperatures are between 24°C (75° F) and 38 °C (100° F). If grading cannot be conducted during this time, any FTHLs found will be removed to low-impact areas (see above) where suitable burrowing habitat exists, (e.g., sandy substrates and shrub cover).</p> <p>8. Temporarily disturbed areas associated with transmission line construction and staging areas, will be revegetated according to a Habitat Restoration Plan (HRP) approved by the BLM, CDFG, and Service. The HRP must be approved in writing by the aforementioned agencies within 60 days of any vegetation-disturbing activities. Restoration involves recontouring the land, replacing the topsoil (if it was collected), planting seed and/or container stock, and maintaining (i.e., weeding, replacement planting, supplemental watering, etc.), and monitoring the restored area for a period of 5 years (or less if the restoration meets all success criteria). Components of the HRP will include:</p> <ul style="list-style-type: none"> • The incorporation of Desert Bioregion 							

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	<p>Revegetation/Restoration Guidance measures. These measures generally include alleviating soil compaction, returning the surface to its original contour, pitting or imprinting the surface to allow small areas where seeds and rain water can be captured, planting seedlings that have acquired the necessary root mass to survive without watering, planting seedlings in the spring with herbivory cages, broadcasting locally collected seed immediately prior to the rainy season, and covering the seeds with mulch.</p> <p>Operations and Maintenance</p> <p>In order to reduce the potential impact to FTHL during O&M, the following will be implemented when conducting O&M along the transmission line and within the creosote bush-white burr sage scrub vegetation in the southwestern corner of the solar energy facility:</p> <p>9. No later than January 31 of every year the Project remains in operation, the Designated Biologist will provide the BLM, USFWS, CDFG, and the FTHL Interagency Coordinating Committee (ICC) via the BLM an annual Project FTHL Status Report, which will include, at a minimum:</p> <ul style="list-style-type: none"> • A general description of the status of the project site within the MA. • A copy of the table in the Project biological monitoring report with notes showing the current implementation status of each conservation measure. • An assessment of the effectiveness of each completed or partially completed measure in 							

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	<p>avoiding and minimizing project impacts.</p> <ul style="list-style-type: none"> • A completed a Project Reporting Form from the Flat-tailed Horned Lizard Rangewide Management Strategy (RMS) (ICC 2003) • A summary of information regarding any FTHL mortality in conjunction with the Project's Wildlife Mortality Reporting Program. • Recommendations on how conservation measures might be changed to more effectively avoid, minimize, and offset future project impacts on the FTHL. <p>10. The Designated Biologist or biological monitor(s) will evaluate and implement the best measures to reduce FTHL mortality along access and maintenance roads, particularly during the FTHL active season (March 1 through September 30). These measures will include:</p> <ul style="list-style-type: none"> • A speed limit of 15 miles per hour when driving transmission line access roads or maintenance roads within the solar energy facility. The Designated Biologist may reduce this speed limit to 10 mph in areas identified as active wildlife corridors as needed to reduced mortality. All vehicles required for O&M along the transmission line and within the Solar Energy Facility must remain on the designated access/maintenance roads. Cross country vehicle and equipment use outside of designated work areas shall be prohibited. • O&M activities including the washing of solar panels, weed abatement, or any other O&M activity that 							

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	<p>may result in ground disturbance will be conducted outside of the FTHL active season whenever feasible.</p> <ul style="list-style-type: none"> If any O&M activities must be conducted during the FTHL active season that may result in ground disturbance, such as weed abatement or vehicles requiring access outside of a designated access road, a biological monitor will be present during activities to reduce FTHL impacts. <p>Implementation of these measures would be based on annual FTHL activity levels, the best professional judgment of the Designated Biologist, and site specific road utilization. FTHL found on access/maintenance roads will be relocated out of harm's way by the Designated Biologist or qualified FTHL monitor.</p> <p>Compensation In accordance with the <i>Flat-tailed Horned Lizard Rangewide Management Strategy</i>, mitigation would be required for impacts to FTHL habitat, as shown in Table 4.12-11.</p> <p>FTHL are known to occur in the creosote bush-white burr sage scrub and desert wash vegetation along the proposed transmission corridors. In accordance with the <i>Rangewide Management Strategy</i>, compensation for permanent impact to this habitat within the MA will be at a 6:1 ratio.</p> <p>No mitigation for FTHL is required for the active agricultural land within the proposed solar energy facility, as it does not provide habitat for this species.</p>							
B6	<p>Nesting Raptors Raptors and active raptor nests are protected under California Fish and Game Code 3503.5, 3503, 3513. In order to prevent</p>	Prior to construction, Planning and	Department of Planning and	Prior to construction	Department of Planning and			

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	<p>direct and indirect noise impact to nesting raptors such as red-tailed hawk, the following measures should be implemented:</p> <ul style="list-style-type: none"> Initial grading and construction within the Proposed Action site should take place outside the raptors' breeding season of February 1 to July 15. If construction occurs between February 1 and July 15, an approved biologist shall conduct a pre-construction clearance survey for nesting raptors in suitable nesting habitat (e.g., tall trees or transmission towers) that occurs within 500 feet of the survey area. If any active raptor nest is located, the nest area will be flagged, and a 500-foot buffer zone delineated, flagged, or otherwise marked. No work activity may occur within this buffer area, until an approved biologist determines that the fledglings are independent of the nest. <p>Mitigation for impacts to potential raptor foraging habitat would be conducted in concert with the purchase/acquisition of mitigation for FTHL habitat as detailed in Mitigation Measure B4. As the 6:1 mitigation ratio for FTHL habitat well exceeds the amount required for impacts to raptor foraging habitat, it is not anticipated that additional mitigation would be necessary.</p> <p><i>Operations and Maintenance Impact Mitigation</i></p> <p>Mitigation for potential impact to raptors and other avian species due to collision with the proposed transmission lines is discussed below in Mitigation Measure B6 (Mitigation for Migratory Birds and Other Sensitive Non-migratory Bird Species), including the development of an ABPP.</p>	<p>Development Services shall verify that pre-construction clearance surveys were conducted.</p> <p>If active raptor nests are present, the measures as listed in Mitigation Measure B5 shall be implemented.</p>	Development Services		Development Services			
B7	<p>Migratory Birds and Other Sensitive Non-migratory Bird Species</p> <p>In order to reduce the potential indirect impact to migratory birds, bats and raptors, an Avian and Bat Protection Plan (ABPP)</p>	Prior to construction, an Avian and Bat	Department of Planning and	Prior to construction	Department of Planning and			

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	<p>will be prepared following the USFWS's guidelines and then implemented by the Project proponent. This ABPP will outline conservation measures for construction and O&M activities that might reduce potential impacts to bird populations and will be developed by the applicant in conjunction with and input from the USFWS.</p> <p><i>Construction Conservation Measures</i> Construction conservation measures to be incorporated into the ABPP include:</p> <ul style="list-style-type: none"> • Minimizing disturbance to vegetation to the maximum extent practicable. • Clearing vegetation outside of the breeding season. If construction occurs between February 1 and September 15, an approved biologist shall conduct a pre-construction clearance survey for nesting birds in suitable nesting habitat that occurs within the proposed area of impact. Pre-construction nesting surveys will identify any active migratory birds (and other sensitive non-migratory birds) nests. Direct impact to any active migratory bird nest should be avoided. • Minimize wildfire potential. • Minimize activities that attract prey and predators. • Control of non-native plants • Apply APLIC design guidelines for overhead utilities (APLIC 2006) by incorporating recommended or other methods that enhance the visibility of the lines to avian species. <p><i>Operations and Maintenance Measures</i> Operations and maintenance conservation measures to be incorporated into the ABPP include:</p> <ul style="list-style-type: none"> • Preparation of a Raven Control Plan that avoids 	<p>Protection Plan (ABPP) will be prepared and implemented by the Applicant.</p>	<p>Development Services</p>		<p>Development Services</p>			

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	<p>introducing water and food resources in the area surrounding the solar energy facility.</p> <ul style="list-style-type: none"> • Incorporate APLIC guidelines for overhead utilities as appropriate to minimize avian collisions with transmission facilities (APLIC 2006). • Minimize noise • Minimize use of outdoor lighting. • Implement post—construction avian monitoring that will incorporate of the Wildlife Mortality Reporting Program 							
<p>B8</p>	<p>Mountain Plovers</p> <p>The following mitigation measures are designed to avoid and minimize direct and indirect harm or injury of federally listed and proposed listed mountain plover and their habitat, and to compensate for unavoidable direct and indirect effects resulting from project construction and operations and maintenance (O&M):</p> <ol style="list-style-type: none"> 1. Speed limits along all transmission access roads and within the solar energy facility site should not exceed 15 miles per hour during construction and O&M. Transmission access for O&M activities shall be kept to the minimum necessary for operations. This limited access is designed to prevent wildlife mortality. 2. An Avian and Bat Protection Plan (ABPP) will be prepared and approved by BLM and USFWS, prior to groundbreaking activities, which will outline conservation measures for construction and O&M activities that might reduce potential impacts to bird populations. The conservation measures in the ABPP will include: <ul style="list-style-type: none"> • Minimizing disturbance to vegetation to the extent practicable. 	<p>Prior to and during construction of the proposed project, the measures listed in Mitigation Measure B8 will be implemented.</p>	<p>Department of Planning and Development Services</p>	<p>Prior to and during construction</p>	<p>Department of Planning and Development Services</p>			

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	<ul style="list-style-type: none"> • Clearing vegetation outside of the breeding season. If construction occurs between February 1 and September 15, a qualified biologist shall conduct a pre-construction clearance survey for nesting birds in suitable nesting habitat that occurs within the proposed area of impact. Pre-construction nesting surveys will identify any active migratory birds (and other sensitive non-migratory birds) nests. Direct impact to any active migratory bird nest should be avoided. • Minimize wildfire potential. • Minimize activities that attract prey and predators. • Control of non-native plants. • Apply Avian Power Line Interaction Committee design guidelines for overhead utilities (2006) by incorporating recommended or other methods that enhance the visibility of the lines to avian species. • Preparation of a Raven Control Plan that avoids introducing water and food resources in the area surrounding the solar energy facility. • Minimize noise. • Minimize use of outdoor lighting. • Implement post-construction avian monitoring that will incorporate a Wildlife Mortality Reporting Program. <p>3. A Wildlife Mortality Reporting Program will be prepared and approved by BLM prior to groundbreaking activities, and implemented during O&M of the solar facility. This plan calls for</p>							

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	<p>identification and reporting of any dead or injured animals observed by personnel conducting O&M activities within the solar energy facility site and along the transmission line. An appropriate reporting format for dead or injured wildlife observed within the solar energy facility site and along the transmission line will be developed in coordination with the USFWS and the BLM. In addition, reporting of any dead or injured avian species found along the transmission line will follow the existing USFWS Bird Fatality/Injury Reporting Program (https:// birdreport.fws.gov/).</p> <p>4. Prior to ground-disturbing activities, an individual shall be designated and approved by the USFWS and BLM as a Designated Biologist* (i.e., field contact representative). A Designated Biologist will be designated for the period during which on-going construction and post-construction monitoring and reporting by an approved biologist is required, such as annual reporting on habitat restoration. Biological Monitor(s) will assist the Designated Biologist in conducting pre-construction surveys and monitoring mobilization, ground disturbance, grading, construction, operation, closure, and restoration activities.</p> <p>* A qualified Designated Biologist must have (1) a Bachelor's degree with an emphasis in ecology, natural resource management, or related science; (2) 3 years of experience in field biology or a current certification of a nationally recognized biological society such as The Ecological Society of America or the Wildlife Society; (3) previous experience</p>							

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	<p>with applying terms and conditions of a biological opinion; and (4) an appropriate permit and/or training if conducting focused or protocol surveys for listed or proposed species.</p> <p>5. Prior to project initiation, a Worker Education Awareness Program (WEAP) will be developed and implemented, and will be available in both English and Spanish. Wallet-sized cards summarizing this information will be provided to all construction, operation, and maintenance personnel. The education program will include the following aspects:</p> <ul style="list-style-type: none"> • Biology and status of the mountain plover. • Protection measures designed to reduce potential impacts to the species. • Function of flagging designating authorized work areas. • Reporting procedures to be used if a mountain plover is encountered in the field. • Driving procedures and techniques for commuting and driving on to the project site to prevent mortality of all wildlife species on roads. <p>6. In the event that continuing agricultural practices on the solar energy facility site are impractical after installation of the solar panels, the vegetation underneath the panels will be maintained as a short grass habitat that could support foraging activities for mountain plover. The timing and formula of any herbicide used for control of weeds will be in accordance with the proposed project's Weed Management Plan, which conforms to resource agency guidelines and standards designed to minimize impacts to sensitive biological resources.</p>							

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	Specifically, herbicides should be applied to any agricultural fields outside of the mountain plover over-wintering season of November through February.							
B9	<p>Jurisdictional Waters</p> <p>The Proposed Action will permanently impact 0.9 acre, and temporarily impact 0.8 acre of CDFG riparian habitat. No impacts to ACE jurisdictional resources are anticipated.</p> <p>As shown in Table 4.12-12, mitigation for the 0.9 acre of permanent impacts to CDFG riparian habitat is typically at a 2:1, while mitigation for the 1.7 acres of temporary impacts to CDFG riparian habitat is typically at a 1:1 ratio; totaling 3.5 acres of required mitigation.</p> <p>Mitigation for these impacts will be conducted in concert with the purchase/acquisition of mitigation for FTHL as detailed in Mitigation Measure B4 above. As the acreage for FTHL mitigation well exceeds the amount required for impacts to CDFG resources, it is not anticipated that additional mitigation would be necessary as long as the FTHL mitigation meets the requirements and approval of CDFG as riparian habitat mitigation. A Section 1600 Streambed Alteration Agreement would also need to be authorized for impact to CDFG resources.</p>	Prior to and during construction of the proposed project, the measures listed in Mitigation Measure B8 will be implemented.	Department of Planning and Development Services	Prior to and during construction	Department of Planning and Development Services			
Section 4.13-Paleontological Resources								
PR1	<p>Prior to grading or any ground disturbance, a paleontological field survey shall be conducted for the project site. The paleontological field survey and subsequent monitoring activities shall be in accordance with the BLM's "Guidelines for Assessment and Mitigation of Potential Impacts to Paleontological Resources."</p> <p>A. Definition of Field Surveys. Field Surveys are pedestrian surveys to be performed in areas where significant fossils can be expected to occur within the boundary and</p>	Prior to the issuance of a grading permit, a paleontological field survey will be conducted and the results reviewed by the Bureau of Land	Bureau of Land Management	Prior to the issuance of a grading permit	Bureau of Land Management			

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	<p>immediate vicinity of the anticipated disturbance, or where the probability of encountering significant fossils is unknown.</p> <ol style="list-style-type: none"> 1. Field surveys are performed prior to any surface disturbing activities. Before conducting field surveys, the project location shall be as final as possible and any staking of the location shall be complete. 2. Surveys are conducted by a BLM-permitted consulting paleontologist hired by the project proponent. <ol style="list-style-type: none"> (a) Surveys shall be performed by a consulting paleontologist holding a valid BLM Paleontological Resources Use Permit. Submission of reports may be done directly by the paleontologist to the BLM. The project proponent is also responsible for all costs associated with the survey, including the consulting paleontologist's fees and charges, all survey costs, fossil preparation to the basic identification stage, analyses, reports, and curation costs directly related to mitigation of the project's anticipated impacts. Any required monitoring and mitigation costs are also the responsibility of the project proponent. These costs are to be negotiated between the project proponent and the consulting paleontologist prior to beginning any data gathering, analysis, or field work, and these negotiations do not require BLM involvement or approval. Any new, additional, or modified curation agreements between the paleontologist and the official repository must be in place prior to starting field work. 	<p>Management.</p>						

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	<p>(b) Authorization for an activity to proceed cannot be given by a consulting paleontologist. Performance of the survey, either by a consulting paleontologist or BLM staff, or submission of the report DOES NOT constitute approval for the activity to proceed. The BLM must review the report, including adequacy of the field methods and findings. The Authorized Officer must approve the findings and determine the need for monitoring prior to approval to proceed.</p> <p>B. Conducting Field Surveys. Field surveys must be performed by the Principal Investigator or an approved Field Agent or Field Monitor (as defined in the following section) as authorized under a Paleontological Resource Use Permit. Field surveys and collections performed as a mitigation measure are not intended to be scientific research studies, but are meant to identify, avoid, or recover paleontological resources to prevent damage or destruction from project activities. However, proper scientific techniques and procedures must be utilized during all mitigation efforts. Safety should be an important consideration; therefore, surveys should not be attempted on cliff faces, in open, non-reinforced trenches deeper than five feet, or other unsafe areas.</p> <ol style="list-style-type: none"> 1. The scope of the survey is dependent upon the scale of the project. Small projects are defined as less than 10 acres, or, if linear, less than five miles; large projects exceed those dimensions. 2. At the start of field work, the consulting paleontologist (paleontologist) must contact the Paleontology Coordinator in each affected Field Office who may 							

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	<p>require a visit to that office.</p> <p>After an initial visit each year, the paleontologist may contact the Field Office by telephone or email prior to subsequent field trips, at the discretion of the Field Office. Information about the survey schedule, additional personnel, emergency field contact information, and any other pertinent data shall be provided to the Paleontology Coordinator. The Field Office will inform the paleontologist of any conditions that may impact the survey, such as fire danger or restrictions, drought restrictions, wildlife timing restrictions, management restrictions, road restrictions or construction, and any other relevant information.</p> <p>3. During the field survey, the paleontologist surveys, locates, and documents all paleontological resources within 200 feet of the proposed project location or corridor, or less distance upon approval.</p> <p>(a) Where significant paleontological resources are at risk, data collection alone does not constitute mitigation of damage. All significant fossils that may be damaged or destroyed during project activities must be collected, along with all relevant contextual and geographical data. Specimens must be collected during the survey or prior to commencement of any surface-disturbing activities.</p> <p>(b) In many cases, isolated gar scales, chelonid (turtle) carapace or plastron fragments, crocodile and fish teeth, and unidentifiable bone fragments do not need to be collected. The location must be recorded and a</p>							

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	<p>description of the fossil material noted in the field notes and on a BLM Locality Form as part of the report. The context of these types of fossils should be considered, as they may represent rare occurrences or unusual faunal associations, and thus may be scientifically important and must be documented and voucher specimens collected where appropriate.</p> <p>(c) Occurrences of plant or invertebrate fossils should be recorded and representative examples or voucher specimens collected where appropriate. Additional mitigation measures may be appropriate in some cases for these types of localities.</p> <p>(d) If a large specimen or a concentration of significant fossils is located during the field survey, the available time and/or personnel may not allow for full recovery during the survey. The specimen(s) and locality(ies) should be stabilized as needed, and a determination made as to whether avoidance is necessary or whether full recovery of the specimen is required at a later time prior to disturbance activities. The Authorized Officer and project proponent must be notified, the mitigation alternatives discussed including funding for recovery, and a decision reached as soon as possible. If avoidance or later recovery is selected for mitigation, the find should be stabilized, buried if needed to protect the fossils and context, and appropriate measures implemented to reduce adverse effects from</p>							

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	<p>natural or human causes.</p> <p>4. During the survey, locations or areas that exhibit a lithology suggesting a high probability of subsurface fossil material must be recorded, and a recommendation for the need for on-site monitoring, spot-checking, or testing shall be made in the report. This may include areas where no fossil material was found on the surface during the survey. The recommendation should consider the size and type of planned disturbance, such as the depth of a trenching operation or the acreage of surface disturbance.</p> <p>5. Surveys must be performed only during times when the ground is visible. Biological timing restrictions, such as critical nesting or birthing times, may confine or delay field activities.</p> <p>C. Report of Survey Findings. After completion of the field survey, the paleontologist must file a written report with the BLM and the designated repository. This report must summarize the results of the survey as well as appropriate geological and paleontological background information as described below. It should also include any recommendations for on-site monitoring or other mitigation. For small projects (less than 10 acres), the report must be filed within 30 days after completion of the survey unless the BLM has specifically approved a different time. The time frame for submission of the report for large projects should be negotiated during project scoping. On a case-by-case basis, approval to begin project activities may be granted for those portions of the project area noted to be less paleontologically sensitive prior to final approval of the report.</p>							

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	<ol style="list-style-type: none"> 1. Reports of the general findings and the background information must be submitted to the BLM project manager or Authorized Officer (if appropriate), the Paleontology Lead or Regional Paleontologist, and each affected Field Office. Reports must include the information and details as specified on page 9 of Attachment 1 of the BLM's "Guidelines for Assessment and Mitigation of Potential Impacts to Paleontological Resources," as applicable. 2. Exact locations of fossil localities contained in these reports are considered sensitive and must not be included in any public document. The BLM locality form (8270-3) or equivalent, 1:24000 scale map showing the localities, and any other information containing specific fossil locations may be bound separately or placed in a separate section to allow for preservation of confidential locality data. A copy of this confidential section must be submitted to the Paleontology Lead (in some cases, two copies may be required). A copy for each affected Field Office may be required. Another copy must be submitted to the official repository with the collected materials. 3. BLM GPS recording and data standards must be used to report paleontological locality data. Existing USGS topographic maps are often based on the NAD27 standard, so locality data calculated from a map base must be converted before submission. Data must be recorded and reported with a mean error of +/- 12.5 meters or less, at a 95 percent confidence level. For small localities, data should be reported as point data. Larger polygonal localities should be reported using coordinates of a centroid and a description of the approximate size, or the key 							

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	<p>coordinate points of a bounding polygon. Linear features, such as roads or surveyed project boundaries, must be reported as line data. The 1:24000 scale map(s) accompanying the locality forms should graphically illustrate the locality, either as a point or an outline of the locality as appropriate, and be clearly labeled with the locality or field number.</p> <p>D. Report Approval. The Authorized Officer will analyze the Survey Report for adequacy within 30 working days of receipt. Notification accepting the report, or explaining any identified deficiencies, will be sent to the consulting paleontologist and the project proponent with a copy placed in the project file. Any deficiencies must be corrected as soon as possible, usually initiated within five working days, and the report must be resubmitted for approval. Any resubmissions must be prompt, but consideration will be made for the amount of time needed for major corrections. Deficiencies directly affecting the survey, such as inadequate survey procedures or incomplete data, must be corrected before granting approval for the project to proceed. Deficiencies not directly affecting the survey, such as curation issues, will not prevent approval of the project, but must be corrected as soon as possible.</p> <p>Determination of Further Mitigation Requirements. Based on the field survey, the need for additional mitigation to protect paleontological resources shall be determined. The Authorized Officer, in consultation with Regional Paleontologist or the Paleontology Lead, shall analyze the Survey Report for survey findings and any mitigation recommendations. If no further mitigation is needed, the Authorized Officer will promptly notify the project proponent that there are no additional</p>							

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	<p>paleontological surveys or mitigation measures required, and the project may proceed pending any other approvals. The project file must be documented indicating acceptance of the survey report and identifying any additional mitigation requirements. If it is determined that additional mitigation efforts are needed to protect or preserve the paleontological resources, the project proponent will be notified as soon as possible. The Authorized Officer and/or the Paleontology Lead usually develop and approve the mitigation procedures or recommend a project be redesigned in consultation with the project proponent. Factors such as locality or specimen significance, economics, safety, and project urgency will be considered when developing mitigation measures. Additional mitigation measures shall be developed and implemented as timely as possible so as not to delay project actions.</p> <p>A. Relocation. The preferred mitigation technique is to change the project location based on the results of the field survey. Relocation, however, may necessitate a field survey of the new area, as well as resurveys by other resource specialists. Anticipation of this contingency prior to or during the original survey may allow for survey of an expanded area at the same time.</p> <p>If relocation will eliminate impacts and is acceptable to all parties, then a report to the file, including a map showing the original and revised locations, must be completed documenting the change. Approval for the project to proceed in the revised location may then be granted by the Authorized Officer to the project proponent. When avoidance is not possible, appropriate mitigation may include excavation or collection (data recovery), stabilization, monitoring, protective barriers and signs, or other physical and administrative protection measures.</p>							

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	<p>B. Deferred Fossil Collection. In some cases, fossil material may have been identified, but not completely collected during the initial field survey, such as a partial dinosaur or other large fossil assemblage. It may be possible to complete the recovery of this material and all related data prior to beginning construction activities, and thus mitigate the adverse impact. This may require a shift in the project schedule and must be coordinated with the project proponent.</p> <p>Approval by the Authorized Officer for the project to proceed will only be granted when recovery of the fossil material and field data is completed. A report to the file and the project proponent documenting the recovery and indicating that no further mitigation is required must be completed, and the report signed by the Authorized Officer. If the discovery cannot be fully collected within the available time frame, it may have to be avoided by relocating or redesigning the project.</p>							
PR2	<p>Based on the field survey and reporting results identified in Mitigation Measure PR1, a Monitoring Plan shall be developed and implemented (if required).</p> <p>A monitoring plan can be developed by a qualified paleontologist hired by the proponent who holds a current California BLM Paleontology Use Permit. The plan must be appropriately scaled to the size and complexity of the anticipated monitoring. If developed by a third party, the appropriate Paleontology Lead or Regional Paleontologist shall review the plan for sufficiency prior to acceptance. Monitoring of the project may proceed when the monitoring plan is approved by the Authorized Officer. A monitoring plan indicates the treatments recommended for the area of the</p>	<p>Prior to the issuance of a grading permit, a monitoring plan shall be developed and approved by the Bureau of Land Management.</p>	<p>Bureau of Land Management</p>	<p>Prior to the issuance of a grading permit</p>	<p>Bureau of Land Management</p>			

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	<p>proposed disturbance and must minimally address the following:</p> <ol style="list-style-type: none"> 1. The recommended approach to additional specimen collection, such as total or partial recovery or sampling; and, 2. The specific locations and intensity of monitoring or sampling recommended for each geologic unit, stratigraphic layer, or area impacted. <p>Monitoring intensity is determined based on the analysis of existing data and/or field surveys and any previous monitoring efforts.</p> <p>Types of Monitoring. There are two types of monitoring: 1) on-site, performed during ongoing operations, and 2) spot-checks, performed during or after disturbance, or at key times during the progress of the project.</p> <ol style="list-style-type: none"> 1. On-site monitoring – In areas with a high probability for buried fossils, the presence of a monitor at the site of disturbance at all times that disturbance is occurring may be warranted. The need for a full-time monitor is based on the findings of the survey, the local geology, and the proposed actions. Efforts will be made to complete fossil recovery with minimal work stoppage. However, in some cases, an extended period of work stoppage may be required, so coordination with the project proponent or representative is important. Prior to beginning the monitoring work, the monitor, company supervisor, and machinery operators shall agree on procedures for brief work stoppages to allow for examination of finds. It is critical that safety be of utmost concern because of the presence of heavy machinery and open trenches. <p>The monitor must assess any finds, collect loose fossil</p>							

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	<p>material and related data, and take appropriate steps to mitigate any current or potential damage. Consideration of the size of the expected fossils must also be considered; for example, microfossils may not be visible during excavation activities. It may be appropriate to collect samples of matrix for later recovery of microvertebrate fossils or other analyses. Activities planned to occur during night time should be assessed relative to the potential to uncover significant fossils. Fossils may not be visible at night in trenching or grading operations, so construction activities may need to be suspended during night time in sensitive areas.</p> <p>2. Spot-checking – In areas with a moderate to high probability for unknown fossil material, it may be more appropriate to check only at key times rather than maintain continuous monitoring of operations. Key times for scheduling spot-checking are when the fossil-bearing bedrock is exposed to view or prior to placing soil material back into the excavation. Examples of these key times may be when a pipeline trenching operation is complete but before pipe is placed and the trench backfilled or prior to redistribution of topsoil. Spot-checking requires close coordination with the project proponent and the paleontologist, and usually requires the paleontologist to be available on short notice. In some instances, it may be advantageous to allow rain and/or wind to erode away loose matrix and concentrate fossil material to increase visibility. The paleontologist will coordinate with the project proponent to allow sufficient time for this action to occur, as appropriate to conditions, expected fossil material, and construction schedules.</p> <p>The paleontologist should report potentially fossiliferous</p>							

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	<p>areas in the final report to allow for future assessment of sites, even if no fossils were located during the project monitoring.</p> <p>Types of Field Personnel. It may be necessary to employ a number of paleontology field personnel simultaneously. There may be a lack of fully qualified paleontologists to perform all the necessary monitoring during the scheduled times of construction. Use of additional personnel for field work is permissible, but Field Agents and Field Monitors (described below) must be requested by the Permittee and authorized by the BLM prior to field work.</p> <ol style="list-style-type: none"> Principal Investigator – The person listed as Permittee (Permit item 1a) on the Paleontological Resources Use Permit is the Principal Investigator (PI) and is responsible for all actions under the permit, for meeting all permit terms and conditions, and for the performance of all other personnel. This person is also the contact person for the project proponent and the BLM. Field Agent – Other qualified paleontologists may perform field work independently of the PI under the conditions of this permit. Résumés must be submitted to BLM and must demonstrate qualifications equivalent to those of Permittees. Field Agents must be listed on the permit under “Name(s) of individual(s) responsible for planning, supervising, and carrying out fieldwork” (Permit item 8) or authorized in a separate letter from BLM. They must follow all the permit terms and conditions applicable to field work and must carry a copy of the permit, included terms and conditions, and separate authorizing letter (if used) while in the field. Field work results must be reported to the PI, who will then submit required reports. Field Monitor – Field Monitors may be utilized for 							

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	<p>supplemental on-site monitoring of surface-disturbing activities when the PI or a Field Agent is performing field work elsewhere. Field Monitors must have sufficient field experience to demonstrate acceptable knowledge of fossil identification, collection methods, and paleontological techniques. The PI must supply a summary of each person's experience to the BLM prior to field work. Field Monitors must be approved by the BLM prior to performing field work and must carry a copy of the permit while in the field. The PI or Field Agent must be in communication with the Field Monitor using a portable communication device, such as a cell phone or two-way radio, and are required to be near enough to the Field Monitor to allow for prompt examination of all fossil discoveries (no more than two hours away) by the PI or Field Agent.</p> <p>4. Field Assistant – Additional personnel not meeting the previously cited experience or knowledge levels may be utilized during field work, but must be under direct, on-site supervision of either the PI or a Field Agent as part of a supervised crew. Field assistants must have at least four to eight hours of training or experience received from a qualified paleontologist in identifying paleontological resources prior to performing field work or when first utilized in this capacity. A listing of all Field Assistants (including contact information) must be supplied prior to any field work. All discoveries made by a Field Assistant must be immediately reported to the PI or Field Agent on site. To ensure proper supervision, an appropriate ratio of Field Assistants per PI or Field Agent must be maintained. The complexity of the project, the area to be covered, and the experience of the assistants are some of the factors that should be considered in determining the proper ratio,</p>							

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	<p>but commonly five to seven assistants is the maximum number that can be supervised by one PI or Field Agent.</p> <p>Work Stoppage. If significant fossil material is discovered during construction activities, the PI, Field Agents, and Field Monitors have the authority to temporarily halt surface disturbing actions until an assessment of the find is completed and appropriate protection measures taken. Efforts will be made to complete fossil recovery with minimal work stoppage. However, in some cases, an extended period of work stoppage may be required. If the paleontological resource can be avoided, mitigated, or collected within approximately two hours, work may resume after approval from the PI or Field Agent, and the Authorized Officer must be notified as soon as possible of the discovery and any mitigation efforts that were undertaken. If the find cannot be mitigated within a reasonable time (two hours), the concurrence of the Authorized Officer or official representative for a longer work stoppage must be obtained. Work may not resume until approval is granted from both the PI or Agent and the Authorized Officer.</p>							
PR3	<p>Upon completion of all field work, including survey and monitoring, the PI must submit within 30 days, a written final report to the Authorized Officer, Paleontology Lead, and the designated repository. A copy of the report may be provided to the project proponent if required, but without the BLM Locality forms. Reports must include the details and information as specified on page 14 of Attachment 1 of the BLM's "Guidelines for Assessment and Mitigation of Potential Impacts to Paleontological Resources," as applicable.</p>	<p>Upon completion of all field work, including survey and monitoring, the PI must submit within 30 days, a written final report to the Authorized Officer, Paleontology Lead, and the designated repository.</p>	Bureau of Land Management	Prior to the issuance of a grading permit	Bureau of Land Management			
PR4	When the final report with the specimen inventory and the	The Authorized	Bureau of	Prior to	Bureau of			

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	<p>signed receipt of confirmation of museum deposition are accepted by the BLM, mitigation for paleontological resources related to the project will be considered completed. The project proponent will be notified in writing as soon as possible by the Authorized Officer after consulting with the Paleontology Lead or Regional Paleontologist and a copy of the notification placed in the project file.</p> <p>The responsibility of the project proponent ends when appropriate mitigation related directly to the project is completed and final approval is received from the Authorized Officer. Any additional field collection, quarrying, final specimen preparation, etc. will be considered to be research, and will be the responsibility of the consulting paleontologist or another approved party. The project proponent will not be held responsible for completion of any research project. However, the project proponent can choose to sponsor further research. A separate research permit will be required for additional research activities.</p>	<p>Officer to provide written verification that the final report has been accepted by the Bureau of Land Management.</p>	<p>Land Management</p>	<p>issuance of a grading permit</p>	<p>Land Management</p>			
<p>PR5</p>	<p>Fossil specimens and related data collected from public lands during field surveys and mitigation remain the property of the Federal government. They must be placed in the approved repository(s) identified on the Paleontological Resource Use Permit held by the consulting paleontologist as soon as practical and receipt(s) of collections submitted to the BLM, but no later than 60 days after all field work is completed. Written approval from the Paleontology Lead or Regional Paleontologist is required if additional time is needed for transfer of all specimens and field data.</p>	<p>The consulting paleontologist to submit receipts to the BLM that fossil specimens and related data collected from public lands were placed in the approved repository identified on the Paleontological Resource Use Permit.</p>	<p>Bureau of Land Management</p>	<p>Prior to the issuance of a grading permit</p>	<p>Bureau of Land Management</p>			

MM No.	Mitigation Measure	Monitoring Method	Responsible Monitoring Party	Monitoring Phase	Verification/ Approval Party	Date Mitigation Measure Verified or Implemented	Location of Documents (Monitoring Record)	Completion Requirement
Section 5.0-Cumulative Impacts								
CUM1	<p>A Mitigation Monitoring and Reporting Program shall be established to determine if the two intersections would operate at un-acceptable LOS starting in Year 2012 and beyond annually until the project construction is completed. If un-acceptable LOS is documented in Year 2012, then a fair share contribution or payment of applicable Transportation Impact Fee is recommended as the mitigation measure. It should be noted that the fair share participation is based on the project's construction traffic that is significantly higher than the project's traffic after completion of construction.</p> <p>If un-acceptable LOS is not documented at the two cumulatively impacted intersections based on the mitigation monitoring and reporting program, then the applicant's fair share contribution (based on construction traffic) should be refunded. If the County desires some form of mitigation, then it is recommended that the fair share contribution (based on permanent operation employees) be conditioned.</p>	<p>At the start of construction activities (Year 2012), a mitigation monitoring and reporting program will be established to determine LOS of the two intersections. If unacceptable, a fair share contribution or payment of applicable Transportation Impact Fee shall be paid and verified by the Department of Planning and Development Services.</p>	<p>Department of Planning and Development Services</p>	<p>Start of construction (Year 2012)</p>	<p>Department of Planning and Development Services</p>			

Referenced County Departments: P&DS – Imperial County Planning and Development Services
 DPW – Imperial County Department of Public Works
 DPH – Imperial County Department of Public Health
 APCD – Imperial County Air Pollution Control District

Source: BRG Consulting, Inc., 2011.