CHAPTER 5.0

MITIGATION MONITORING AND REPORTING PROGRAM

5.1 INTRODUCTION

This document is the Final Mitigation Monitoring and Reporting Program (FMMRP) for Wistaria Ranch Solar Energy Center. This FMMRP has been prepared pursuant to Section 21081.6 of the California Public Resources Code, which requires public agencies to "adopt a reporting and monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment." A Final MMRP is required for the proposed Project because the EIR identified significant adverse impacts and mitigation measures have been identified to address these impacts. The numbering of the individual mitigation measures follows the numbering sequence as found in the EIR. All revisions to mitigation measures that were necessary, as a result of responding to public comments and incorporating staff-initiated revisions have been incorporated into this FMMRP.

5.2 MITIGATION MONITORING AND REPORTING PROGRAM

The FMMRP, as outlined in the following table, describes mitigation timing, monitoring responsibilities, and compliance verification responsibility for all mitigation measures identified in this Final EIR. The County of Imperial will be the primary agency, but not the only agency responsible for implementing the mitigation measures. In some cases, other public agencies will implement measures. In other cases, the project applicant will be responsible for implementation of measures and the County's role is exclusively to monitor the implementation of the measures. In such cases, the Project Applicant may choose to require the construction contractor to implement specific mitigation measures prior to and/or during construction. The County will continue to monitor mitigation measures that are required to be implemented during the operation of the project.

The Final MMRP is presented in tabular form on the following pages. The components of the Final MMRP are described briefly below:

Mitigation Measures: The mitigation measures are taken from the Draft EIR, in the same order that they appear in the Draft EIR. The Final MMRP contains revisions to mitigation measures, as well as any new mitigation measures.

Mitigation Timing: Identifies at which stage of the Project mitigation must be completed.

Monitoring Responsibility: Identifies the department within the County, Project Applicant, or consultant responsible for mitigation monitoring.

Compliance Verification Responsibility: Identifies the department of the County or other State agency responsible for verifying compliance with the mitigation. In some cases, verification will include contact with responsible state and federal agencies.

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MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
TRANSPORATION AND CIRCULATION				
MM 4.3.6a	The CUP owner shall utilize I-8 to SR-111 and/or SR-98 for all equipment deliveries. Employee and vendor routes to each CUP shall be limited to SR-111, SR-98, and Clark Road, LaBrucherie/Ferrell Road and Kubler Road, unless improvements are made to other county roads leading to individual CUP sites in advance of development of each CUP.	Imperial County Planning and Development Services Department, Imperial County Public Works Department.	Prior to the issuance of grading permit.	
MM 4.3.6b	As each CUP may be constructed individually and independently, the CUP owner shall improve the roads as shown on **Figures 4.3-13** thru **4.3-29**. If a CUP owner has already improved the roads that will be utilized by the next CUP to start construction, then no new road improvements are required.	Imperial County Planning and Development Services Department, Imperial County Public Works Department.	Prior to the issuance of grading permit.	
MM 4.3.6c	Each CUP owner shall be responsible for repairing any damage caused to the roads it utilizes as follows: • CUP 13-0036 – Approximately 200 feet of new pavement required on Rockwood Road south of SR-98 for entrance from SR-98 (**Figure 4.3-13**). • CUP 13-0037 – Approximately 200 feet of new pavement required on Rockwood Road north of SR-98 and 0.25 miles of new pavement required along Rockwood Road from Kubler Road to the south (**Figure 4.3-14**). • CUP 13-0038 – No improvements required as long as traffic remains on SR-98, Ferrell Road and Kubler Road (**Figure 4.3-15**). • CUP 13-0039 – No improvements required as long as traffic remains on SR-98, Ferrell Road and Kubler Road (**Figure 4.3-16**). • CUP 13-0040 – a) Micro-grind and Asphalt Rubber Asphalt Membrane (ARAM)	Imperial County Planning and Development Services Department, Imperial County Public Works Department.	Prior to the issuance of grading permit.	

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	resurfacing along Brockman Road from SR-98 to CUP 13-0042 for approximately 1.5 miles then utilized on-site haul road through CUP 13-0041 and CUP 13-0042 or b) utilize on-site haul road from Kubler Road thru CUP 13-0038 (**Figure 4.3-17**). • CUP 13-0041 – a) Micro-grind and Asphalt Rubber Asphalt Membrane (ARAM) resurfacing along Brockman Road from SR-98 to CUP 13-0042 or b) utilize on-site haul road from Kubler Road thru CUP 13-0038 and CUP 13-0040 (**Figure 4.3-18**). • CUP 13-0042 – Micro-grind and Asphalt Rubber Asphalt Membrane (ARAM) resurfacing along Brockman Road from SR-98 to Cup 13-0042 for approximately 1.5 miles (**Figure 4.3-19**). • CUP 13-0043 – a) Micro-grind and Asphalt Rubber Asphalt Membrane (ARAM) resurfacing along Brockman Road from SR-98 to CUP 13-0042 for approximately 1.5 miles then on-site haul road through CUPs 13-0042, 13-0041, 13-0040 or; b) Micro-grind and Asphalt Rubber Asphalt Membrane (ARAM) resurfacing along Brockman Road from SR-98 to Lyons Road for approximately 2.5 miles and 1 mile of 3-inch asphalt concrete overlay and 3-inch thick aggregate base shoulder backing on Lyons Road (**Figure 4.3-20**). • CUP 13-0044 – Micro-grind and Asphalt Rubber Asphalt Membrane (ARAM) resurfacing along Brockman Road from SR 98 to Lyons Road for approximately 2.5 miles and 3-inch thick aggregate base shoulder backing; then pave 0.25 miles of Rockwood Road south of Lyons Road (**Figure 4.3-21**). • CUP 13-0045 – Micro-grind and Asphalt Rubber Asphalt Membrane (ARAM) resurfacing along Brockman Road from SR-98 to Lyons Road for approximately 2.5 miles and 1.5 miles of 3-inch asphalt concrete overlay and 3-inch thick aggregate base shoulder backing on Lyons Road east of Brockman Road (**Figure 4.3-22**). • CUP 13-0046 – Micro-grind and Asphalt Rubber Asphalt Membrane (ARAM) resurfacing along Brockman Road from SR-98 to Lyons Road for approximately			

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	2.5 miles and 1 mile of 3-inch asphalt concrete overlay and 3-inch thick aggregate base shoulder backing on Lyons Road east of Brockman Road (**Figure 4.3-23**). • CUP 13-0048 – Micro-grind and Asphalt Rubber Asphalt Membrane (ARAM) resurfacing along Brockman Road from SR-98 to Lyons Road for approximately 2.5 miles and 1 mile of 3-inch asphalt concrete overlay and 3-inch thick aggregate base shoulder backing on Lyons Road east of Brockman Road (**Figure 4.3-25**). • CUP 13-0049 – Micro-grind and Asphalt Rubber Asphalt Membrane (ARAM) resurfacing along Brockman Road from SR-98 to Lyons Road for approximately 2.5 miles (**Figure 4.3-26**). • CUP 13-0050 – 3-inch asphalt concrete overlay and 3-inch thick aggregate base shoulder backing on Anza Road west of Ferrell Road for approximately 1.5 miles (**Figure 4.3-27**). • CUP 13-0051 – 3-inch asphalt concrete overlay and 3-inch thick aggregate base shoulder backing on Anza Road west of Ferrell Road for approximately 0.75 miles (**Figure 4.3-28**). • CUP 13-0052 – No Improvements. Access from Ferrell Road/Anza Road intersection (**Figure 4.3-29**).			
MM 4.3.6d	CUP owner shall limit the Project's construction traffic on unpaved County roadways to the extent possible and utilize improved paved roadways identified in MM 4.6.3c. In the event the CUP owner's construction traffic requires the use of unpaved County roadways, the CUP owner shall mitigate those County unpaved roadways in accordance with ICAPCD 805. In addition to complying with Rule 805, if 50 vehicle trips per day (VPD) are triggered by the projects on any single County unpaved roadway, the CUP owner shall provide for the future maintenance cost of the affected roadway for the full term of the CUP which trigged the increase beyond the 50 VPD threshold.	Imperial County Planning and Development Services Department, Imperial County Public Works Department.	Prior to the issuance of grading permit.	

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AIR QUALITY				
FULL BUILD-OUT SCENARIO/PHASED CUP SCENARIO To reduce construction-related emissions, the following control measures shall be implemented for the duration of the construction period:				
MM 4.4.1a	Prior to commencing construction, each CUP owner shall submit a Dust Control Plan to the ICAPCD for approval identifying all sources of PM_{10} emissions and associated mitigation measures during the construction and operational phases of the Project. The Project Proponent shall submit a "Construction Notification Form" to the ICAPCD 10 days prior to the commencement of any earthmoving activity. The Dust Control Plan submitted to the ICAPCD shall meet all applicable requirements for control of fugitive dust emissions, including the following measures designed to achieve the no greater than 20% opacity performance standard for dust control: • All disturbed areas, including bulk material storage that is not being actively used, shall be effectively stabilized, and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by using water, chemical stabilizers, dust suppressants, tarps or other suitable material, such as vegetative groundcover. Bulk material is defined as earth, rock, silt, sediment, and other organic and/or inorganic material consisting of or containing PM with five percent or greater silt content. • All on-site and off-site unpaved roads shall be effectively stabilized, and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants, and/or watering. • All unpaved traffic areas one acre or more in size with 75 or more average vehicle trips per day, shall be effectively stabilized, and visible emissions shall be limited to no greater than 20 percent 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 shall be cleaned and/or washed at the delivery site after removal of bulk	Prior to issuance of grading permit(s).	Imperial County Planning and Development Services Department/ICAPCD	

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	material. • All track-out or carry-out, which includes bulk materials that adhere to the exterior surfaces of motor vehicles and/or equipment (including tires) that may then fall onto the pavement, shall 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 new unpaved roads is prohibited within any area with a population of 500 or more, unless the road meets ICAPCD's definition of a "temporary unpaved road." Any temporary unpaved road shall be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emission by paving, chemical stabilizers, dust suppressants and/or watering.			
MM 4.4.1b	Each CUP owner shall implement all applicable standard mitigation measures for construction combustion equipment for the reduction of excess NOx emissions as contained in the Imperial County CEQA Air Quality Handbook and associated regulations. These measures include: • 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 equipmen4t off when not in use or reducing the time of idling to five minutes at a maximum. • Limit the hours of operation of heavy-duty equipment and/or the amount of equipment in use. • Replace fossil-fueled equipment with electrically driven equivalents (assuming powered by a portable generator set and are available, cost effective, and	During construction.	Imperial County Planning and Development Services Department/ICAPCD.	

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	capable of performing the task in an effective, timely manner). • Curtail construction during periods of high ambient pollutant concentrations; this may include ceasing construction activity during the peak hour of vehicular traffic on adjacent roadways. • Implement activity management (e.g. rescheduling activities to avoid overlap of construction phases, which would reduce short-term impacts).			
MM 4.4.1c	Each CUP owner shall use all available EPA Tier 3 or better construction equipment.	Prior to issuance of grading permit(s).	Imperial County Planning and Development Services Department/ ICAPCD	
MM 4.4.1d	Consistent with the requirements of ICAPCD Policy 5, each CUP owner shall pay an emission mitigation fee sufficient to off-set the amount by which the Project's NO_X emissions exceed the 100 lbs/day threshold. ICAPCD allows a project to pay in-lieu impact fees using the most current Carl Moyer Cost Effective methodology to reduce excess NO_X emissions. Under the ICAPCD program, the exact amount of the fee cannot be calculated until the time of construction when more precise data regarding the construction equipment types and hours of operation are known and ICAPCD can calculate the fee. Prior to any earthmoving activity, each CUP owner shall submit to the ICAPCD a complete list of all construction equipment to be utilized during the construction phase identifying make, model, year, horsepower, and estimated hours of usage.	Prior to issuance of grading permit(s).	Imperial County Planning and Development Services Department/ ICAPCD	
GEOLOGY AND SOILS				
MM 4.6.1	The proposed Project shall be designed in accordance with the engineering and design standards contained in the 2013 CBC, the Seismic Regulations, Special Publication 117A, and the County of Imperial building requirements. Prior to approval of final building plans, a registered civil engineer or certified engineering geologist, having at least five years of experience in the field of seismic hazard	Imperial County Planning and Development Services Department.	Prior to approval of final building plans/As part of Project design.	

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	evaluation and mitigation, shall prepare a Final Geotechnical and GeoHazards Report containing site-specific evaluations of the ground shaking hazards affecting the Project, identify the portions of the Project site containing ground shaking hazards, and identify appropriate Project design measures pursuant to the established and proven methodologies set forth in Special Publication 117A and otherwise in compliance with the requirements of Special Publication 117A. All recommended Project design measures as set forth in the Final Geotechnical and GeoHazards Report shall be incorporated into and reflected on the final design and building plans. The Final Geotechnical and GeoHazards Report and Project plans shall be submitted for review and approval by the Imperial County Planning and Development Services Department prior to approval of the final building plans.			
MM 4.6.2a	A Final Geotechnical and GeoHazards Report shall be prepared by a licensed professional engineer during the final design phase of the Project. The proposed solar field site parcels and Gen-Tie shall be designed in accordance with the Final Geotechnical and GeoHazards Report. The Report shall be submitted to, and reviewed and approved by, the Imperial County Department of Public Works prior to issuance of building permits. The Geotechnical and GeoHazards Report shall include, but not be limited to, an analysis and recommendations regarding site-specific design provisions for mitigating the following on-site conditions as identified in the Preliminary Geotechnical and GeoHazards Report (LandMark 2014a): • Soil liquefaction (All solar field site parcels) • Sheet flooding along All American Canal earthen embankments (CUPs 13-0050, 13-0051 and 13-0052) • Landsliding along the New River (CUPs 13-0046 and 13-0045) • Expansive and corrosive soils (All solar field site parcels) All measures and design specifications identified in the Final Geotechnical and GeoHazards Report shall be incorporated into and reflected on the Project design and building plans. Or:	Imperial County Department of Planning and Development Services/ Imperial County Department of Public Works.	Prior to approval of final building plans/As part of Project design/Prior to issuance of building permits.	

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MM 4.6.2b	No habitable structures shall be placed within the incised New River flood channel and floodplain.	Imperial County Planning and Development Services Department.	During construction	
MM 4.6.4	The proposed Project shall be designed in accordance with the engineering and design standards contained in the 2013 CBC, the Seismic Regulations, Special Publication 117A, the Landslide Guidelines and the County of Imperial building requirements. Prior to approval of final building plans, a registered civil engineer or certified engineering geologist, having at least five years of experience in the field of seismic hazard evaluation and mitigation, shall prepare a Final Geotechnical and GeoHazards Report containing site-specific evaluations of the landsliding hazards along the New River (CUPs 13-0046 and 13-0045) and identify appropriate Project design measures pursuant to the established and proven methodologies set forth in the 2013 CBC, Special Publication 117A and the Landslide Guidelines and otherwise in compliance with the requirements of Special Publication 117A. All recommended Project design measures as set forth in the Final Geotechnical and GeoHazards Report shall be incorporated into and reflected on the final design and building plans. The Final Geotechnical and GeoHazards Report and project plans shall be submitted for review and approval by the Imperial County Department of Planning and Development Services prior to approval of the final building plans.	Imperial County Department of Planning and Development Services.	Prior to approval of final building plans/As part of Project design.	
MM 4.6.6	The proposed Project shall be designed in accordance with the engineering and design standards contained in the 2013 CBC relating to expansive soils. Prior to approval of final building plans, a registered civil engineer or certified engineering geologist, having at least five years of experience in the field of expansive soils evaluation and mitigation, shall prepare a Final Geotechnical and GeoHazards Report containing site-specific evaluations of expansive and corrosive soils for all solar field site parcels and identify appropriate Project design measures pursuant to the established and proven methodologies set forth in the 2013 CBC. All recommended Project design measures as set forth in the Final Geotechnical and GeoHazards Report shall be incorporated into and reflected on the final design and	Imperial County Department of Planning and Development Services.	Prior to approval of final building plans/As part of Project design.	

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	building plans. The Final Geotechnical and GeoHazards Report and project plans shall be submitted for review and approval by the Imperial County Department of Planning and Development Services prior to approval of the final building plans.			
MM 4.6.7	The Project's wastewater treatment and disposal system(s) shall comply with all applicable provisions of the OWTS Policy; Imperial County Code, including the Plumbing Code and ordinances governing Regulation of Sewage Disposal Systems and Sanitation Permits, as set forth in Title 9, Division 10, Chapters 4, 12 and 13; and the Imperial County Uniform Policy and Method for Soils Evaluation, Testing and Reporting (Relative to Applications for Private Sewage System Permits) ("County Policy"); and the Pressure Distribution Guidelines (if a pressure distribution system is used). At each location where on-site wastewater treatment systems associated with the construction of an O&M facility are proposed, a site-specific study shall be prepared by a qualified engineer, as defined in the OWTS Policy and the County Policy to (a) determine the capability of the soils to provide the minimum required 5-foot vertical separation between each on-site wastewater treatment system and groundwater, (b) determine the capability of the soils to satisfy percolation requirements, and (c) perform other soil and site evaluations to determine the capability of the soils to otherwise support on-site wastewater treatment systems. If the soils are determined to be suitable for on-site wastewater treatment systems, the qualified engineer shall design on-site wastewater treatment systems to comply with the OWTS Policy, including with regard to maintenance of minimum setbacks from specified land uses, ensuring that effluent does not surface at any time, that percolation of effluent will not adversely affect beneficial uses of waters of the State, the maintenance of at least 12 inches of soil cover (or 6 inches for pressure distribution systems) above on-site wastewater treatment system, designation of a 100% replacement area that is equivalent and separate and available for future use, and that no impermeable surface cover shall be placed above any on-site wastewater treatment system. If a qualified engineer determines that soils are not suitable for on-site wastewater treatment systems at O&M building sites, then the applicant shall be required to	Imperial County Environmental Health Services.	Prior to issuance of building permits.	

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	obtain an operation and discharge permit from the Regional Water Quality Control Board for the discharge of wastewater generated by the Project's O&M buildings. If permitted, wastewater shall be treated onsite and then used onsite as irrigation water for landscaping or as dust control water in compliance with Title 22 Standards. If on site use of wastewater cannot be permitted, then an application will be made to the Imperial Irrigation District to permit treated wastewater to be conveyed to the nearest drain maintained by the Imperial Irrigation District for discharge under Regional Water Quality Control Board Waste Discharge Requirements.			
MM 4.6.8	A Field Resistivity and Ground Potential Rise Evaluation shall be prepared by a qualified engineer having at least five years of experience in the field of corrosive soils evaluation and mitigation during the final design phase of the Project. The Evaluation shall identify Project components potentially subject to corrosive soils, as well as specific, accepted, proven construction engineering practices and measures that could be implemented to avoid adverse corrosion impacts. Potential measures may include, but are not limited to: galvanization, epoxy coatings, thicker steel, and cathodic protection and shall be applied and implemented in a manner that protects the functionality of Project components from being compromised as a result of exposure to corrosive soils. Concrete utilizing mixes of quantities of Type II or Type V Portland cement to achieve a minimum strength of 4,500 pounds per square inch (psi) compressive strength and a low water-cement ratio (0.45 maximum by weight) can also be used to encase steel as an effective measure of protection against corrosive soils. The Field Resistivity and Ground Potential Rise Evaluation shall be submitted for review and approval to the Imperial County Department of Public Works. Measures identified in the Field Resistivity and Ground Potential Rise Evaluation shall be identified on and incorporated into the Project's final design plans.	Imperial County Department of Planning and Development Services / Imperial County Department of Public Works.	Prior to issuance of building permits.	

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CULTURAL RESOURCES				
CUPs 13-0037 and 13-0043 The mitigation measures required here and elsewhere in this section would apply to the Phased CUP Scenario regardless of whether an individual CUP or groups of CUPs were developed at one time.				
MM 4.7.1a	Per CEQA Guidelines Section 15126.4(b)(3)(A), preservation in place is the preferred method of mitigating impacts to archaeological sites. Preservation of CA-IMP-12136, CA-IMP-12135, and CA-IMP-12134 shall be implemented to the extent feasible. However, if preservation in place is not feasible, CUPs 13-0037 and CUP 13-0043 shall be designed and constructed to avoid earth-moving activities within the immediate area (as defined by a 10-foot buffer radius around) CA-IMP-12136, CA-IMP-12135, and CA-IMP-12134. Avoidance measures shall be reflected on the final design plans submitted to the County for review and approval. Prior to any earth-moving associated with construction and decommissioning activities, construction fencing shall be placed around the immediate area of CA-IMP-12136, CA-IMP-12135, and CA-IMP-12134 as a means of keeping construction workers and equipment from disturbing the areas.	Archaeological Monitor and Imperial County Planning and Development Services Department.	Prior to grading and during subsurface construction activities; during decommissioning activities within the immediate area of CA-IMP-12136, CA-IMP-12135, and CA-IMP-12134.	
MM 4.7.1b	If CA-IMP-12136, CA-IMP-12135, and/or CA-IMP-12134 cannot be avoided, a formal Phase II evaluation shall be conducted. The Phase II evaluation shall occur prior to initiation of any earth-moving activities within a 10-foot buffer radius around of CA-IMP-12136, CA-IMP-12135, and/or CA-IMP-12134 in order to assess the significance of the sites and avoid potential adverse impacts. Phase II testing and evaluation procedures may include, but not be limited to the following techniques: ➢ Shovel test pits ➢ One meter square excavation units ➢ Surface collection ➢ Site mapping ➢ Soils profiles ➢ Soils sampling ➢ Artifact analysis	RPA and Imperial County Planning and Development Services Department.	Prior to grading and during subsurface construction activities; during decommissioning activities within the immediate area of CA-IMP-12136, CA-IMP-12135, and CA-IMP-12134.	

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	➢ Floral and faunal analysis ➢ Radiocarbon analysis ➢ Curation These techniques are used if testing indicates a site is significant and is determined to be a "historically significant" under Section 15064.5 of the CEQA Guidelines and/or eligible for CRHR listing under PRC 5024.1. Should the Phase II evaluation determine the presence of historical or archeological resource(s) that cannot be avoided, preservation measures shall be identified by a State-Registered Professional Archaeologist (RPA). If on-site preservation is determined infeasible, the RPA shall prepare a data recovery plan prior to commencing groundbreaking activities. The recovery plan shall describe provisions to record and document scientifically important information and, if advisable, collect and deposit excavated materials with the local California Historical Resources Information Center (CHRIS). Any recovered artifacts would be curated with a local museum. This will enable the collection of information that may be important to the prehistory or history of the local area, California, or the nation. Following data recovery, a qualified archaeological monitor shall be present during grading and subsurface construction within the areas of CA-IMP-12136, CA-IMP-12135, and/or CA-IMP-12134 to ensure undiscovered resources are protected.			
MM 4.7.2	**FULL BUILD-OUT SCENARIO/PHASED CUP SCENARIO** Per CEQA Guidelines Section 15126.4(b)(3)(A), preservation in place is the preferred method of mitigating impacts to archaeological sites. To the extent feasible, any discovered archaeological resources shall be preserved in place. However, if preservation in place is not feasible, each CUP owner shall retain a Registered Professional Archaeologist (RPA). Due to the extensive disturbance by farming in the agricultural fields and the limited depth of disturbance for the proposed Project, archaeological monitoring is not required on the agricultural fields outside the three recorded historic period sites. Archeological monitoring shall be required during construction within 10 feet of the three recorded historic period sites. However, in the unlikely event that potential subsurface resources are discovered by	Registered Professional Archaeologist (RPA), and the Imperial County Planning and Development Services Department.	During initial stages of ground-disturbing activity and possibly longer, depending on findings.	

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	construction workers, the RPA shall be called to the site to investigate and monitor subsurface excavations within 100 feet of the potential resource. Monitoring activities shall be supervised by an RPA, who shall have the authority to determine the duration, intensity and inspection timing (from full-time to as-needed). The RPA may also recommend a Native American monitor (following the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites established by the Native American Heritage Commission [NAHC]) to attend such investigations and monitoring efforts. The RPA shall be empowered to temporarily halt or divert construction operations within a reasonable distance from a find or resource exposure in order to determine if significant cultural resources are present, and if such resource would be adversely affected by continuing construction operations. The RPA shall immediately notify the Imperial County Planning and Development Services Department of such decisions. Work shall not continue at the discovery site until the RPA, in coordination with the Native_American monitor and the Imperial County Planning and Development Services Department, conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially significant or eligible for listing on the NRHP or CRHR. If a potentially-eligible resource is encountered, then the RPA, Native American monitor, the County, and each CUP owner shall arrange for either 1) total avoidance of the resource, if possible; or 2) test excavations to evaluate eligibility for the CRHR and, if eligible, data recovery as mitigation. The data recovery plan shall identify methods for recovering the scientifically consequential information from and about the historical resource, and recordation/deposition of data/materials with the local California Historical Resources Information Center (CHRIS). Any recovered artifacts would be curated with a local museum. This will enable the collection of information that may be important to the prehistory or history of the local area, California, or the nation.			

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MM 4.7.3	**FULL BUILD-OUT SCENARIO/PHASED CUP SCENARIO** In the event that evidence of human remains is discovered, construction activities within 200 feet of the discovery shall be halted or diverted and the Imperial County Coroner shall be notified (Section 7050.5 of the Health and Safety Code). If the Coroner determines that the remains are of a deceased Native American, the Coroner will notify the Native American Heritage Commission (NAHC) which shall in turn notify the Most Likely Descendant (MLD) for the deceased Native American (Section 5097.98 of the Public Resources Code). Upon notification by the NAHC, the designated MLD then has 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains and associated grave goods (AB 2641). If the CUP owner does not agree with the recommendations of the MLD, the NAHC can mediate (Section 5097.94 of the Public Resources Code). If no agreement is reached, the CUP owner must inter the remains with appropriate dignity where they will not be further disturbed (Section 5097.98 of the Public Resources Code). With regards to the new burial site, in order to protect it, the CUP owner must either record the site with the NAHC or the appropriate California Historic~~al~~ Resources Information System Center; record an open space or conservation zoning designation or easement; or record a document with the county in which the property is located (AB 2641). If the remains are not Native American, then the coroner shall follow all applicable laws for removal and treatment of the remains	Imperial County Planning and Development Services Department, Imperial County Coroner in coordination with NAHC.	During construction and decommiss-ioning activities.	
MM 4.7.4a	**FULL BUILD-OUT SCENARIO/PHASED CUP SCENARIO** Each CUP owner shall retain a qualified paleontologist. Due to the significant disturbance from agricultural activities to depths of 5 feet, paleontological monitoring shall take place during construction of the initial 10 percent of land area of each CUP for 2 days per week when ground disturbance is at a depth of 5 feet and deeper. Following that period, if no paleontological resources meeting the San Bernardino County Museum significance criteria are found, the Principal Paleontologist may review the procedures and, if warranted, reduce the rate of monitoring to one day per week. However, if paleontological sensitive soils (as defined per the Society of Vertebrate Paleontology) or paleontological resources	Applicant and Imperial County Planning and Development Services Department.	During construction of the initial 10% of total solar field grading activities and possibly longer, depending on findings.	

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	(per significance criteria of the San Bernardino County Museum) are encountered, monitoring shall be increased to full-time within a radius of 100 meters of the location of the find. Full time monitoring may become necessary if the earth-moving operations continuously impact undisturbed paleontologically sensitive soils. A program to mitigate impacts on paleontological resources that are exposed shall be developed and implemented.			
MM 4.7.4b	Earth-moving operations impacting the soils five feet and deeper within the Project area shall be "spot-checked" up to two days per week by a RPA to determine whether undisturbed lakebed sediments have been encountered. During construction on the initial ten percent of total solar field grading, disturbance below 5 feet shall be monitored through "spot-checking" two days per week. If within that period no paleontological findings meeting the San Bernardino County Museum significance criteria are found, the Principal Paleontologist may review the procedures and, if warranted, reduce the rate of "spot-checking" to one day per week. If paleontologically sensitive soils, as defined by the Society of Vertebrate Paleontology (1995), are being impacted, or if paleontological resources meeting the San Bernardino County Museum significance criteria are encountered, they would be reported to the Principal Paleontologist and monitoring would be increased to full-time within a radius of 100 meters of the find. Full time monitoring may become necessary if the earth-moving operations continuously impact paleontological sensitive soils. A program to mitigate Project impacts on paleontological resources that are exposed shall be developed and implemented. Paleontological monitors shall be equipped to salvage fossils as they are unearthed (to help avoid construction delays) and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. Monitors shall be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Recovered specimens shall be prepared to a point of identification and permanent preservation, including washing of sediments to recover small invertebrates and	Applicant and Imperial County Planning and Development Services Department.	During construction and during decommiss-ioning activities that include disturbance three feet or deeper.	

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	vertebrates. Fossil specimens shall be curated by accessioning into an established, accredited museum repository with permanent retrievable paleontological storage. A report of findings with an appended itemized inventory of specimens shall be prepared. Submittal of the report and inventory to the Imperial County Planning and Development Services Department, along with confirmation of the curation of recovered specimens into an established, accredited museum repository, shall signify completion of the program to mitigate impacts to paleontological resources.			
AGRICULTURAL RESOURCES				
MM 4.9.1a	**Payment of Agricultural and Other Benefit Fees** One of the following options included below are to be implemented prior to the issuance of a grading permit or building permit (whichever is issued first) for the proposed Project: **For Non-Prime Farmland:** • **Option 1**: The Permittee shall procure Agricultural Conservation Easements on a 1 to 1 basis on land of equal size, of equal quality of farmland, outside 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 • **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 total acres of proposed site 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 Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation and enhancement of agricultural lands within Imperial County; or	Imperial County Planning and Development Services Department.	Prior to the issuance of a grading permit or building permit (whichever is issued first).	

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	• **Option 3**: The Permittee and County voluntarily enter into an enforceable Public Benefit Agreement or Development Agreement that includes an Agricultural Benefit Fee payment that is (1) consistent with Board Resolution 2012-005; (2) the Agricultural Benefit Fee must be held by the County in a restricted account to be used by the County only for such purposes as the stewardship, preservation and enhancement of agricultural lands within Imperial County and to implement the goals and objectives of the Agricultural Benefit program, as specified the Development Agreement, including addressing the mitigation of agricultural job loss on the local economy. **For Prime Farmland:** • **Option 1**: Agricultural Conservation Easements on a "2 to 1" basis on land of equal size, of equal 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; or • **Option 2**: The Permittee shall pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 30% of the fair market value per acre for the total acres of the proposed site 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 Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation and enhancement of agricultural lands within Imperial County. • **Option 3**: The Permittee and County enter into an enforceable Public Benefit Agreement or Development Agreement that includes an Agricultural Benefit Fee payment that is (1) consistent with Board Resolution 2012-005; (2) the Agricultural Benefit Fee must be held by the County in a restricted account to be used by the County only for such purposes as the stewardship,			

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	preservation and enhancement of agricultural lands within Imperial County and to implement the goals and objectives of the Agricultural Benefit program, as specified the Development Agreement, including addressing the mitigation of agricultural job loss on the local economy; the Project and other recipients of the Project's Agricultural Benefit Fee funds; or emphasis on creation of jobs in the agricultural sector of local economy for the purpose of off-setting jobs displaced by this Project. • **Option 4**: The Permittee must revise their CUP Application/Site Plan to avoid Prime Farmland.			
MM 4.9.1a	**Reclamation/Decommissioning Plan and Security** The DOC has clarified the goal of a reclamation and decommissioning plan: the land must be restored to land which can be farmed. In addition to MM 4.9.1a for Prime Farmland and Non-Prime Farmland, the Applicant shall submit to Imperial County a Reclamation Plan prior to issuance of a grading permit. The Reclamation Plan shall document the procedures by which each CUP will be returned to its current agricultural condition/LESA score of 73.42. Permittee also shall provide financial assurance/bonding in an amount equal to a cost estimate prepared by a California-licensed general contractor or civil engineer for implementation of the Reclamation Plan in the event Permittee fails to perform the Reclamation Plan.	Imperial County Planning and Development Services Department.	Prior to the issuance of a grading permit or building permit (whichever is issued first).	
HYDROLOGY AND WATER QUALITY				
MM 4.11.1a	**FULL BUILD-OUT SCENARIO/PHASED CUP SCENARIO** Prior to the issuance of building permits for, each CUP property owner shall file a NOI to comply with the GCP and associated local NPDES regulations with the SWRCB. Each CUP property owner shall also submit proof of filing the NOI to the Imperial County Planning and Development Services Department prior to the issuance of building permits for each CUP.	Imperial County Planning and Development Services Department.	Prior to issuance of building permits.	

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
MM 4.11.1b	**FULL BUILD-OUT SCENARIO/PHASED CUP SCENARIO** Prior to beginning construction, a complete SWPPP shall be prepared to demonstrate that the development of each CUP would comply with the GCP and associated local NPDES regulations. The SWPPP(s) shall be implemented for each CUP (13-0036 thru 13-0052). The SWPPP(s) shall fully describe BMPs that address pollutant source reduction and provide measures/controls necessary to mitigate potential pollutant sources. These include, but are not limited to: erosion controls; sediment controls; tracking controls; non-storm water management; materials and waste management; and good housekeeping practices. The SWPPP(s) shall be prepared by a QSD and implemented for each CUP under the review/direction of a QSP. A monitoring program shall be included in the SWPPP(s) prepared for each individual CUP that outlines storm event inspections throughout construction of all solar field site parcels, along with a sampling plan in accordance with the GCP. The monitoring program shall be prepared by a QSD and implemented at all solar field site parcels under the review/direction of a QSP. The goals of the program shall be: (1) to identify areas contributing to a storm water discharge; (2) to evaluate whether measures to reduce pollutant loadings identified in the SWPPP are adequate, properly installed, and functioning in accordance with the terms of the GCP; and (3) whether additional control practices or corrective maintenance activities are needed. If a discharge is observed during these inspections, a sampling and analysis of the discharge shall be required. Each CUP property owner shall submit a copy of the SWPPP(s) with to the County of Imperial Planning and Development Services Department prior to the issuance of building permits for each CUP.	Imperial County Planning and Development Services Department.	Prior to issuance of building permits.	
MM 4.11.1c	**FULL BUILD-OUT SCENARIO/PHASED CUP SCENARIO** Applicant proposed BMPs and design features shall be incorporated into the Final Design Plans for each CUP as applicable. Applicant proposed BMPs and design features shall also be incorporated into the SWPPP(s) prepared for each individual CUP (based on build-out phasing) as applicable.	Imperial County Planning and Development Services Department.	Prior to issuance of building permits	

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
MM 4.11.1d	**FULL BUILD-OUT SCENARIO/PHASED CUP SCENARIO** Each CUP property owner shall be responsible for operation and maintenance of site design, source control, and treatment control BMPs. Each CUP property owner shall also be responsible for long-term funding for BMP maintenance. In addition, each CUP owner shall participate in a formal agreement with the County of Imperial allowing access to each CUP property for inspection to ensure that each CUP property owner is properly carrying out the BMPs over the life of the Project.	Imperial County Planning and Development Services Department.	Prior to issuance of building permits/Throughout life of Project.	
MM 4.11.4a	**CUP 13-0038** The shallow earthen ditch that conveys water to proposed Basin SP-2 and SP-3 on CUP 13-0038 shall remain undisturbed or otherwise be reconstructed to continue conveyance of flow. The following considerations shall be incorporated as part of the design and construction of CUP 13-0038: A shallow earthen ditch receives flow from Basin SP-1 (CUP 13-0039) and conveys runoff along the southern limit of Basin SP-2 (CUP 13-0038). At the southwestern corner of Basin SP-2 (CUP 13-0038), flow between Basins SP-1 and SP-2 (CUPs 13-0039 and 13-0038) converge and discharge to an earthen ditch along the southern limit of Basin SP-3 (CUP 13-0038). At the southwestern corner of Basin SP-3 (CUP 13-0038), the ditch receives runoff from Basin SP-3 (CUP 13-0038), collecting runoff in an underground storm drain that conveys flow to the Spill from Wistaria Canal Lateral 4. In the development and construction of Basins SP-2 and SP-3 (CUP 13-0038), the earthen ditch shall either remain undisturbed or otherwise be reconstructed in a manner that continues the above described conveyance of flow.	Imperial County Planning and Development Services Department, and Imperial County Department of Public Works.	During Final Project Design.	
MM 4.11.4b	The shallow earthen ditch that conveys water to proposed Basin SP-2 and SP-3 on CUP 13-0038 shall either remain undisturbed or otherwise be reconstructed to continue conveyance of flow. The following considerations shall be incorporated as part of the design and construction of CUP 13-0039:	Imperial County Planning and Development Services Department,	Prior to approval of final building plans/As part of Project	

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	• Flow from the fields located to the east of Basin W5-10 (CUP 13-0039) is collected in a storm drainage structure and conveyed underground western across Basin W5-10 (CUP 13-0039). At the westerly limit of Basin W5-10 (CUP 13-0039), the pipe enters a storm drain structure that also collects surface and tile drain flow from Basin W5-10 (CUP 13-0039). The converged flow from adjacent fields and W5-10 (CUP 13-0039) continues in an underground pipe in a northwestern direction across Basin SP-1 (CUP 13-0039), ultimately discharging to the Wistaria 5 Drain. In the development and construction of Basins SP-1 and W5-10 (CUP 13-0039), the underground pipe shall remain either undisturbed or otherwise be reconstructed in a manner that continues the above described conveyance of flow.	and Imperial County Department of Public Works.	design/Prior to issuance of building permits.	
MM 4.11.4c	The shallow earthen ditch that conveys water to proposed Basin SP-2 and SP-3 on CUP 13-0038 shall remain undisturbed or otherwise be reconstructed to continue conveyance of flow. The following considerations shall be incorporated as part of the design and construction of CUP 13-0049: • A shallow earthen ditch receives flow from Basin W7-5 (CUP 13-0048) and conveys runoff along the northerly limit of Basin W7-2 (CUP 13-0049). At the northwesterly corner of Basin W7-2 (CUP 13-0049), flow between Basins W7-5 and W7-2 (CUPs 13-0049 and 13-0048) converge and discharge to an earthen ditch along the northern limit of Basin W7-3 (CUP 13-0049). At the northwestern corner of Basin W7-3 (CUP 13-0049), the ditch receives runoff from the fields located to the north and conveys flow south to Wisteria 7 Drain. In the development and construction of Basins W7-2 and W7-3 (CUP 13-0049) the earthen ditch shall either remain undisturbed or otherwise be reconstructed in a manner that continues the above described conveyance of flow.	Imperial County Planning and Development Services Department, and Imperial County Department of Public Works.	During Final Project Design.	
MM 4.11.5a	**CUPs 13-0045, 13-0046, 13-0036, 13-0037, 13-0042 13-0051 and 13-0052** During final design of CUPs 13-0045, 13-0046, 13-0036, 13-0037, 13-0042 13-0051 and 13-0052, the limits of FEMA FIRM Zone "A" shall be considered and structures	Imperial County Planning and Development	Prior to approval of final building	

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	shall be located beyond the limits of Zone "A." If the Project requires placement of structures within Flood Zone "A," site-specific analysis shall be performed during final engineering design to determine the depth of flooding in a 100-year event. The analysis shall specify the grading and construction work necessary to ensure structures are above the 100-year flood elevation. The results of the site-specific analysis shall be submitted for review and approval by the Imperial County Planning and Development Services Department and the Public Works Department during Final Project Design. All measures and design specifications identified in the site-specific analysis shall be incorporated into and reflected on the Project design and building plans.	Services Department	plans/As part of Project design/Prior to issuance of building permits.	
MM 4.11.5b	**CUPs 13-0045, 13-0046, 13-0036, 13-0037, 13-0042 13-0051 and 13-0052** Should construction, operation, or decommissioning activities require presence of people within Flood Zone "A" at CUPs 13-0045, 13-0046, 13-0036, 13-0037, 13-0042 13-0051 and 13-0052, CUP owners and/or contractor representatives shall conduct a review of rain forecasts, and construction activities shall be scheduled in a manner that considers potential for flooding. Any non-stationary equipment and personnel located within Flood Zone "A" shall be relocated outside of the flood zone until such time as the threat of flooding has passed. Each CUP owner shall prepare a plan identifying actions to be taken to avoid placement of people and equipment within the Flood Zone "A" during construction, operation, and decommissioning of the Full Build-out Scenario and each CUP. The plan shall be submitted to the County of Imperial Planning and Development Services Department, and reflected in the Project's conditions of approval.	Imperial County Planning and Development Services Department, and Imperial County Department of Public Works.	During potential flood events throughout the life of the Project.	
BIOLOGICAL RESOURCES				
MM 4.12.1a	**GENERAL CONSTRUCTION MEASURES - FULL BUILD-OUT SCENARIO AND ALL CUPS (13-0036 THRU 13-0052)** **MM 4.12.1a** Each CUP owner shall identify and retain a qualified biologist(s) approved by CDFW. The name, documented experience, any permit numbers, and resumes for the qualified biologist(s) shall be submitted to the CDFW for approval at least 7 days prior to initiation of construction. It is assumed CDFW will approve	Imperial County Planning and Development Services Department.	Prior to and during Project construction	

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	qualified biologist(s) within 15 days of the submittal. The qualified biologist(s) shall be present on-site during all ground-disturbing phases of construction to regularly monitor construction activities and ensure construction is proceeding in compliance with the avoidance, minimization, and mitigation measures committed to by the Applicant, as well as measures required by regulatory agencies. In addition, the qualified biologist(s) shall maintain communications with the appropriate personnel (project manager, resident engineer) to ensure that issues relating to biological resources are appropriately and lawfully managed. The qualified biologist shall be responsible for reporting any noncompliance issues to CDFW within 48 hours. The resident engineer shall be immediately notified to halt work, if necessary. The qualified biologist(s) shall provide a report to CDFW at least monthly identifying construction activities and the results of compliance monitoring related to implementation of avoidance and minimization measures. The qualified biologist(s) shall meet the following minimum qualifications: • Have a bachelor's degree in biological sciences, zoology, botany, ecology, or a closely related field or at least 4 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; • Have at least 1 year of field experience with biological resources found in the geographic region of the Project; and • Have extensive knowledge of the biology and ecology of sensitive species occurring and potential occurring within the Project site. Have specialized avian experience in the Imperial Valley (e.g., knowledge of nesting chronology, avian behavior) necessary to conduct nesting surveys and monitor buffers.			
MM 4.12.1b	Each CUP owner shall develop and implement a Worker Environmental Awareness Program (WEAP) prior to the start of construction. The WEAP shall be submitted to the Imperial County Planning and Development Services Department for review and approval prior to the issuance of building permits. The WEAP training shall be led by the qualified biologist(s) and shall cover the following:	Imperial County Planning and Development Services Department.	Prior to and during Project construction	

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	• The potential presence and ecology of sensitive biological resources found on-site, such as potential jurisdictional waters and nesting avian species; • Flagging/fencing of exclusion areas; • Proper implementation of protective measures to avoid impacts to special-status species; • The reasons, need, and method by which employees should report on wildlife mortality, follow nest management protocols, dispose of carcasses, comply with applicable regulations (including the consequences of noncompliance), and the appropriate agencies and personnel that should be contacted after incidents; and • Other permit requirements and environmental issues. All construction site personnel shall be required to attend the WEAP training in conjunction with hazard and safety training prior to working on-site.			
MM 4.12.1c	Each CUP owner shall comply with the following measures prior to and during construction. Compliance with these requirements shall be reflected on the Final Engineering Plans to be submitted for review and approval by the County of Imperial Public Works Department: • All construction-related activities shall take place within the development footprint of the Project as defined by the final engineering plans. The anticipated impact areas, including staging areas, equipment access, and disposal or temporary placement of spoils, shall be delineated with staking and/or orange construction fencing prior to construction to avoid natural resources where possible. No construction-related activities shall occur outside of the designated impact area. All construction materials, staging, storage, dispensing, fueling, and maintenance activities shall be designated on construction maps and shall be situated a minimum of 50 feet from all drainages. Staging and temporary access shall occur on existing roadways whenever possible. • Parking of vehicles shall occur within the fenced Project area or within previously disturbed areas prior to construction of the fencing, and away from sensitive habitats.	Imperial County Planning and Development Services Department/ Imperial County Department of Public Works.	Prior to and during Project construction	

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	• Grading shall only occur where necessary and as specified by the Project's final engineering plans, and shall be avoided wherever possible to minimize the amount of ground disturbance. To the extent possible, Project layout and design shall generally follow existing contours of the Project site to minimize the amount of grading required. • To the extent possible, nighttime construction shall be avoided. When activities must occur at night, all Project lighting (e.g., staging areas, equipment storage sites, roadway) shall be directed downward and away from natural vegetation communities. Light glare shields shall be used to reduce the extent of illumination into adjoining areas. • Nighttime and daytime on-site construction vehicle speeds shall be restricted to 10 miles per hour and 20 miles per hour, respectively. Speed limit signs shall be posted throughout the site to remind construction workers of travel speed restrictions. • Spoils, trash, and any construction-generated debris shall be removed to an approved off-site disposal facility. A trash abatement program shall be established. Trash and food items shall be contained in closed containers and removed daily to reduce the attraction of opportunistic predators such as common ravens, coyotes, and feral cats and dogs that may prey on sensitive species. • When handling toxic substances, construction vehicles shall carry a Hazardous Material Spill Kit for use in the event of a spill. All construction personnel working on-site shall be trained in using these kits. Spill containment materials must be on-site or readily available for any equipment maintenance or refueling. • Construction workers shall be prohibited from bringing domestic pets and firearms to the site. • A SWPPP or equivalent shall be prepared prior to the start of construction to comply with applicable RWQCB storm water management provisions. The SWPPP or SWPPP equivalent document shall identify the design features and BMPs that shall be used to effectively manage drainage-related issues (e.g., erosion and			

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	sedimentation) during construction. Erosion control measures shall be regularly checked by inspectors, the qualified biologists, and/or resident engineer. Fencing and erosion control measures of all construction areas shall be inspected a minimum of once per week (refer to mitigation measure MM 4.11.1b in Section 4.11, Hydrology and Water Quality). • All construction activities shall cease during heavy rains to prevent unnecessary erosion, runoff, and sedimentation, and shall not resume until conditions are suitable for the movement of equipment and materials. • No planting or seeding of invasive plant species on the most recent version of the California Invasive Plant Council (Cal-IPC) California Invasive Plant Inventory for the Project region shall be permitted. • To prevent indirect effects to sensitive natural resources from fugitive dust associated with construction of the Project, all active construction areas shall be watered down as necessary. All trucks hauling soil, sand, and other loose materials shall be covered or shall maintain at least 2 feet of free-board. All unpaved access roads, parking areas, and staging areas at construction sites shall have non-potable water or nontoxic soil stabilizers applied as needed. • At the completion of construction, all construction-related materials shall be removed from the site.			
MM 4.12.1d	Each CUP owner shall develop a Weed Management Plan prior to the commencement of construction activities. The Weed Management Plan shall include a variety of measures that shall be undertaken during construction and operation activities to prevent the introduction and spread of new weed species. The Weed Management Plan shall also address monitoring, plus educating personnel on weed identification and methods for avoiding and treating infestations. Weed control methods may include both physical and chemical control. All chemical applications require oversight by a holder of a valid Qualified Applicator's License (QAL) issued by the California Department of Pesticide Regulation (CADPR) Recommendations for use of chemical products will be made in writing by a Pest Control Advisor (PCA) with a valid CADPR license. Chemical products will be registered, non-restricted, general-use herbicides. Treatment	Imperial County Planning and Development Services Department.	Prior to issuance of building permits.	

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	applications will follow use and safety guidelines available on product labels. Typical active ingredients expected for chemical treatments are glyphosate and triclopyr. Glyphosate and triclopyr are found in broad-spectrum, systemic herbicides, and available in numerous products intended for control of post-emergent vegetation. Chemical treatment of vegetation in and around aquatic or wetland features requires products approved for use within such habitats, as described on product labels. The Weed Management plan shall be submitted to the Imperial County Planning and Development Services Department for review and approval prior to issuance of building permits.			
MM 4.12.1e	**GENERAL OPERATIONS MEASURES - ALL CUPs (13-0036 THRU 13-0052)** MM 4.12.1e, is a general Project operation measure applicable to all sensitive, special status, and jurisdictional biological resources, including, but not limited to vegetation communities. As such, although discussed under the impact statement regarding vegetation communities, this measure is applicable to all operational activities throughout both the Full Build-out Scenario and all CUPs (13-0036 thru 13-0052) proposed as part of the Phased CUP Scenario, as further referenced under Impacts 4.12.2 through 4.12.14, below. Each CUP owner shall develop and implement an Operation and Maintenance Worker Education Plan to advise personnel on general operations measures. The Worker Education Plan shall be submitted to the County of Imperial Planning and Development Services Department for review and approval prior to issuance of building permits. The following provisions shall be included in the Worker Education Plan and implemented throughout the operational lifespan of each CUP: • Operation and maintenance personnel shall be prohibited from: – Harming, harassing, or feeding wildlife and/or collecting special-status plant or wildlife species. – Traveling (either on foot or in a vehicle) outside of Project footprint except on public roads. – Littering on the Project area.	Imperial County Department of Planning and Development Services	Throughout operation of each CUP, the Electric Collector line Corridor, and the Gen-Tie corridor.	

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	– Allowing persons not employed at the facility to remain on site after daylight hours – Exceeding normal nighttime operational noise or lighting levels. • All operation and maintenance equipment, including cranes and personnel, shall stay within the permanent impact footprint of CUP boundaries, the Electrical Collector Line Corridor, or the Gen-Tie line corridor, except when not physically feasible or when necessary to protect human life or property. Operation and maintenance vehicles shall be parked in designated areas and away from sensitive habitats. • Nighttime and daytime vehicle speeds within each CUP, the Electrical Collector Line Corridor, and the Gen-Tie line corridor shall be restricted to 10 miles per hour and 25 miles per hour, respectively. Speed limit signs shall be posted throughout the Project site to remind workers of travel speed restrictions. • Each CUP, the Electrical Collector Line Corridor, and the Gen-Tie line corridor shall be kept clear of trash and other litter to reduce the attraction of opportunistic predators such as common ravens, coyotes, and feral dogs that may prey on sensitive species. • Operation and maintenance employees shall maintain Hazardous Materials Spill Kits on-site. All operation and maintenance staff shall be trained in how to use Hazardous Materials Spill Kits in the event of a spill. • Operation and maintenance employees shall be prohibited from bringing domestic pets and firearms to the site. • The General Construction Permit shall specify post-construction storm water control standards, and preparation and implementation of a Long-Term Maintenance Plan for the retention/detention basins (refer to mitigation measure MM 4.11.1a in Section 4.11, Hydrology and Water Quality). • Operation and maintenance activities at each CUP, the Electric Collector Line Corridor, and the Gen-Tie corridor shall be carried out in accordance with the Weed Management Plan identified under MM 4.12.1d.			

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
MM 4.12.1f	**GENERAL DECOMMISSIONING MEASURES - ALL CUPs (13-0036 THRU 13-0052)** MM 4.12.1f, described below, is a general Project decommissioning measure applicable to all sensitive, special status, and jurisdictional biological resources, including, but not limited to vegetation communities. As such, although discussed under the impact statement regarding vegetation communities, this measure is applicable to all Project decommissioning activities throughout both the Full Build-out Scenario and all CUPs (13-0036 thru 13-0052) proposed as part of the Phased CUP Scenario, as further referenced under Impacts 4.12.2 through 4.12.14, below. Each CUP owner shall implement the following measures during decommissioning activities occurring within each CUP, the Electric Collector Line Corridor, and the Gen-Tie line corridor: • All mitigation measures required during construction of the Project to avoid or minimize impacts to biological resources shall also be implemented during decommissioning activities. • Decommissioning of the Project shall minimize new site disturbance and removal of native vegetation to the maximum extent possible. • Topsoil removed during decommissioning shall be stockpiled and used as topsoil during restoration efforts associated with decommissioning disturbance. • Soil shall be stabilized and revegetated with plant species characteristic of native species within adjacent habitats, except where immediately reclaimed as agriculture. Local seed sources shall be used where feasible. • Surface water flows shall be restored to pre-disturbance conditions. Unnecessary stream crossings, roads, and pads shall be removed and revegetated. Erosion control measures shall be installed in all disturbance areas. • Petroleum and chemical spills shall be remediated prior to the completion of decommissioning.	Imperial County Planning and Development Services Department.	Throughout decommissioning of each CUP, the Electric Collector line Corridor, and the Gen-Tie corridor.	

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
MM 4.12.2	**JURISDICTIONAL WATERS AND WETLANDS MEASURES - ALL CUPs (13-0036 THRU 13-0052)** Each CUP owner shall implement the following measures prior to and during construction activities at each CUP, the Electric Collector line Corridor and Gen-Tie line corridor to avoid construction-related impacts to jurisdictional waters and wetlands: • Each CUP and Project design shall avoid direct and indirect impacts to jurisdictional waters to the greatest extent feasible. Construction within jurisdictional waters and/or wetlands shall be subject to prior authorization by USACE, RWQCB, and CDFW. • All equipment operating in and near jurisdictional waters or wetlands shall be in good working condition and free of leaks. All vehicles shall have drip pans during storage to contain minor spills and drips. No refueling or storage shall take place within 100 feet of a drainage channel or structure. In addition, all maintenance crews working with heavy equipment shall be trained in spill containment and response. • Discharges shall not permanently restrict or impede the passage of normal or expected high flows, or cause the permanent relocation or diversion of the flows. • Where turbidity or erosion occurs or is expected to occur from drainage structures, biofilters, detention basins or other appropriate drainage catchment structures shall be installed where flow conveyance occurs from the Project directly into a jurisdictional area. • Temporary impacts to jurisdictional waters and wetlands will be recontoured to pre-construction conditions. Temporary impacts to vegetated jurisdictional waters and wetlands will also be revegetated with appropriate native vegetation or non-native compatible with the landscape palette. • Permanent impacts to jurisdictional waters and wetlands shall be mitigated either through on-site and/or off-site re-establishment and/or enhancement of jurisdictional waters and wetlands or through an approved-mitigation bank or in-	County of Imperial Planning and Development Services Department / USACE / RWQCB / CDFW.	Prior to and during construction; Prior to issuance of a building permit.	

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	lieu fee program, if one is available. The type of mitigation, mitigation location, and the final mitigation ratios will be established during the permit process for the Project's USACE Section 404 permit, the RWQCB Section 401 Water Quality Certification, and a CDFW Streambed Alteration Agreement. The federal agencies have published guidance on mitigation, i.e., the final rule for Compensatory Mitigation for Losses to Aquatic Resources that was issued by USACE and USEPA. Issuance of required permits/authorizations and preparation of a detailed Wetland/Waters Mitigation Plan to be submitted for review and approval by the USACE, RWQCB, and CDFW before impacts to jurisdictional waters. • Each CUP owner shall comply with additional measures identified during permitting through the USACE, RWQCB, and CDFW. In addition, the determination of whether the Project may be permitted under USACE's NWP program, or whether an individual permit shall be required, shall be determined formally as part of the CWA Section 404 permit process. To qualify for an NWP, the proposed action and the associated unavoidable impacts to jurisdictional waters based on final project designs must satisfy all terms and conditions of the applicable NWP, as well as all general conditions and any relevant regional conditions of the NWP program (refer also to mitigation measure 4.11.1a). • The Wetland/Waters Mitigation Plan shall describe proposed on-site and off-site mitigation. For all habitat restoration proposed, this plan shall include details regarding site preparation (e.g., grading), planting specifications, and irrigation design, as well as maintenance and monitoring procedures. The plan shall also outline yearly success criteria and remedial measures should the mitigation effort fall short of the success criteria, and a strategy for long-term mitigation site management. Alternatively, mitigation obligations may be satisfied by participating in a fee-based mitigation program (e.g., a wetland mitigation bank) in which case, long-term management for such mitigation shall be covered under the terms of the formal banking agreement or by purchasing appropriate mitigation credits from a regulatory approved bank.			

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
MM 4.12.3	Prior to the on-set of construction within each CUP, a rare plant habitat field assessment shall be conducted to assess the need for focused rare plant surveys within this CUP area. If rare plants have potential to occur in each CUP, then surveys shall be required during appropriate conditions. If focused rare plant surveys detect special-status species, the Applicant shall prepare a salvage and relocation plan in coordination with CDFW.	Imperial County Planning and Development Services Department.	Prior to construction of CUP 13-0047.	
MM 4.12.5	Prior to the onset of construction within CUP areas 13-0046 and 13-0045 a Yuma clapper rail field habitat assessment shall be conducted within CUPs 13-0046 and 13-0045 plus a 250 foot (75 meter buffer) (CUP 13-0046/13-0045 Study Area) to determine if potentially suitable habitat is present. o The Project Applicant shall not remove any identified potentially suitable Yuma clapper rail habitat within CUP areas 13-0046 or 13-0045. o Project-related construction, clearing and ground disturbing activities are prohibited within 250-feet of identified potentially suitable Yuma clapper rail habitat during the breeding season (February 15 through June 30).	Imperial County Planning and Development Services Department.	Prior to the onset of construction within CUP areas 13-0047, 13-0046, and 13-0045.	
MM 4.12.7	**BURROWING BURROWING OWL CONSTRUCTION MEASURES - ALL CUPs 13-0036 THRU 13-0052** The following measures shall apply to construction activities at the Full Build-out Scenario and each individual CUP (13-0036 thru 13-0052): • A qualified biologist shall be on-site during all ground-disturbing construction activities in potential BUOW habitat. The qualified biologist shall be responsible for implementing and overseeing BUOW avoidance and minimization measures. • The qualified biologist shall have the authority to stop construction if activities are in violation of avoidance and minimization measures. A qualified biologist possesses a bachelor's degree in wildlife biology or a related field and has demonstrated field experience in the identification and life history of BUOW. • Per CDFW guidance, a take avoidance survey (i.e., pre-construction clearance survey) will be conducted by a qualified biologist to determine presence or absence of BUOW no less than 14 days and no more than 30 days prior to initiating construction activities. Surveys shall include areas within the Project	Imperial County Planning and Development Services Department/CDFW.	Prior to and during construction of the Full Build-out Scenario and each individual CUP (13-0036 thru 13-0052).	

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	footprint and a surrounding 500-foot (150-meter) buffer. The survey shall consist of walking parallel transects and noting any fresh BUOW sign or presence. The results of the take avoidance survey shall be provided to CDFW. If more than 30 days pass between the take avoidance survey and initiation of Project construction, additional take avoidance surveys may be required, depending on what actions have been implemented to deter BUOW from moving into the Project footprint and buffer area. A final take avoidance survey shall be conducted within the Project footprint within 24 hours prior to initiation of construction activities. Given the total duration of construction and the size of the Project, it is expected that take avoidance surveys will be conducted in phases, in order to stay within the required survey windows associated with construction activities. ➢ If occupied burrows are found during take avoidance surveys, appropriate construction buffers or setback distances shall be determined by the qualified biologist on a case-by-case basis, depending on the season in which disturbance will occur, the type of disturbance, and other factors that could influence susceptibility to disturbance (e.g., topography, vegetation, existing disturbance levels, etc.). To the extent feasible, buffers of 246 feet (75 meters) will be used during the breeding season (February 1 through August 31) and 164 feet (50 meters) will be used during nonbreeding season (September 1 through January 31). "Shelter in place" techniques shall be used if necessary to create a visual and auditory barrier between construction activities and the occupied burrow. Techniques shall include placing hay bales, fencing, or another physical barrier between the occupied burrow and construction activities. The qualified biologist shall determine if and/or when shelter in place is necessary and feasible for implementation. When construction activities commence adjacent to the buffer area, a qualified biologist shall be present on-site full time to monitor the behavior of BUOW for at least 3 days. The qualified biologist shall have the authority to increase the setback distance if there are signs of disturbance, such as changes in behavior as a result of			

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	construction or other indications of distress by BUOW. ➢ If BUOW activity is detected at a burrow within the Project footprint during the non-breeding season (September 1 through January 31), BUOW shall be excluded from active burrows and encouraged to passively relocate to suitable, unoccupied habitat outside of the exclusion area. BUOW shall be excluded by installing one-way doors in burrow entrances. Although passive relocation does not result in control of the recipient area for BUOW, the qualified biologists shall verify that there is an acceptable "recipient" area within a reasonable distance that provides the necessary subsidies to support BUOW with the goal to minimize the stress of relocation. Subsidies to be considered include suitable burrows (primary and satellite) and habitat quality (e.g., vegetation cover, diversity) that is equal to or greater than that from which they were relocated. If, during pre-construction surveys, BUOW activity is detected at a burrow within the Project footprint during the breeding season (February 1 through August 31), then an appropriate construction buffer or setback distance shall be determined by the qualified biologist on a case-by-case basis. This buffer shall be flagged and all Project-related activity shall remain outside of the flagged area until a qualified biologist determines the burrow is no longer occupied (e.g., juveniles are foraging independently and are capable of independent survival). ➢ In the event that BUOW will be excluded from the Project footprint and occupied burrows will be impacted, a mitigation site with suitable burrows and habitat shall be secured and a Burrowing Owl Exclusion Plan shall be developed and approved by CDFW prior to excluding BUOW from burrows. Specific objectives for BUOW protection addressed by this Burrowing Owl Exclusion Plan shall describe exclusion methodology, burrow excavation procedures, on-site and post-relocation monitoring of occupied burrows, and reporting. ➢ Occupied BUOW burrows directly impacted shall be replaced by installing artificial burrows on mitigation sites (i.e., conservation easements, in-lieu fee			

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	lands, Farm Contract land), or other land as agreed to by CDFW, at a ratio of 1:1. If the mitigation sites identified for the Project have at least two suitable BUOW burrows for each occupied burrow directly impacted, then artificial burrows shall not be installed. Suitable burrows are defined as burrows greater than approximately 4 inches (10 centimeters) in diameter (height and width) and greater than approximately 60 inches (150 centimeters) in depth. Burrows shall be scoped to ensure they are of proper depth for BUOW. ➢ A security in an amount equal to the fair market value of the cost of a perpetual conservation easement and long-term endowment for the number of acres of burrowing owl habitat mitigation obligation for each CUP Phase (one or more CUPs for which a security is posted) prior to commencement of construction shall be posted to fulfill the mitigation obligations for lost burrowing owl habitat. ➢ A CUP owner shall proffer compensatory mitigation when a total of four CUP Phases have posted security and proffered compensatory mitigation or 18 months from the date of posting security on the first CUP Phase, whichever is longer. Security shall be returned to the CUP owner upon proffer of compensatory mitigation. CDFW may extend the 18-month period if the CUP owner is making a good-faith effort to proffer mitigation and demonstrating progress in securing mitigation. If the 18-month period elapses and the CUP owner cannot proffer mitigation or demonstrate a good faith effort to secure mitigation, CDFW may cash in the security to secure mitigation itself. ➢ The CUP owner shall proffer mitigation for lost burrowing owl core foraging habitat, as identified in the BUOW occupancy analysis and model (Table 4.12-16; Appendix J), by (1) securing a CUP owner purchased_conservation easement or similar instrument that protects the agricultural use of the land in perpetuity at a ratio of 1:1; (2) participating in the Burrowing Owl Habitat Mitigation Plan administered by the Imperial Community Foundation-Burrowing Owl Stewardship and Education Fund (IVCF-BOSEF) (or similar qualified non-profit organization and approved by CDFW), if available; and/or			

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	(3) using a CDFW-approved in-lieu fee program, if one is available at the time the compensatory mitigation is proffered. To be available as compensatory mitigation for this Project, the Burrowing Owl Habitat Mitigation Plan shall be developed for approval by CDFW and the IVCF-BOSEF Board of Directors (or the Board of Directors of similar qualified non-profit organization) before the time compensatory mitigation is proffered. ➢ The Burrowing Owl Habitat Mitigation Plan would be developed to compensate for impacts to core foraging habitat, and include the following components: – Avoiding higher quality habitat to the extent practicable. [Note: The Project Applicant has already implemented this measure by removing portions of the Project based on the occupancy model.] – A strategy and methods to enroll farmers in a program to grow and retain Burrowing Owl Friendly Crops (BOFC) identified by the occupancy model (i.e., wheat and alfalfa). Core BUOW foraging habitat shall be mitigated at a 1:1 ratio by entering farm land into short-term (minimum 3 years) farm agreements to predominantly grow BOFC (**Table 4.12-17**). – A strategy and method for integrating owl-friendly farm practices to reduce mortality of owls. For farm land enrolled in BOFC agreements that include requirements to implement BUOW safe farm practices, impacts to core BUOW foraging habitat shall be mitigated at a reduced ratio of 0.7:1, which reflects the combined benefit of farming BOFC using BOSFP through short-term (minimum of 3 years) farm agreements (**Table 4.12-17**). – A long-term financing plan and a defined program sufficient to fund the BOFC/BOSFP agreement program through the end of the Project's operational life (anticipated to be approximately 30 years) (e.g. endowment account).			

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)

TABLE 4.12-17
COMPENSATION FOR CORE BURROWING OWL FORAGING HABITAT UNDER THE BURROWING OWL FARM CONTRACT PLAN[1] (ACRES)

CUP Area	Core Foraging Habitat (acres)	Base BUOW Friendly Crops/ Consistency (1:1)	BUOW Friendly Crops/ Consistency + BOSFP (0.7:1)[12]
CUP 13-0036	123.7	123.7	86.6
CUP 13-0037	6.9	6.9	4.8
CUP 13-0038	0.0	0.0	0.0
CUP 13-0039	7.8	7.8	5.5
CUP 13-0040	37.9	37.9	26.6
CUP 13-0041	0.0	0.0	0.0
CUP 13-0042	0.0	0.0	0.0
CUP 13-0043	133.2	133.2	93.2
CUP 13-0044	0.0	0.0	0.0
CUP 13-0045	28.6	28.6	20.0
CUP 13-0046	14.7	14.7	10.3
CUP 13-0048	9.1	9.1	6.4
CUP 13-0049	1.9	1.9	1.3
CUP 13-0050	99.6	99.6	69.7
CUP 13-0051	150.2	150.2	105.2
CUP 13-0052	0.0	0.0	0.0
Total	**613.6**	**613.6**	**429.7**

Source: AECOM 2014e, pp. 5-11-5-12).

[1] The mitigation ratios proposed in this table would also be used for Plan administrator-secured perpetual conservation easements. CUP owner-secured perpetual conservation easements would reflect a 1:1 mitigation ratio.

~~1~~[2]Reduced ratios reflect added conservation value of implementing BOSFP through (short-term) Farm Contracts and perpetual

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	conservation easements. Ratios shown are proposed and will be finalized in Burrowing Owl Habitat Mitigation Plan. – A Farm Contract incentive plan, including compensation for farmers entering into and successfully executing Farm Contracts and eligibility requirements. – Identification of minimum duration of Farm Contracts and other Farm Contract management practices. – A set of on-farm practices in consultation with IVCF-BOSEF, the local farming community, and other stakeholders. – An accounting mechanism for tracking acreage enrolled in Farm Contracts. – Specific actions to ensure enrolled acreage for Farm Contracts satisfy the established compensatory mitigation acreage requirement. – A monitoring and reporting program. – An adaptive management strategy for the implementation of the Burrowing Owl Habitat Mitigation Plan, such as changes to BOSFPs and Farm Contract duration. – Ability to purchase of conservation easements and include a mechanism to provide long-term funding to enroll lands in agricultural conservation easements with a requirement to implement BOSFP, under the discretion of the implementing entity. The Burrowing Owl Habitat Mitigation Plan will finalize a reduced mitigation ratio to reflect the added conservation value of restricting land under an agricultural easement to implement BOSFP; the proposed mitigation ratio is 0.7:1 (**Table 4.12-17**). Conservation easements secured by the Burrowing Owl Habitat Mitigation Plan administrator (IVCF-BOSEF) without requirements to implement BOSFP would be mitigated at a 1:1 ratio. – The total number of acres encumbered at any one time (as Farm Contracts would be short-term agreements) shall depend on Project impacts to core BUOW foraging habitat, the portfolio of Farm Contracts (i.e., whether a property is implementing burrowing owl-friendly crops only or also			

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	implementing BOSFP), and the quantity of acres in conservation easements.			
MM 4.12.14a	**AVIAN-SPECIFIC CONSTRUCTION MEASURES - ALL CUPs (13-0036 THRU 13-0052)** A Bird and Bat Conservation Strategy (BBCS) will be developed by the Project Applicant in coordination with the County of Imperial, USFWS, and CDFW. The BBCS will include the following components: • A description and assessment of the existing habitat and avian and bat species; • An avian and bat risk assessment and specific measures to avoid, minimize, reduce, or eliminate avian and bat injury or mortality during all phases of the Project. • A post-construction monitoring plan that will be implemented to assess impacts on avian and bat species resulting from the Project. The post-construction monitoring plan will include a description of standardized carcass searches, scavenger rate (i.e., carcass removal) trials, searcher efficiency trials, and reporting. • Statistical methods will be used to estimate Project avian and bat species, including special status species, annual mortality by taxa and season. Analysis will also determine collision rates during diurnal and nocturnal periods; species mortality composition; and assess the spatial distribution mortalities. Sufficient data (i.e., sample sizes) will dictate the extent that fatality models can be used to generate fatality estimates within the various categories. Fatality estimates will be generated using the most appropriate fatality estimator given the data set. • An injured bird response plan that delineates care and curation of any and all injured birds. • A nesting bird management strategy to outline actions to be taken for avian nests detected within the impact footprint during operation of the Project. • A conceptual adaptive management and decision-making framework for reviewing, characterizing, and responding to monitoring results.	Imperial County Planning and Development Services Department.	Prior to, throughout construction and during operation of the Full Build-out Scenario and each individual CUP (13-0036 thru 13-0052).	

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	• Monitoring studies following commencement of commercial operation of each CUP area. Monitoring results will be reviewed annually by the Applicant and the County of Imperial, in consultation with CDFW and USFWS, to inform adaptive management responses. • During Project construction, incidental avian carcasses or injured birds found during construction shall be documented. Should a carcass be found by Project personnel, the carcass shall be photographed, the location shall be marked, the carcass shall not be moved, and a qualified biologist shall be contacted to examine the carcass. When a carcass is detected, the following data shall be recorded (to the extent possible): observer, date/time, species or most precise species group possible, sex, age, estimated time since death, potential cause of death or other pertinent information, distance and bearing to nearest structure (if any) that may have been associated with the mortality, location (recorded with a Global Positioning System [GPS]), and condition of carcass. • If any federal listed, state listed or fully protected avian carcasses or injured birds are found during construction or post-construction monitoring, the Project Applicant shall notify USFWS and CDFW within 24 hours via email or phone and work with the resource agencies to determine the appropriate course of action for these species. For such listed species, the CUP owner shall obtain or retain a biologist with the appropriate USFWS Special Purpose Utility Permit(s) and CDFW Scientific Collecting Permit(s) to collect and salvage all dead and injured birds, and store/curate them in freezers for later disposition and analysis. • Although take is not anticipated, it is possible. Should mortality of a federally listed species be documented, the take will be addressed by applying for an incidental take permit through the development of a Habitat Conservation Plan (HCP) that satisfies the permit issuance criteria stipulated under Section 10(a)(l)(B) of the Endangered Species Act or through consultation under Section 7 of the federal Endangered Species Act. If mortality of a State-listed species is documented, the CUP owner shall apply for a 2081(b) incidental take permit from CDFW. Alternatively, if available, the CUP owner may elect to obtain incidental			

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	take authorization through participation in the Desert Renewable Energy Conservation Plan. • Utility lines constructed above-ground shall conform to Avian Power Line Interaction Committee (APLIC) standards. • Post-construction monitoring studies shall be conducted by a third-party independent contractor for at least 2 years following commencement of commercial operation of each CUP area. Monitoring results shall be reviewed annually by the Applicant and the County of Imperial, in consultation with CDFW and USFWS, to determine if and to what extent post-construction monitoring studies shall be continued in future years.			
MM 4.12.14b	To the extent possible, construction shall occur outside the typical avian breeding season (February 15 through September 15). If construction must occur during the general avian breeding season, a pre-construction nest survey shall be conducted within the impact area and a 500-foot (150-meter) buffer by qualified biologist no more than 7 days prior to the start of vegetation clearing and/or ground disturbing construction activities in any given area of the Project footprint. Construction crews shall coordinate with the qualified biologist at least 7 days prior to the start of construction in a given area to ensure that the construction area has been adequately surveyed. A nest is defined as active once birds begin constructing or repairing the nest in readiness for egg-laying. A nest is no longer an "active nest" if abandoned by the adult birds or once nestlings or fledglings are no longer dependent on the nest. If no active nests are discovered, construction may proceed. If active nests are observed that could be disturbed by construction activities, these nests and an appropriately sized buffer (typically a 200-foot (61-meter) buffer for non-raptor species nests and at least a 500-foot (150-meter) buffer for raptor or federally listed species nests) would be avoided until the young have fledged. Final construction buffers or setback distances shall be determined by the qualified biologist in coordination with USFWS and CDFW on a case-by-case basis, depending on the species, season in which disturbance shall occur, the type of disturbance, and other factors that could influence susceptibility to disturbance (e.g., topography,	Imperial County Planning and Development Services Department.	Prior to and throughout construction activities at each individual CUP (13-0036 thru 13-0052).	

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	vegetation, existing disturbance levels, etc.). Active nests shall be avoided until the young have fledged and/or the monitor determines that no impacts are anticipated to the nesting birds or their young. If vegetation clearing and/or ground disturbing activities cease for 14 or more consecutive days during the nesting season in areas where suitable nesting habitat remains, repeat nesting bird surveys shall be required to ensure new nesting locations have not been established within the impact area and the defined buffers. Construction-generated noise may result in disturbance to nesting migratory birds. The following measures shall be incorporated to minimize noise generated from construction activities: • The qualified biologist shall coordinate with contractors to ensure that heavy equipment will be repaired as far as practical from habitats where nesting birds may be present. • Construction equipment, including generators and compressors, shall be equipped with manufacturers' standard noise-control devices or better (e.g., mufflers, acoustical lagging, and/or engine enclosures). • The construction contractor shall maintain all construction vehicles and equipment in proper operating condition and provide mufflers on all gas- and diesel-powered equipment. • The Project's BBCS shall be implemented during the construction. Incidental avian carcasses or injured birds found during construction shall be documented. If a carcass be found by Project personnel, the carcass shall be photographed, the location shall be marked, the carcass shall not be moved, and a qualified biologist shall be contacted to examine the carcass. When a carcass is detected, the following data shall be recorded (to the extent possible): observer, date/time, species or most precise species group possible, sex, age, estimated time since death, potential cause of death or other pertinent information, distance and bearing to nearest structure (if any) that may have been associated with the mortality, location (recorded with a Global Positioning			

MM #	Mitigation Measure	Monitoring Responsibility	Timing	Verification (Date and Initials)
	System [GPS]), and condition of carcass.			
MM 4.12.14c	During decommissioning, Project improvements associated with the Electric Collector Corridor Line and the Mount Signal Solar Farm Project Gen-Tie line shall be removed. In addition, all unnecessary overhead power lines and poles shall be removed by each CUP owner.	Imperial County Planning and Development Services Department.	Throughout decommissioning activities at each individual CUP (13-0036 thru 13-0052).	

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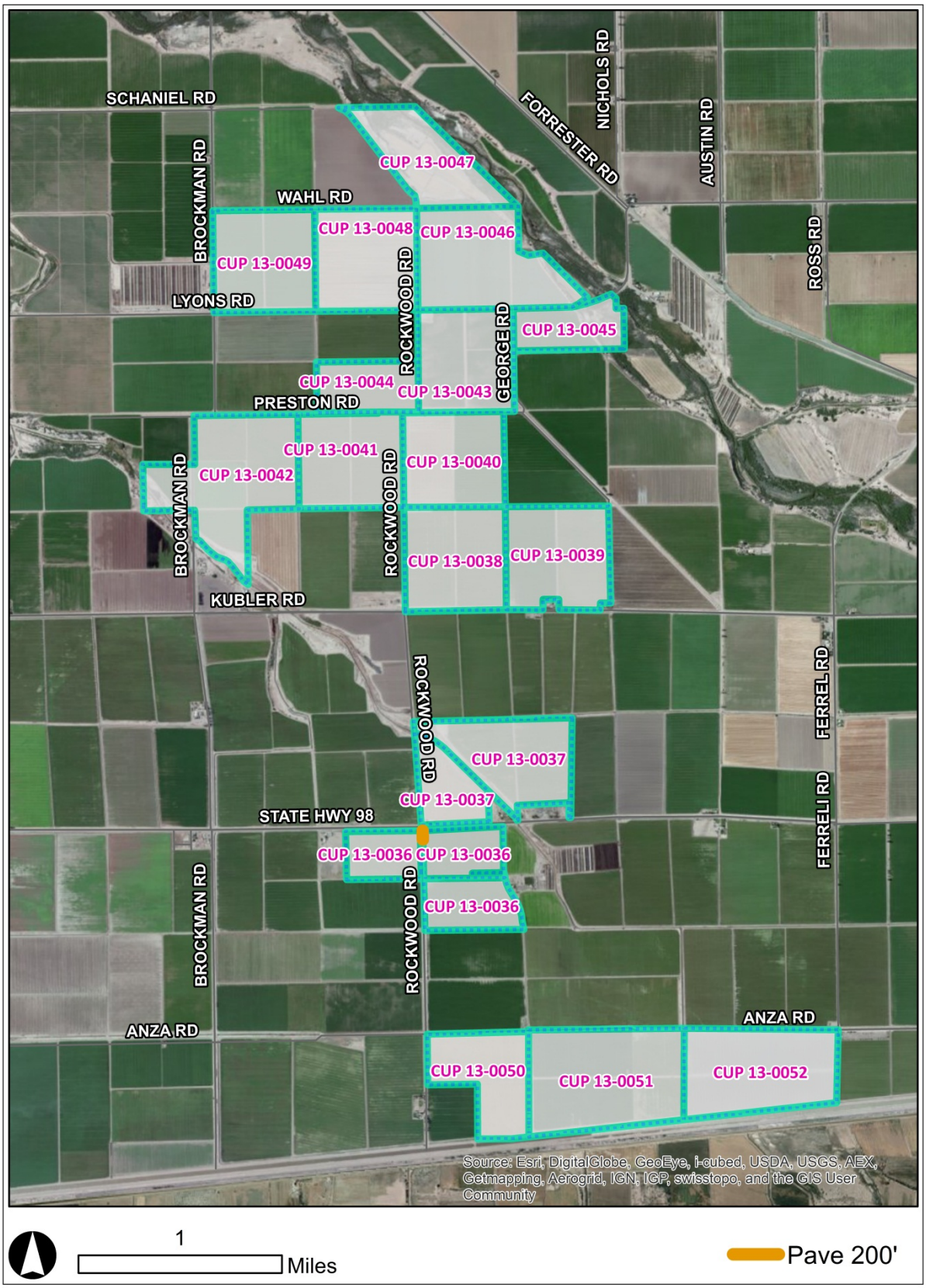

FIGURE 4.3-13
CUP 13-0036 – ROADWAY IMPROVEMENTS

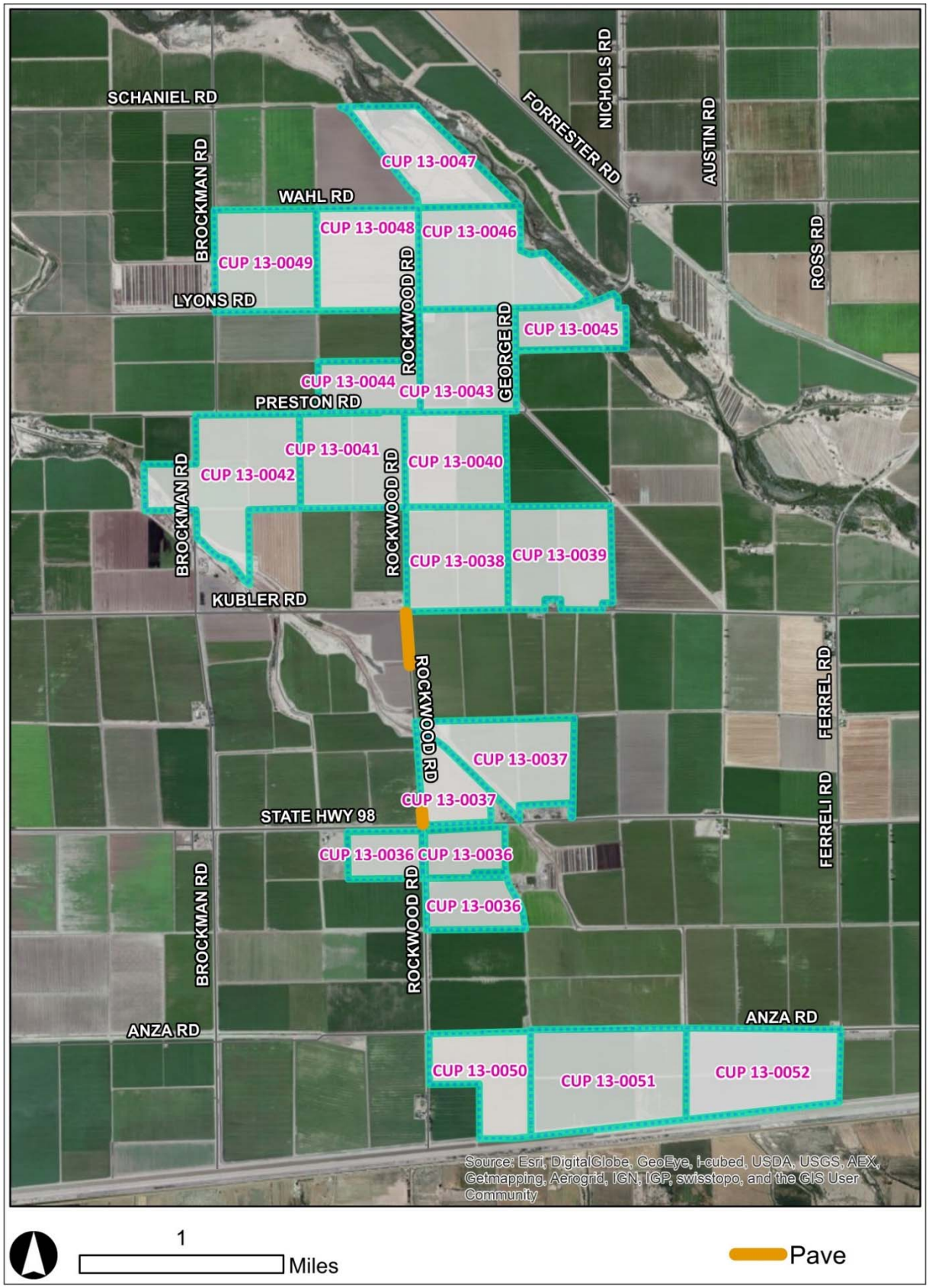

FIGURE 4.3-14
CUP 13-0037 – ROADWAY IMPROVEMENTS