

## **SECTION 4.7**

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# **CULTURAL RESOURCES, TRIBAL CULTURAL RESOURCES AND PALEONTOLOGICAL RESOURCES**

## 4.7 CULTURAL RESOURCES, TRIBAL CULTURAL RESOURCES AND PALEONTOLOGICAL RESOURCES

This section provides a background discussion of the regulatory framework and the environmental setting for cultural resources, tribal cultural resources and paleontological resources. Cultural resources consist of archaeological sites from the prehistoric and historic periods, as well as buildings, structures, and objects from the historic period. Tribal cultural resources can be either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe. Paleontological resources consist of fossils which are the remains of once living organisms preserved in rocks and sediments.

The regulatory framework identifies the federal, state, and local regulations applicable to cultural resources, tribal cultural resources and paleontological resources. The environmental setting discusses the records search results, field inventory results, Native American concerns and paleontological context. Impacts to each category of resources that could potentially result from constructing the Project are analyzed based on state and local laws and regulations.

Information contained in this section is summarized from the “Cultural Resource Inventory for the Seville 4 Solar Project, Imperial County, California” (ASM 2017) and the “Paleontological Technical Study Seville 4 Energy Project, Titan II LLC” (Paleo Solutions 2017). These documents are included in **Appendix G** provided on the attached CD of Technical Appendices of this EIR.

For the purposes of this discussion, the survey area encompasses the entire Project area including the Project site, Gen-Tie Line alignment, access road extension and Lot D where the Seville 4 Substation and IID Switching Station are proposed.

### 4.7.1 REGULATORY FRAMEWORK

#### A. STATE

##### **Cultural Resources**

##### California Environmental Quality Act (CEQA)

CEQA is the state law that addresses the evaluation of a project’s impacts on cultural resources. A “project” is an activity that may cause a direct or indirect physical change in the environment and that is undertaken or funded by a state or local agency, or requires a permit, license, or lease from a state or local agency. CEQA requires that all private and public activities not specifically exempted be evaluated against the potential for environmental damage, including effects to historical resources. Historical resources are recognized as part of the environment under CEQA.

CEQA defines historical resources as “any object, building, structure, site, area, or place that is historically significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California” (Division I, Public Resources Code, Section 5021.1[b]). Further, a “historical resource” is a resource that 1) is listed in or has been determined eligible for listing in the California Register of Historical Resources (CRHR) by the State Historical Resources Commission, or has been determined historically significant by the CEQA lead agency because it meets the eligibility criteria for the CRHR, 2) is included in a local register of historical resources, as defined in Public Resources Code 5020.1(k), or 3) has been identified as significant in a historical resources survey, as defined in Public Resources Code 5024.1(g) [CCR Title 14, Section 15064.5(a)].

The eligibility criteria for the CRHR are as follows [CCR Title 14, Section 4852(b)]:

- (1) It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;
- (2) It is associated with the lives of persons important to local, California, or national history.

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- (3) It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or
- (4) It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

In addition, the resource must retain integrity. The integrity of a resource is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association [CCR Title 14, Section 4852(c)]. Resources that have been determined eligible for the NRHP are automatically eligible for the CRHR.

Lead agencies have a responsibility to evaluate historical resources against the CRHR criteria prior to making a finding as to a proposed project's impacts to historical resources. Mitigation of adverse impacts is required if the proposed project will cause substantial adverse change. Substantial adverse change includes demolition, destruction, relocation, or alteration such that the significance of an historical resource would be impaired. While demolition and destruction are obvious significant impacts, it is more difficult to assess when change, alteration, or relocation crosses the threshold of substantial adverse change. The CEQA Guidelines provide that a project that demolishes or alters those physical characteristics of an historical resource that convey its historical significance (i.e., its character-defining features) is considered to materially impair the resource's significance.

The CRHR is used in the consideration of historical resources relative to significance for purposes of CEQA. The CRHR includes resources listed in, or formally determined eligible for listing in, the NRHP and some California State Landmarks and Points of Historical Interest. Properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts), or that have been identified in a local historical resources inventory, may be eligible for listing in the CRHR and are presumed to be significant resources for purposes of CEQA unless a preponderance of evidence indicates otherwise.

Archaeological sites are usually evaluated under Criterion 4, the potential to yield information important in prehistory. An archaeological test program may be necessary to determine whether the site has the potential to yield important data. Imperial County, as the CEQA lead agency, makes the determination of eligibility based on the results of the test program.

### Public Resources Code 5097.98(b) and 5097.98 (e)

Public Resources Code 5097.98 (b) and 5097.98(e) require a landowner on whose property Native American human remains are found to limit further development activity in the vicinity until he/she confers with the NAHC-identified Most Likely Descendants (MLDs) to consider treatment options. In the absence of MLDs or of a treatment acceptable to all parties, the landowner is required to reenter the remains elsewhere on the property in a location not subject to further disturbance.

### California Health and Safety Code, Section 7050.5

California Health and Safety Code, Section 7050.5 makes it a misdemeanor to disturb or remove human remains found outside a cemetery. This code also requires a project owner to halt construction if human remains are discovered and to contact the county coroner.

### ***Tribal Cultural Resources***

#### Assembly Bill (AB) 52

Assembly Bill (AB) 52 amends Public Resource Code (PRC) 5097.94, and adds eight new sections to the PRC relating to Native Americans. AB 52 was passed in 2014 and took effect on July 1, 2015. It establishes a new category of environmental resource that must be considered under CEQA called tribal cultural resources (PRC 21074) and establishes a process for consulting with Native American tribes and groups

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regarding those resources. Under AB 52, a project that may substantially change the significance of a tribal cultural resource is a project that may have a significant impact on the environment. If a project may cause a significant impact on a tribal cultural resource, the lead agency shall implement measures to avoid the impacts when feasible. Environmental documents must incorporate a discussion of the impacts, mitigation measures, and notification and consultation conducted with tribes affiliated with the geographic area.

### Public Resources Code (PRC) Section 21074

Public Resources Code (PRC) Section 21074 defines a tribal cultural resource as a site, feature, place, cultural landscape, sacred place, and any object with cultural value to a California Native American Tribe (CNAT). A tribal cultural resource must be on or eligible for the California Register of Historical Resources (CRHR) or must be included in a local register of historical resources. The lead agency can determine if a tribal cultural resource is significant even if it has not been evaluated for the CRHR or is not included on a local register.

### AB 4239

AB 4239 established the NAHC as the primary government agency responsible for identifying and cataloging Native American cultural resources. The bill authorized the NAHC to act to prevent damage to and insure Native American access to sacred sites and authorized the Commission to prepare an inventory of Native American sacred sites located on public lands.

### **Paleontological Resources**

### California Environmental Quality Act (CEQA)

The procedures, types of activities, persons, and public agencies required to comply with CEQA are defined in the Guidelines for Implementation of CEQA (State CEQA Guidelines), as amended on March 18, 2010 (Title 14, Section 15000 et seq. of the California Code of Regulations) and further amended January 4, 2013. One of the questions listed in the CEQA Environmental Checklist is: “Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?” (State CEQA Guidelines Appendix G, Section V, Part C) (Paleo Solutions 2017, p. 9).

### State of California Public Resources Code

The State of California Public Resources Code (Chapter 1.7), Sections 5097.5 and 30244, includes additional state level requirements for the assessment and management of paleontological resources. These statutes require reasonable mitigation of adverse impacts on paleontological resources resulting from development on state lands, and define the excavation, destruction, or removal of paleontological “sites” or “features” from public lands without the express permission of the jurisdictional agency as a misdemeanor. As used in Section 5097, “state lands” refers to lands owned by, or under the jurisdiction of, the state or any state agency. “Public lands” is defined as lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.

### **B. LOCAL**

### **Cultural Resources**

### **Imperial County General Plan**

The Imperial County General Plan provides goals, objectives, policies and/or programs for the identification and protection of significant cultural resources. The Conservation and Open Space Element (Imperial County 2008a) and the Renewable Energy and Transmission Element of the General Plan (Imperial County 2015b) includes goals, objectives, policies and/or programs for the protection of cultural

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resources and scientific sites that emphasize identification, documentation, and protection of cultural resources. **Table 4.7-1** provides a consistency analysis of the applicable Imperial County General Plan policies relevant to cultural resources as they relate to the Project. While this EIR analyzes the Project's consistency with the General Plan pursuant to State CEQA Guidelines Section 15125(d), the Imperial County Board of Supervisors ultimately determines consistency with the General Plan.

**TABLE 4.7-1  
IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS**

General Plan Goals, Objectives Policies and/or Programs	Consistent with General Plan?	Analysis
<b>CONSERVATION AND OPEN SPACE ELEMENT</b>		
<b>Preservation of Cultural Resources</b>		
<b>Goal 3:</b> Important prehistoric and historic resources shall be preserved to advance scientific knowledge and maintain the traditional historic element of the Imperial Valley landscape.	Yes	No important pre-historic or historic resources have been identified as part of the Cultural Resources Inventory or Paleontological Technical Report prepared for the Project site. Mitigation measure MM 4.5.4 is identified to protect any previously unknown resources that may be impacted during construction. Therefore, the proposed Project is consistent with this goal.
<b>Objective 3.1</b> Protect and preserve sites of archaeological, ecological, historical, and scientific value, and/or cultural significance.	Yes	A Cultural Resources Inventory was conducted for the proposed Project. Thirteen archaeological sites were identified within the boundaries of the survey area. Mitigation measures MM 4.7.3a and MM 4.7.3b have been identified to reduce potential impacts to the potential CRHR-eligible resources. No other known archaeological, ecological or historical sites with scientific value or cultural significance are known to exist in the survey area. Therefore, the proposed Project is consistent with this objective.
<b>RENEWABLE ENERGY AND TRANSMISSION ELEMENT</b>		
<b>Goals and Objectives</b>		
<b>Goal 1:</b> Support the safe and orderly development of renewable energy while providing for the protection of environmental resources.	Yes	The proposed Project is within the boundaries of the existing Seville Solar Farm Complex. As such, it is considered safe and orderly in its development and is consistent with this Goal.

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**TABLE 4.7-1  
IMPERIAL COUNTY GENERAL PLAN CONSISTENCY ANALYSIS**

General Plan Goals, Objectives Policies and/or Programs	Consistent with General Plan?	Analysis
<b>Objective 1.4:</b> Analyze potential impacts on agricultural, natural and cultural resources, as appropriate.	Yes	The Cultural Resources Inventory and Paleontological Technical Report prepared for the Project analyzed potential for cultural and paleontological resources within the Project area. The results of these reports are included in this section. Therefore, the proposed Project is consistent with this objective
<b>Goal 2:</b> Encourage development of electrical transmission lines along routes which minimize potential environmental effects.	Yes	The proposed Gen-Tie Line is within the boundaries of Seville Solar Farm Complex thereby minimizing the potential for environmental effects. Therefore, the proposed Project is considered consistent with this Goal.
<b>Objective 2.2:</b> Where practicable and cost-effective, design transmission lines to minimize impacts on agricultural, natural and cultural resources, urban areas, military operation areas, and recreational activities.	Yes	Refer to analysis under Goal 2, above. The proposed Project is consistent with Goal 2.
<b>Goal 8:</b> Develop overlay zones that will facilitate the development of renewable energy resources while preserving and protecting agricultural, natural, and cultural resources. Development of overlay zones shall include coordination with Federal, State, County, Tribal governments, educational entities, the public and local industries.	Yes	The Project is immediately adjacent to lands currently designed as Renewable Energy (RE) Overlay Zone. The Project is requesting a zone change to add the RE Overlay Zone to the existing A-2 General Agriculture Zone. Therefore, the proposed Project is consistent with this Goal.

### 4.7.2 ENVIRONMENTAL SETTING

The Project lies within the southwest corner of the Colorado Desert, an extension of the Sonoran Desert. The Project area is located in west-central Imperial County, California, approximately eight miles west of the junction of SR 78 and SR 86, and approximately three miles east of the San Diego County line. The Project area is also approximately 12 miles from the southern tip of the Salton Sea and one-half mile west of Pole Line Road. The topography in the area is comprised of flat-lying, very low gradient desert lands and approximately 60 acres of idle agricultural fields. However, all agricultural activities on the Project site have been suspended within the past decade. Lot D has been graded as part of the Seville Solar Farm Complex but is currently vacant. The proposed extension of the existing private access road and the Gen-tie Line are within the boundaries of the Seville Solar Farm Complex.

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### A. CULTURAL RESOURCES CONTEXT

The context for Cultural Resources is the Colorado Desert. Four successive periods, each with distinctive cultural patterns, may be defined for the prehistoric Colorado Desert, extending back in time over a period of at least 12,000 years. They include: Early Man (Malpais), Paleoindian (San Dieguito), Archaic (Pinto and Amargosa), and Late Prehistoric (Patayan) (ASM 2017, p. 9.) A full discussion of the cultural context of the Project area is contained in the Cultural Resources Inventory included in **Appendix G** provided on the attached CD of Technical Appendices of this EIR. A summary excerpt from the Cultural Resources Inventory (ASM 2017) is provided below.

#### **Prehistory**

##### ***Early Man Period (Malpais Pattern) (ca. 50,000 to 12,000 B.C.)***

The Malpais Pattern is represented by archaeological materials that have been hypothesized to date between 50,000 and 10,000 B.C. The term was originally used for ancient-looking cleared circles, tools, and rock alignments that were later classified as San Dieguito I. Malpais continued to be applied to heavily varnished choppers and scrapers found on desert pavements of the Colorado, Mojave, and Sonoran deserts that were thought to predate Paleoindian assemblages that included projectile points.

##### ***Paleoindian Period (San Dieguito Pattern) (ca. 12,000 to 5000 B.C.)***

The earliest chronologically distinctive archaeological pattern recognized in most of North America is the Clovis pattern. Dated to around 11,500 B.C., Clovis assemblages are distinguished by fluted projectile points and other large bifaces, as well as extinct large mammal remains. Fluted points have reportedly been found in the Yuha Desert, Cuyamaca Rancho State Park, Ocotillo Wells, Lost Valley, and Chuckwalla Valley.

Most of the lithic assemblages, rock features, and cleared circles in the Salton Basin were routinely assigned to the San Dieguito Phase III complex by many of the initial investigators. The successive phases were characterized by the addition of new, more sophisticated tool types to the pre-existing tool kit.

San Dieguito I and II tools include bifacially and unifacially reduced choppers and chopping tools, concave-edged scrapers (spokeshaves), bilaterally notched pebbles, and scraper planes. Appearing in the San Dieguito II phase are finely made blades, smaller bifacial points, and a larger variety of scraper and chopper types. The San Dieguito III tool kit is appreciably more diverse, with the introduction of fine pressure flaking; tools include pressure-flaked blades, leaf-shaped projectile points, scraper planes, plano-convex scrapers, crescentics, and elongated bifacial knives.

The San Dieguito pattern appears to reflect a hunter-gatherer adaptation consisting of small mobile bands exploiting small and large game and collecting seasonally available wild plants. An absence of milling stones has been seen as reflecting a lack of hard seeds and nuts in the diet, and as a diagnostic cultural trait distinguishing the San Dieguito pattern from subsequent Desert Archaic patterns.

##### ***Archaic Period (Pinto and Amargosa Patterns) (ca. 5000 B.C. to A.D. 500)***

The Pinto and Amargosa patterns were regional specializations within the general hunting and gathering adaptations that characterized the Archaic period. These patterns occur more frequently in the northern Great Basin, the Mojave Desert, and the Sonoran Desert east of the Colorado River. Few Pinto or Amargosa (Elko series) projectile points have been identified on the desert pavements in the Colorado Desert, although that condition is beginning to change as the number of investigations increases. Some late Archaic sites are known, indicating occupations along the boundary between the low desert and Peninsular Range and at more favored habitats.

Early projectile points in Imperial County have generally been reported only as isolates on desert pavements, but a recent inventory at the Salton Sea Test Base produced a cluster of early projectile points

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including Lake Mojave, Pinto/Gatecliff, and Elko forms, and even two eccentric crescents, scattered among protohistoric sites on the bed of Lake Cahuilla 30 m below sea level.

The emerging picture of late Archaic occupation in the Salton Basin is of mobile hunter and gatherer bands with atlatls for hunting and milling stones for seed and nut processing, operating out of a limited number of base camps in optimal areas on the boundaries of the Salton Basin and on the shoreline of Lake Cahuilla. This Archaic pattern may be viewed as a cultural precursor of the Late Prehistoric period, although linguistic data and tribal origin stories suggest some demographic displacements in the late prehistoric past.

### ***Late Prehistoric Period (Patayan Pattern) (ca. A.D. 500 to 1700)***

Sites dating to the Late Prehistoric period are probably more numerous than any other in the Colorado Desert. Within the Late Prehistoric period, between A.D. 1000 and 1700, desert peoples of this region developed wide-spectrum and diversified resource procurement systems emphasizing a collector organization using residential bases and temporary logistical camps, scheduled according to the ripening seasons of staple plant resources. Mobility was an important element in this pattern, with frequent travel between the Colorado River and Lake Cahuilla, when the lake was present.

The diversity of sites and assemblages associated with Lake Cahuilla indicate considerable variability in Late Prehistoric and protohistoric social and ecological adaptations to the lake. The number of house pits at fish camps ranges from one to more than a dozen, perhaps indicating the number of households in residence at any one time or resume of an area. Fish traps range from single examples to long lines that are suggestive of cooperative fishing ventures.

Archaeologically excavated house pits indicate that some have developed middens and diverse artifact types, suggestive of season-long temporary camps, while others have only sparse artifact associations suggestive of short-term fishing expeditions. Faunal assemblages vary from those largely limited to fish bone or the remains of migratory water birds, to others that contain more diverse resources, including rabbit and large mammal bone. This variability in site types and assemblage contents has yet to be correlated in a systematic manner with other variables, such as the recessional stages of Lake Cahuilla (reflected in elevation), localized geography and paleoenvironments, ethnicity, or other factors.

The numerous trail systems throughout the Colorado Desert attest to long-range travel to special resource collecting zones and ceremonial locales, trading expeditions, and possibly warfare. Pot drops, trailside shrines, and other evidence of transitory activities are associated with these trails. Trade and travel is also seen in the distribution of localized resources such as Obsidian Butte obsidian, wonderstone from the south end of the Santa Rosa Mountains, soapstone, marine shell from the Gulf of California and the Pacific coast, and ceramic types.

### ***Ethnography***

The ethnographic summary of the vicinity of the survey area is summarized from Schaefer and Quach 2013. Early ethnohistoric information of the general area is primarily derived from the accounts of the Juan Bautista de Anza expeditions in 1774 and 1775-1776 concerning the ethnohistoric village of San Sebastian which lies to the east of the survey area. These accounts of the Indian village at San Sebastian constitute the first detailed descriptions of native life in the desert area. San Sebastian continued to be visited by Spanish colonists between 1776 and 1781. From ethnohistoric accounts over 300 people used the Anza trail in this period. The inhabitants of San Sebastian had opportunity for exposure not only to European material culture and ideas, but also European diseases. Members of the last Spanish immigrant groups to use the trail arrived at Mission San Gabriel in August 1781 with smallpox. It was just before this group crossed the Colorado River that the Quechan rose up against the two newly established missions near



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Yuma. On July 17 and 18, 1781, they destroyed both sites and killed many of the inhabitants, among them Díaz and Garcés of the earlier Anza expeditions. This rebellion would effectively close the Anza trail until the American period.

San Sebastian is also noted in the diary of Cayetano Limón, who led that last group of Spanish colonists. Reaching the Colorado River in August 1781, they noted the presence of destroyed missions as well the abandonment of San Sebastian. Additional details about San Sebastian emerge from the accounts of the Spanish punitive expedition against the Quechan in 1781-1782. San Sebastian appears to have regained its isolation from Europeans for the next 60 years. A new overland route was eventually established in the 1820s that partially followed Fages' detour and came within 10 km of San Sebastian. The residents probably followed patterns of other desert groups, avoiding contact but raiding settlements for cattle and goods, as suggested by historical accounts relating to nearby Native settlements such as San Felipe. It is likely that mortality rates rose from exposure to European diseases and population sizes dwindled, particularly after the smallpox epidemic of 1862 and the severe drought of 1863-1871. San Sebastian, however, would have remained as a place to practice traditional lifeways with little interference from the quickly changing world around it.

Historical evidence of Native occupation at San Sebastian is scant. The Indian village appears once again on an 1869 U.S. military map of southern California roads and trails. This map suggests that the village continued to support a population for at least a decade longer than previously assumed. Soon thereafter, it can be presumed the dwindling native population fused with other communities like Vallecito, Agua Caliente, or those along the New and Alamo Rivers.

### ***The Kumeyaay/Kamia***

The Anza expedition accounts identify the occupants as Yuman-speaking people who nevertheless had a hostile relationship with the Quechan at that time. The Cahuilla appear to have intermingled with the Kumeyaay to some extent. Descriptions of the people and their associations with groups to the south in Baja California and with gathering territories to the west strongly indicate Kumeyaay occupation at the time of Spanish contact. There appears to be little doubt that San Felipe Creek was in Kumeyaay territory, with the Cahuilla to the north in protohistoric and ethnohistoric times.

Major ethnographies for the Kumeyaay and the desert branch of the group, the Kamia, were researched and written in the 1920s and 1930s, about 150 years after the establishment of the mission system. The Kamia had been largely integrated into the Quechan tribe on the Colorado River. The Kumeyaay are depicted primarily as hunters and gatherers in ethnographic and ethnohistoric documents, but some groups practiced agriculture in areas of the Imperial Valley. There is still some controversy regarding the degree of dependence these groups placed on cultivated crops versus natural crops. Review of the ethnographic and ethnohistoric record indicates that most groups moved to different areas on a seasonal basis to capitalize on particular crops such as acorns or agave and were not wholly dependent on any one crop.

### **History**

#### ***Exploration and Initial Development***

In the late 1800s, the federal government sponsored individual land development in the west in the form of a series of acts (Homestead, Timber-Culture, Desert Land, and Timber Acts). Most settlers in the desert depended on artesian wells in 1894, which made sustained irrigation efforts difficult. Hydraulic well drilling began in Indio in 1898 and offered another method of water collection for settlers.

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More cattle camps were established from the 1880s to the early 1900s, as what became the Julian-Kane Springs road saw cattle drives between the Peninsular Ranges and Imperial Valley. In 1901, Harpers Well was drilled. About 3.5 mi. west of Harpers Well, the small hamlet of San Felipe was created around 1910. Further west, the town of Little Borrego was developed at the intersection of Julian-Kane Springs Road and Split Mountain Road. It was developed by Tom Hawn, an Alhambra realtor. The Borrego Hotel was built in 1924.

At Harper's Well, an angora goat ranch was operating in the 1930s, and from it portions of the corral still stand. The Seventh Cavalry also camped there in 1937 or 1938. With the emerging agricultural development of Imperial Valley and speculative developments to the west, the Julian-Kane Springs Road must have been an important local transportation route until 1932. In the winter of that year, a rare snowstorm ruined the road and it was soon bypassed by Highway 78.

### ***Creation of the Salton Sea***

The 1905-1907 flood was simultaneously destructive and creative: it destroyed the irrigation system in the Imperial Valley and created the contemporary Salton Sea. Since the 1905 flood, the depth and shape of the Salton Sea have changed. Several islands were created, including South Island (1907-1913), Rocky Hill (1907-1914), and Mullet Island. By 1915, the floodwaters of the Salton Sea receded and prompted the transformation of South Island and Rocky Hill into parts of the mainland. In 1943, surface water level was at 241 ft. below sea level. The contemporary outlet from the New River did not extend into the Salton Sea within protective levees. Mullet Island had become incorporated into the mainland as a small peninsula. In August 1955, the surface water level was at 234.5 ft. below sea level.

Over the years, the Salton Sea became a recreational hotspot in the desert. The lake in the desert attracted entrepreneurs who acquired land from the Southern Pacific Railroad along the north shore from the Mortmar train stop to the Sea in 1926. They planned Date Palm Beach, a development that started out small, trying to attract motorboat racers. In 1929, boat racers set five world records at the first boat races at Date Palm Beach. In 1946, the resort was purchased by a new owner and renamed Desert Beach.

Desert Beach hosted the Salton Sea Speed Boat Regatta in 1949 and again in 1951. Helen's Beach House offered 1950s tourists and real estate speculators a lakeside retreat and relaxation. In 1955, Salton Sea State Park was dedicated as the second largest California State Park. During 1950 to 1970, the recreational activities made the state park the second most popular destination in California, but the popularity eventually faded due to the imbalances of the Sea.

One year after the establishment of the Salton Sea State Park, the Sea stood at 234.5 ft. below sea level. Although the Imperial Irrigation District made efforts to stabilize it, salinity levels increased in the 1980s. The Salton Sea Task Force grew out of the recognition that the quality of the water required action, and in 1993 that task force became the Salton Sea Authority. This newly established coalition combined the efforts of Riverside and Imperial Counties, the Coachella Valley Water District (CVWD), and the IID. Additionally, Congressman Sonny Bono formed a Congressional Salton Sea Task Force in 1997, and in 1998 the Salton Sea National Wildlife Refuge was renamed after the late congressman.

### ***Survey Area and Vicinity History***

Ted Jacobs began development of the Allegretti Farms property, which was locally known as the "Ranch Oasis" or "Jacobs Ranch" in the 1950s. During the initial development, two wells were dug in 1953, known as then as "San Felipe Well" and "Jacobs Domestic Well," with initial farming of the Jacobs Ranch beginning in 1954. During the 1960s, three additional water wells were drilled on the Property and "San

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Felipe Well” was converted to a USGS monitoring well. Sometime during this time period or the later the “Jacobs Domestic Well” fell into disuse, as a 1995 hydrogeologic study (Krieger 1995) reported that the “Jacobs Domestic Well” had by then been “long abandoned.” A 1970 Water Supply Analysis reports that crops such as alfalfa, barley, oats, citrus, date palms, grapes and tomatoes have been farmed on the property, though the 1995 hydrogeologic study also noted high yields of Sudan Grass until the late 1970s.

It is clear from aerial photographs that the farm underwent relatively continuous expansion until 1978, when the farmed area of the property reached its current boundaries. A 1978 aerial of the property shows clear subdivision of the fields along with the establishment of an irrigation system. The aeriels between 1973 and 1978 also show the construction of a north-south berm on the western edge of the property to stop flooding and overflow from the upper tributaries of San Felipe Creek. This in effect diverted any overflow southward into the lower tributaries of the Fish Creek drainage.

The ownership and management of the farm was passed to Allegretti & Company, which renamed the property Allegretti Farm in 1981. Aerial photographs from 1984, 1987, and 1992 show continuous farming of this property, with the agricultural focus on the far southern fields as well as the southern portions of the northwestern fields. From aerial photographs, it is also clear that use of the northeastern fields declined during this period. In 1993, the use of the property was leased to Morgan Ranches/Kelomar, Inc., which grew melons, onions, alfalfa, wheat, safflower, arugula, asparagus, milo, and carrots. Initially flood irrigation was utilized by Morgan, but it was gradually replaced by drip and sprinkler systems with associated structural infrastructure such as bordering ditches to collect and reuse agricultural tail water. Agricultural focus during this period mirrored the land use history previously undertaken by Allegretti & Company, with the far southern fields with richer soils more intensively utilized than the northeastern fields with gravelly soils, which accordingly were kept fallow. The farm was certified as an organic farm in 2001 by the California Certified Organic Farmers. The farm was leased in 2010 by Oasis Organics, which grew onions, wheat, safflower, and milo.

### **Cultural Resources within the Project Site**

The survey conducted as part of the Cultural Resources Inventory included: the Project site (both Fixed-Frame and HSAT Configurations); the extension of the existing private access road; the Seville 4 Substation and IID Switching Station (on Lot D); and the Gen-Tie Line (through Lots A and 3). **Figure 4.7-1A** depicts the survey area for the Fixed-Frame Configuration. **Figure 4.7-1B** depicts the survey area for the HSAT Configuration.

### ***Project Site***

#### **Records Search**

Record searches of the CHRIS system were conducted at the SCIC on July 22, 2017. The search encompassed the survey area and a one-mile record search radius around the survey area. Fourteen previous cultural resource studies were conducted within the survey area and one-mile record search radius. **Table 4.7-2** shows the two of the previous cultural resources studies that addressed the survey area directly. Less than 25 percent of the survey area has been previously surveyed for cultural resources.

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**TABLE 4.7-2  
CULTURAL RESOURCE SURVEYS WITHIN THE RECORD SEARCH AREA**

Report No.	Authors	Date	Title	Relation to Survey Area
IM-00979	Underwood, Jackson	2003	Archaeological Survey of Four Rio-Tel Cellular Tower Locations: Tamarisk, Hawk 2e, Holtville, and Blu-In-Park Imperial County, California	Intersect
IM-01208	SWCA Environmental Consultants	2008	Cultural Resources Inventory for the Bureau of Land Management California Desert District in Imperial, Riverside, and San Bernardino	Intersect

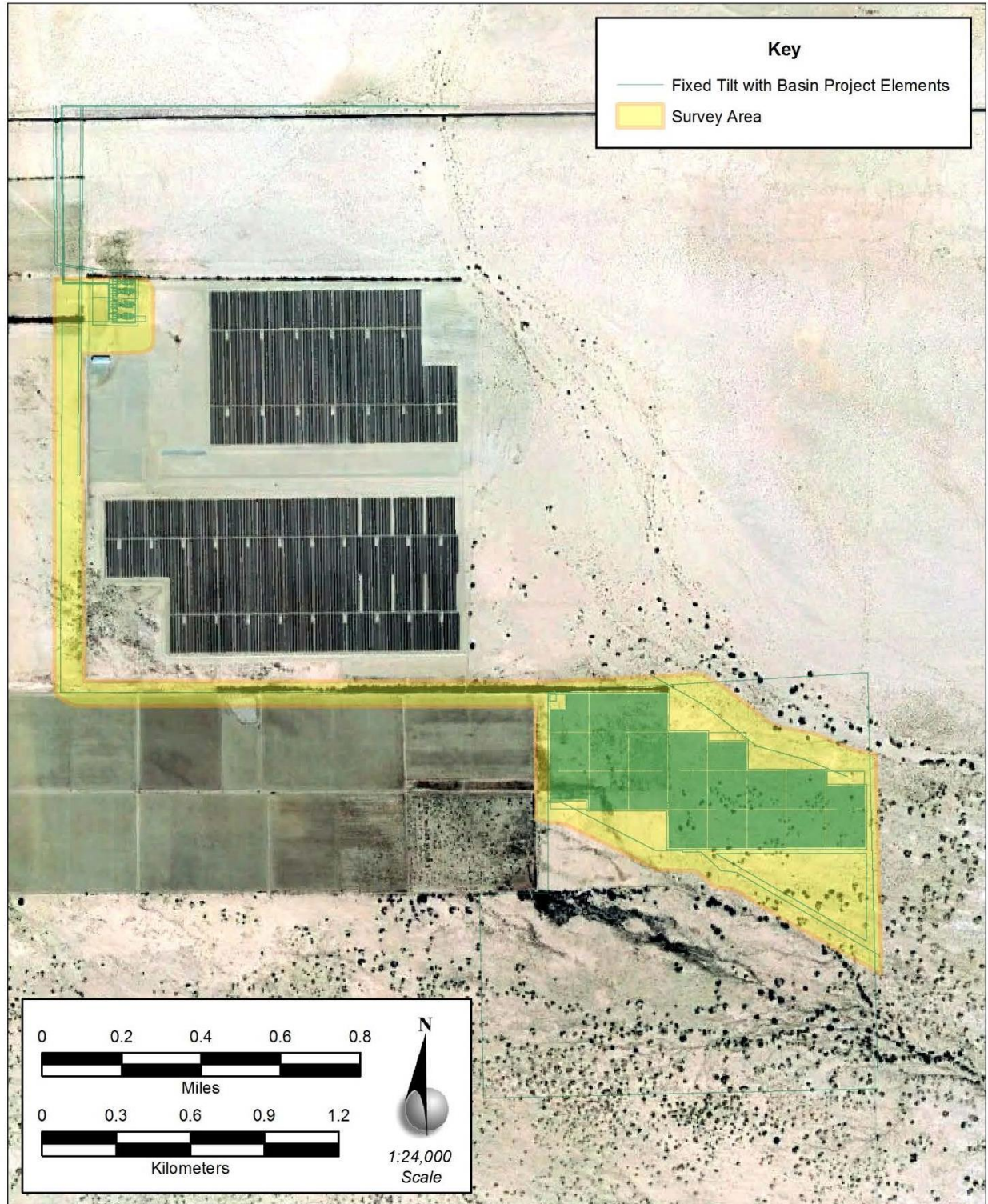
Source: ASM 2017.

One hundred and forty-one cultural resources have been previously recorded within the record search area. Seven cultural resources, two of which were combined into one resource have been previously recorded within or adjacent to the survey area. **Table 4.7-3** summarizes the seven resources within the survey area. A brief description of each resource follows the table.

**TABLE 4.7-3  
PREVIOUSLY RECORDED CULTURAL RESOURCES WITHIN THE RECORD SEARCH AREA**

Primary Number P-13-	Trinomial CA-IMP-	Contents	Recorder, Date	Relation to the survey area
001266 (subsumed 008587)	1266 (subsumed 8010)	AP2: Lithic Scatter, AP3: Ceramic Scatter, AP16: Milling/Lithic Work Area	Gallegos & Associates, [IP]; Postillo, G., 1977	Intersect
008586	8009	AP2: Lithic Scatter, AP3: Ceramic Scatter	Underwood, J. and Lilburn, L., 1998	Intersect
008587 (subsumed by 001266)	8010 (subsumed by 1266)	AP2: Lithic Scatter, AP3: Ceramic Scatter	Ramirez, R., King, G., Hares, H., and Covert, J., 2008	Intersect
008606	8029	AP2: Lithic Scatter, AP3: Ceramic Scatter	Underwood, J. and Lilburn, L., 1998	Intersect
009941	10004	AP2: Lithic Scatter, AP3: Ceramic Scatter	Ramirez, R., King, G., Hares, H., and Covert, J., 2008	Intersect
009942	10005	AP2: Lithic Scatter, AP3: Ceramic Scatter	Ramirez, R., King, G., Hares, H., and Covert, J., 2008	Intersect
014438	-	AP16: Other (isolate, milling slab)	Quach, T., Lambert, C., Smith, N., and Salazar, F., 2013	Intersect

## 4.7 CULTURAL RESOURCES, TRIBAL CULTURAL RESOURCES AND PALEONTOLOGICAL RESOURCES

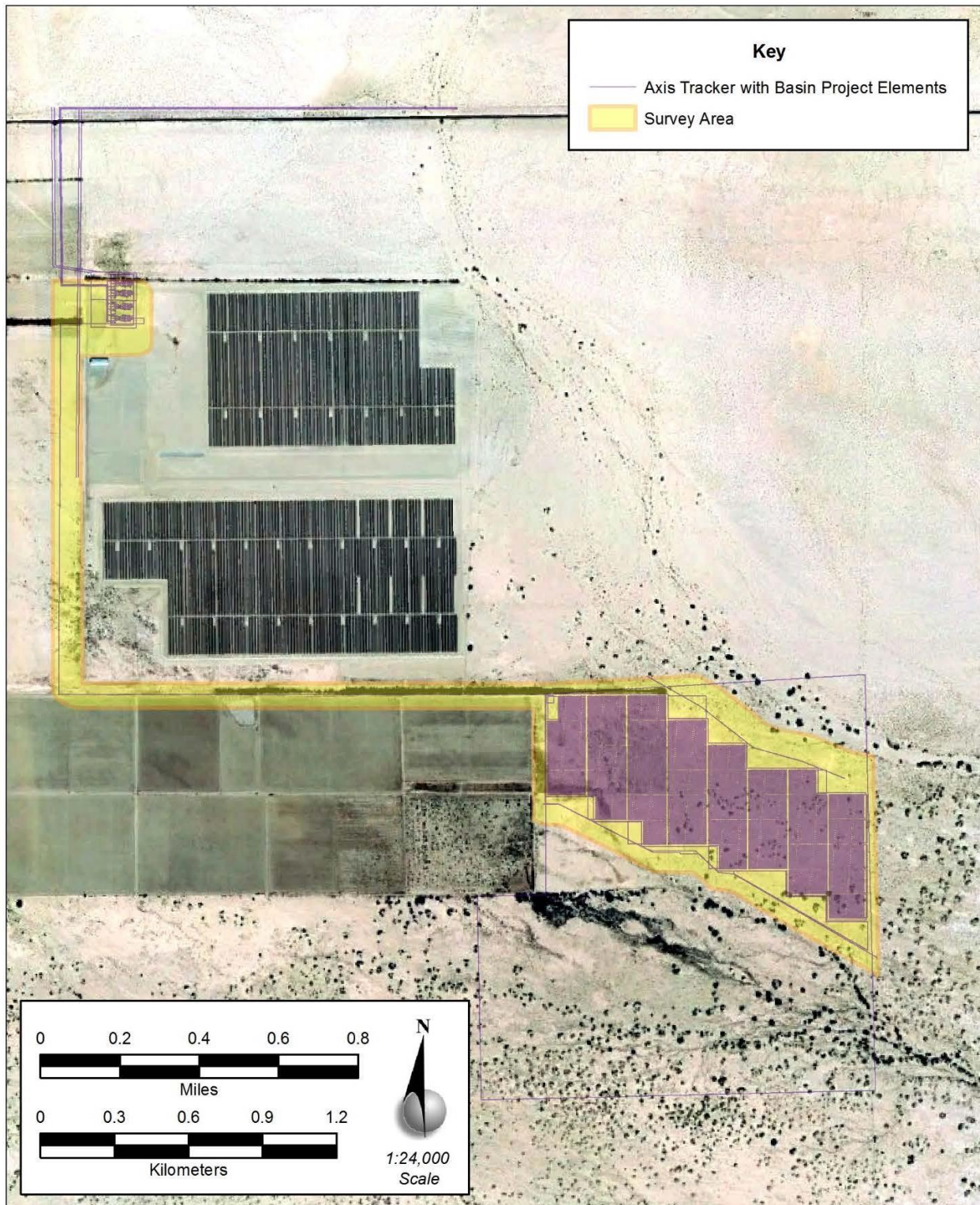


Source: ASM 2017.

**FIGURE 4.7-1A**  
**SURVEY AREA FOR FIXED-FRAME CONFIGURATION**



## 4.7 CULTURAL RESOURCES, TRIBAL CULTURAL RESOURCES AND PALEONTOLOGICAL RESOURCES



Source: ASM 2017.

**FIGURE 4.7-1B**  
**SURVEY AREA FOR HSAT CONFIGURATION**

## **4.7 CULTURAL RESOURCES, TRIBAL CULTURAL RESOURCES AND PALEONTOLOGICAL RESOURCES**

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### **P-13-001266 / IMP-1266**

The site was originally recorded by Postolla in 1977 as a scatter of flakes, sherds, and some fire-affected rock. Subsequent surveys resulted in the expansion of site boundaries of IMP-1266 in addition to combining several other previously recorded sites: IMP-1267, IMP-1270, IMP-1271, IMP-1272, IMP-1273, IMP-1274, IMP-1275, IMP-1276, and IMP-8010. These sites were subsumed under the trinomial CA-IMP-1266. The site was re-located by Gallegos and Associates, and the boundary of the site was expanded to include a 530 x 1,300-meter area. Gallegos and Associates identified IMP-1266 as a large habitation site, with 630+ pieces of flaked lithic debitage, 600+ pottery sherds, one metavolcanic projectile point base fragment, one quartzite core, one bifacial granitic mano, one unifacial granitic mano, nine granitic mano fragments, numerous unidentified ground stone fragments, one battered implement, and one metate fragment. Ceramic types include brownware and buffware. Lithic materials include quartzite, metavolcanics, volcanic, obsidian, and wonderstone.

### **P-13-008586 / IMP-8009**

The site was originally recorded by Underwood and Lilburn in 1998. The site consists of a low-density scatter of lithics, ceramics, and fire-affected rock in an area that measures 85 x 20 meters. Artifacts include 15+ buffware ceramic sherds, 15+ pieces of debitage (quartzite, metavolcanic, basalt), two quartzite hammer stones, three granitic mano fragments, and two sandstone metate fragments.

### **P-13-008587 / IMP-8010 (subsumed by P-13-001266 / IMP-1266)**

This site was originally recorded by Underwood and Lilburn in 1998 as a large, low-density scatter of lithics and ceramics with fire-affected rock. The site was re-located by Ramirez et al. in 2008 as an extensive ceramic and lithic scatter, with most of the artifacts occurring in two concentrations and eroding out of sand dunes. Concentration 1 contains approximately 296 ceramic sherds, two obsidian flakes, and one metavolcanic flake. Concentration 2 contains about 69 ceramic sherds, seven metavolcanic flakes, four chert flakes, and two quartzite flakes. In total, there were approximately 600 artifacts recorded within the site. P-13-008587 has since been subsumed by P-13-001266.

### **P-13-008606 / IMP-8029**

This site was originally recorded by Underwood and Lilburn in 1998. This site consists of at least three buffware ceramic sherds, at least four flakes (quartzite and petrified wood), and two mano fragments. The site measures 20 x 8 meters.

### **P-13-009941 / IMP-10004**

This site was recorded by Hares et al. in 2008. This site is composed of four loci that contain a total of 410+ ceramic sherds, 23 flakes (quartzite, rhyolite, felsite, chert, obsidian, basalt), two cores, one mano, and one mano fragment. The site measures 40 x 110 meters.

### **P-13-009942 / IMP-10005**

This site was recorded by Covert et al. in 2008. This site consists of seven Tizon brownware sherds, nine pieces of debitage (quartzite, felsite, chalcedony, chert), and three granitic mano fragments. The site measures 40 x 65 meters.

### **P-13-014438**

This isolate was originally recorded by Quach et al. in 2013. It consists of one sandstone milling slab fragment.

## 4.7 CULTURAL RESOURCES, TRIBAL CULTURAL RESOURCES AND PALEONTOLOGICAL RESOURCES

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### Historic Addresses

No historic addresses have been previously recorded within the survey area or record search radius. The SCIC record search confirmation is included in Appendix A of the Cultural Resources Inventory included in **Appendix G** provided on the attached CD of Technical Appendices of this EIR.

### ***Native American Heritage Commission Sacred Lands File Record Search***

The California NAHC was contacted on June 15, 2017 to conduct a record search of the Sacred Lands File for the survey area. On June 21, 2017, the NAHC responded that the record search of the Sacred Lands File had negative results; however, the area is sensitive for potential tribal cultural resources. The NAHC response included a list of 20 Native American individuals and organization to contact for further information regarding the survey area, including sacred sites, tribal cultural resources, and traditional cultural properties. Letters were sent to the 20 contacts on June 26, 2017. The NAHC was contacted again by ASM on June 27, 2017 to determine if any Cahuilla Native American individuals and organizations should also be contacted as the proposed Project is located near the southern boundary of the Cahuilla's ethnographic territory. On June 27, 2017, the NAHC provided an additional 17 Cahuilla Native American individuals and organizations to contact for further information. Letters were sent to the additional 17 contacts on June 28, 2017.

On June 29, 2017, Ray Teran, Resource Management of the Viejas Band of Kumeyaay Indians responded that the Project site has cultural significance or ties to Viejas, and requested that a Kumeyaay Cultural Monitor be on site for ground-disturbing activities.

On July 17, 2017, William Vance, Tribal Vice Chairperson of the Augustine Band of Cahuilla Indians responded that the Tribe is unaware of specific cultural resources that may be affected by the proposed Project. Mr. Vance encouraged contact of other Native American tribes within the vicinity of the Project. Monitoring during the pre-construction and construction phase of the project is recommended.

As of the time this Draft EIR was published, no additional responses have been received. All correspondence pertaining to the NAHC is included in Appendix B of the Cultural Resources Inventory included in **Appendix G** provided on the attached CD of Technical Appendices of this EIR.

### ***Field Survey***

#### Methods

The archaeological survey was performed by ASM Associate Archaeologist Joel Lennen, ASM Field Technicians Joseph Arnold and Julian Armen, and Native American Monitor Gabe Kitchen of Redtail Monitoring and Research, Inc., from July 31 to August 2, 2017. The survey area was systematically surveyed in 15-meter transect intervals aligning primarily north-south. The survey included all elements of the survey area (see Figures 4.1-7A and 4.1-7B). Any isolates, sites, and features were recorded. All site and isolate locations were recorded in Universal Transverse Mercator (UTM) coordinates using handheld GeoExplorer Trimble units with sub-meter accuracy. Resources were plotted on project maps using NAD 83 UTM coordinates. As applicable, site information was recorded on State of California DPR 523 series forms to State of California standards. Overview photographs were also taken of the survey area. The location of the isolates and photographs of the survey area are confidential.

A site was defined as any concentration of three or more artifacts in a 25-square-meter area. Site boundaries were defined when over 50 meters of open space separated artifact scatters. Isolated artifacts



## 4.7 CULTURAL RESOURCES, TRIBAL CULTURAL RESOURCES AND PALEONTOLOGICAL RESOURCES

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were defined as fewer than three artifacts in a 25-square-meter area. ASM assigned all cultural resources that meet the definition of archaeological sites with temporary site numbers.

ASM prepared California State Department of Parks and Recreation (DPR) 523 site forms for submittal to the SCIC for assignment of primary numbers and site trinomials to newly discovered sites. Recordation efforts included: the plotting of each site on USGS 7.5-minute quad map; defining site boundaries and documentation of features and formed artifacts; detailed sketch maps to demonstrate the relationship of the sites' locations to topographic features and other landmarks; photographs of the site locations and specific features; and detailed information on environmental context, artifact content and density, cultural affiliation, and function. Site forms for all prehistoric cultural resources are confidential.

### Field Conditions

The field conditions throughout the duration of the survey included clear or partly cloudy skies, with relatively high humidity due to recent rains and temperatures reaching into the mid- to upper-100s. As a result of the recent precipitation, some of the access roads and survey area were impacted by minor alluvial erosion. Ground surface visibility was excellent with most areas having approximately 80 to 90 percent visibility.

The survey area terrain is a mixture of flat agricultural fields that appear to have been out of use for a significant period, the previously developed solar farm substation area (i.e. Seville 1 Solar Substation Lot D) and access road, and the slightly undulating undeveloped desert terrain with low-lying dunes and intermittent drainages. The soil in the agricultural fields was a loamy sand, while the soil in the southeast portion of the survey area was sand. The presence of naturally occurring freshwater shell increased from west to east, especially outside of the agricultural fields. There was also a sparse scatter of modern rabbit (lagomorph) bones as well as a few bones from unidentified species. No possible human remains were identified anywhere in the survey area.

At the time of the survey, none of the agricultural fields were in use. The fields appeared to have been left to fallow for several years. Previous aeriels also indicate that the agricultural fields in the survey area have not been intensively utilized. The furrows were noted to be generally deflated and almost at ground level. In addition to the anthropogenic impacts noted above, fluvial and aeolian erosion have significantly affected most of the survey area, especially within the southeast portion of the survey area where there is no evidence of agricultural use.

The IID T-Line Road and existing IID "R" Transmission Line along the eastern boundary of the survey area coincide with the highest concentration of previously recorded cultural resources. Except for small pockets surrounding the existing Seville 1 Solar and Seville 2 Solar Substation on Lot C, the heaviest concentration of vehicular traffic and modern refuse was found along these linear features. The IID T-Line Road and existing IID "R" Transmission Line intersect with a moderate-sized drainage located along the southern boundary of the survey area, where there was an increase in the amount of vegetative debris and gravel.

### **Survey Results**

As shown in **Table 4.7-4**, 18 cultural resources have been previously recorded or were newly recoded within the survey area. Seven cultural resources (six archaeological sites and one isolate) have been previously recorded within the survey area. However, two of the archaeological sites, IMP-1266 and IMP-8010, had been previously combined into IMP-1266.

Two of the sites, P-13-008586/IMP-8009 and P-13-009942/IMP-10005, were not re-located during the survey. The remaining archaeological sites and isolate were relocated within the survey area. Site P-13-008606/IMP-8029 was re-located approximately 15 meters to the southeast of its previously recorded

## 4.7 CULTURAL RESOURCES, TRIBAL CULTURAL RESOURCES AND PALEONTOLOGICAL RESOURCES

location. Eight archaeological sites and four isolates were newly recorded within the survey area. The locations of the cultural resources are confidential.

**TABLE 4.7-4  
SUMMARY OF CULTURAL RESOURCES WITHIN THE SURVEY AREA**

Primary Number P-13-	Trinomial CA-IMP-	Temp Site #	Type	Description	Located
001266 (subsumed 008587)	1266 (subsumed 8010)	-	AP2: Lithic Scatter, AP3: Ceramic Scatter, AP16: Milling/Lithic Work Area	A large prehistoric site consisting of large ceramic and lithic scatter and multiple milling areas	Yes
008586	8009	-	AP2: Lithic Scatter, AP3: Ceramic Scatter	A large, low-density lithic and ceramic scatter with fire- affected rock	No
008606	8089	-	AP2: Lithic Scatter, AP3: Ceramic Scatter	A low density lithic and ceramic scatter with fire-affected rock	Yes
009941	10004	-	AP2: Lithic Scatter, AP3: Ceramic Scatter	An extensive ceramic and lithic scatter composed of four loci	Yes
009942	10005	-	AP2: Lithic Scatter, AP3: Ceramic Scatter	A small ceramic and lithic scatter.	No
014438	-	-	AP16: Prehistoric Isolate	An isolated sandstone milling slab fragment.	Yes
-	-	JL_S_1	AP2: Lithic Scatter, AP3: Ceramic Scatter	A small ceramic and lithic scatter	Yes
-	-	JL_S_2	AP2: Lithic Scatter, AP3: Ceramic Scatter	A small ceramic and lithic scatter	Yes
-	-	JL_S_3	AP2: Lithic Scatter, AP3: Ceramic Scatter	A moderate-sized ceramic and lithic scatter	Yes
-	-	JL_S_4	AP2: Lithic Scatter, AP3: Ceramic Scatter	A moderate-sized ceramic and lithic scatter	Yes
-	-	JL_S_5	AP2: Lithic Scatter, AP3: Ceramic Scatter	A small ceramic and lithic scatter	Yes
-	-	JL_S_6	AP2: Lithic Scatter, AP3: Ceramic Scatter	A small ceramic and lithic scatter	Yes
-	-	JL_S_7	AP2: Lithic Scatter, AP3: Ceramic Scatter	Two ceramic sherds and one mano	Yes
-	-	JL_S_8	AP2: Lithic Scatter, AP3: Ceramic Scatter	Two flakes and two ceramic sherds	Yes
-	-	JL_I_3	AP16: Prehistoric Isolate	Two ceramic sherds	Yes
-	-	JL_I_4	AP16: Prehistoric Isolate	Two ceramic sherds	Yes

## 4.7 CULTURAL RESOURCES, TRIBAL CULTURAL RESOURCES AND PALEONTOLOGICAL RESOURCES

**TABLE 4.7-4  
SUMMARY OF CULTURAL RESOURCES WITHIN THE SURVEY AREA**

Primary Number P-13-	Trinomial CA-IMP-	Temp Site #	Type	Description	Located
-	-	JL_I_6A	AP16: Prehistoric Isolate	Two ceramic sherds	Yes
-	-	JL_I_6B	AP16: Prehistoric Isolate	One ceramic sherd	Yes

Source: ASM 2017.

### P-13-001266 / IMP-1266 (Including subsumed P-13-008587 / IMP-8010)

Only a small portion of P-13-001266/IMP-1266 intersects the survey area, including the previously subsumed resource P-13-008587/IMP-8010. Approximately 60 buffware body sherds were identified within the portion of the site that lies with the survey area. A small percentage of the buffware body sherds show evidence of burning. P-13-001266/IMP-1266 also includes one grayware body sherd; five wonderstone interior flakes; 10+ volcanic interior flakes; six quartzite interior flakes; three obsidian interior flakes; one petrified wood interior flake; one jasper primary flake; and five fire-affected rocks (FAR). The site has been impacted by vehicular traffic along Road 191 (an OWSVRA road, refer to Figure 4.2-1 in Section 4.2, Land Use), which cuts through the western boundary of the site.

### P-13-008586 / IMP-8009

During the current survey, P-13-008586 / IMP-8009 was not re-located within the survey area. It is possible, in accordance with its recorded location at the base of a low-lying dune, that the site has since been covered by a slight shift in the dune caused by aeolian deposition.

### P-13-008587 / IMP-8010

P-13-008587 / IMP-8010 has been previously subsumed as part of P-13-001266 / IMP-1266.

### P-13-008606 / IMP-8029

The site was re-located 15 m to the south east of where it was originally recorded. Artifacts identified within the site boundaries include seven buffware body sherds, two petrified wood interior flakes, one grayware body sherd, and one quartzite interior flake.

### P-13-009941 / IMP-10004

Only one volcanic interior flake was identified within the previously recorded boundaries of P-13-009941 / IMP-10004. It is possible the site has been heavily impacted from Road 191 and associated vehicular traffic, or was covered by aeolian and fluvial erosion.

## **B. TRIBAL CULTURAL RESOURCES**

The context for tribal cultural resources includes tribes with traditional lands or cultural places located in Imperial County. The NAHC was queried for a list of tribes to contact. A total of 37 contact names were provided from the following tribes: Kumeyaay, Cahuilla, Cahuilla Serrano, and Cahuilla Luiseno. Only one tribe, the Torres Martinez Desert Cahuilla Indians, requested consultation with the County. A letter was sent to the tribe via certified mail on June 27, 2017. The Tribe had 30 days to respond. At the close of the comment period, no response had been received.

## 4.7 CULTURAL RESOURCES, TRIBAL CULTURAL RESOURCES AND PALEONTOLOGICAL RESOURCES

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### C. PALEONTOLOGICAL RESOURCES

The context for paleontological resources is Lake Cahuilla, a prehistoric lake that covers approximately 2,200 square miles in the Coachella and Imperial Valleys. The lake formed several times over during the Holocene when water from the Colorado River was diverted into the Salton Trough. Geologic mapping indicates that the Project area is underlain by late Pleistocene to Holocene aged (approximately 37,000 to 240 years ago) Lake Cahuilla Beds (**Figure 4.7-2**).

According to the Paleontological Technical Report: The Lake Cahuilla Beds consist of a thin series of tan-gray claystone, sand, and gravel deposited in former Lake Cahuilla. Lake Cahuilla is the name given to a recurring prehistoric lake in the Cahuilla Valley, first named by William Phipps Blake after the local Cahuilla tribe (Paleo Solutions 2017, p. 12). The lake was formed by the natural periodic diversion of the Colorado River from its normal terminus in the Gulf of California to the Cahuilla Basin, in which the Salton Sea exists today. When full, the lake extended from the southern end of the Coachella Valley to the Cerro Prieto area in Baja California, Mexico (Paleo Solutions 2017, p. 12). The lake typically evaporated when the Colorado River reverted to flowing in the ocean, stranding any flora or fauna previously living in the lake. The total thickness of these sediments is up to 300 feet, and the last appearance of Lake Cahuilla was 300 to 500 years ago (Paleo Solutions 2017, p. 12). Lake Cahuilla Beds have produced fossils elsewhere in Imperial County and are known to have a high paleontological potential (Paleo Solutions 2017, p. 4).

### 4.7.3 IMPACTS AND MITIGATION MEASURES

#### A. STANDARDS OF SIGNIFICANCE

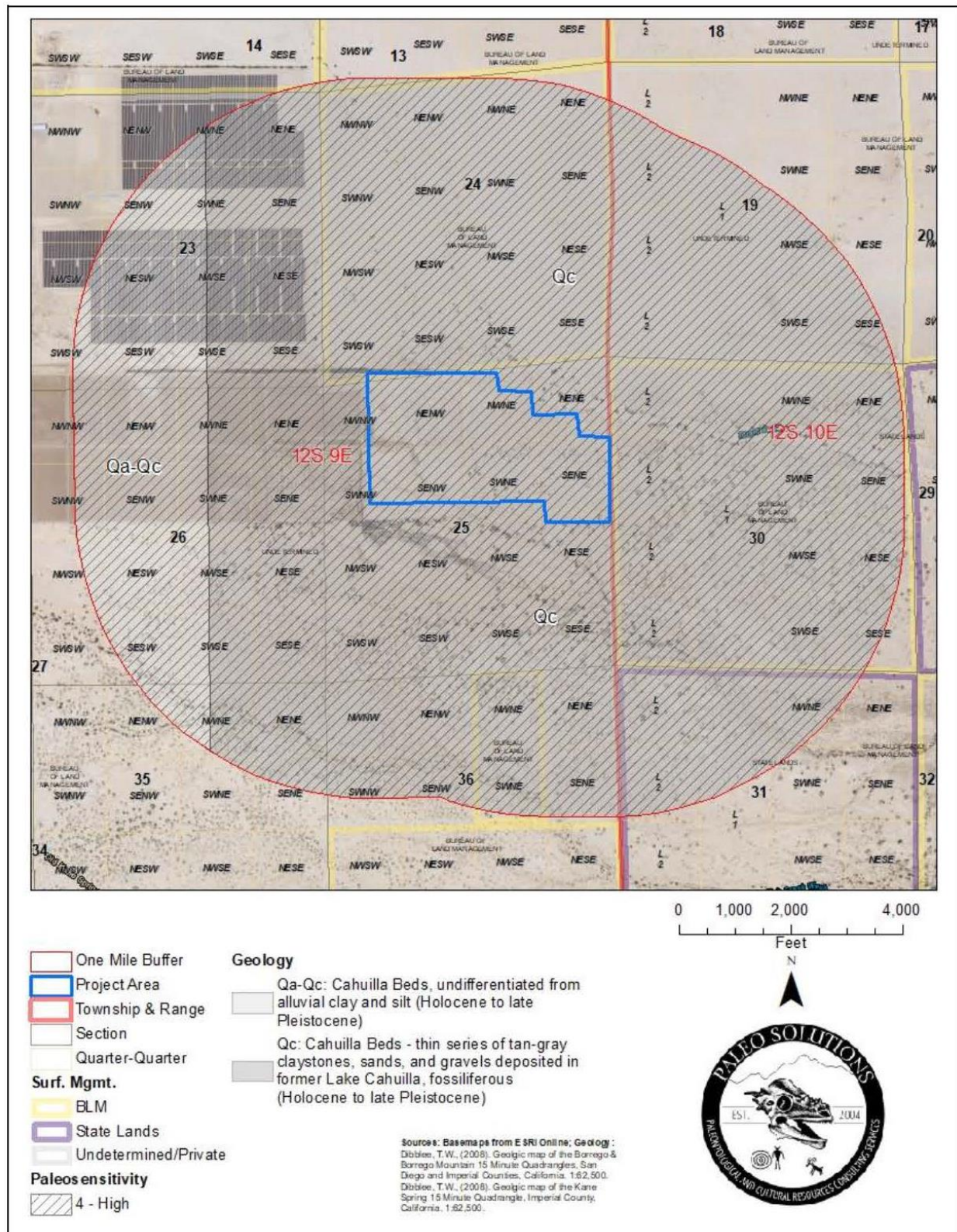
##### **Cultural and Paleontological Resources**

The impact analysis provided below is based on the following questions from the CEQA Guidelines Appendix G. The Project would result in a significant impact to cultural resources if it would result in any of the following:

- a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5.
- b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5.
- c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.
- d) Disturb any human remains, including those interred outside of dedicated cemeteries.

Impacts to a Historical Resource, as defined by CEQA (listed in an official historic inventory or survey or eligible for the CRHR), are significant if the resource is demolished or destroyed or if the characteristics that made the resource eligible are materially impaired [CCR Title 14, Section 15064.5(b)]. CEQA Historical Resources include resources that are eligible for the NRHP or the CRHR [CCR Title 14, Section 15064.5(a)]. Such resources can be buildings, structures, and facilities from the historic period and prehistoric and historic archaeological sites. Demolition or alteration of eligible buildings, structures, and features to the extent that they would no longer be eligible would result in a significant impact. Whole or partial destruction of eligible archaeological sites would result in a significant impact. In addition to impacts from

## 4.7 CULTURAL RESOURCES, TRIBAL CULTURAL RESOURCES AND PALEONTOLOGICAL RESOURCES



Source: Paleo Solutions 2017.

**FIGURE 4.7-2**  
**GEOLOGIC MAP SHOWING LAKE CAHUILLA BEDS**



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construction resulting in destruction or physical alteration of an eligible resource, impacts to the integrity of setting (sometimes termed “visual impacts”) of eligible buildings and above-ground structures and facilities in the Project area could also result in significant impacts.

Vertebrate fossils, whether preserved remains or track ways, are classified as significant by most state and federal agencies and professional groups (and are specifically protected under the California Public Resources Code). In some cases, fossils of plants or invertebrate animals are also considered significant and can provide important information about ancient local environments. Assessment of significance is also subject to the CEQA criterion that the resource constitutes a “unique paleontological resource or site.”

### **Tribal Cultural Resources**

The text below is reflective of the Final Text for tribal cultural resources update to Appendix G: Environmental Checklist Form:

- a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place or object with cultural value to a California Native American tribe, and that is:
  - 1) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as define in Public Resources Code Section 5020.1(k), or
  - 2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth is subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.

### **B. METHODOLOGY**

#### **Cultural Resources**

The identified cultural resources in the survey areas for the Fixed-Frame Configuration and HSAT Configuration were evaluated to determine if they are eligible for the CRHR. If evaluated as eligible for the CRHR, the resources were found to be Historical Resources as defined by CEQA. Construction activities were analyzed to determine whether they would demolish or destroy the Historical Resource or if they would materially impair the characteristics that made the resource eligible for the CRHR. If the construction activities would demolish or destroy the Historical Resource, or if they would materially impair the characteristics that make it eligible, the impact is determined to be significant. If a cultural resource is not a Historical Resource as defined by CEQA, there is no potential for impacts.

#### **Tribal Cultural Resources**

As previously stated, the County of Imperial sent a letter to the Torres Martinez Desert Cahuilla Indians on June 27, 2017. At the close of the 30-day comment period, no response was received from the Tribe.

Only one tribe, the Torres Martinez Desert Cahuilla Indians, requested consultation with the County. A letter was sent to the tribe via certified mail on June 27, 2017. The Tribe had 30 days to respond. At the close of the comment period, no response had been received. No further discussion of Tribal Cultural Resources is included in this Draft EIR.

## 4.7 CULTURAL RESOURCES, TRIBAL CULTURAL RESOURCES AND PALEONTOLOGICAL RESOURCES

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### Paleontological Resources

The Project area was evaluated based on the analysis of existing paleontological data. The paleontological analysis of existing data included: a geologic map review of the Project area at a scale of 1:24,000, a literature search; and one institutional record search at the San Diego Natural History Museum (SDNHM). The literature reviewed included published and unpublished scientific papers. A paleontological record search was completed by the SDNHM on October 4, 2017. The results of the record search are attached as Appendix A of the Paleontological Technical Study included in **Appendix G** provided on the attached CD of Technical Appendices of this EIR. A second record search was requested from the Colorado District Stout Research Center in Anza Borrego on October 3, 2017; however, as of the date of this report, a response has not been received. Additional record searches of online databases were completed by Paleo Solutions staff (Paleo Solutions 2017, p. 10).

### C. PROJECT IMPACTS AND MITIGATION MEASURES

#### **Impacts to Historical Resources**

**Impact 4.7.1** No historic resources were identified in the survey area. Therefore, **no impact** to a historic resource would occur as a result of development of the proposed Project.

No historic addresses have been previously recorded within the survey area or record search radius (ASM 2017, p. 29). The SCIC record search confirmation is included in Appendix A of the Cultural Resources Inventory included in **Appendix G** provided on the attached CD of Technical Appendices of this EIR.

#### ***Construction, Operation and Reclamation***

As there are no historic resources, no impact would occur during construction, operation or reclamation.

#### **Mitigation Measures**

None required.

#### **Significance After Mitigation**

Not Applicable.

#### **Impacts to Archaeological Resources - Prehistoric Isolates**

**Impact 4.7.2** A total of five prehistoric isolates were identified during field surveys of the survey area. As isolates they are ineligible to the CRHR and not significant under CEQA. Therefore, **no impact** would occur with regard to prehistoric isolates.

Isolated artifacts were defined as fewer than three artifacts in a 25 m<sup>2</sup> area. In total five isolates were identified in the survey area. The isolated artifacts are listed in **Table 4.7-4** and summarized below:

- 28540\_JL\_I\_3 – two ceramic sherds
- 28540\_JL\_I\_4 – two ceramic sherds
- 28540\_JL\_I\_6\_A – two ceramic sherds
- 28540\_JL\_I\_6\_B – one ceramic sherds
- P-13-014438 – one milling slab

One isolate was previously recorded and four isolates were newly recorded. The locations of the cultural resources are confidential (ASM 2017, p. 33). The five prehistoric isolates within the survey area are not eligible for listing on the CRHR and are not significant resources under CEQA. Therefore, no further work is recommended for the isolates (ASM 2017, p. 33).

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### **Construction**

The discovered isolates do not hold any integrity and would not yield any additional information. Further, the isolates are not considered Historical Resources for the purposes of CEQA. Therefore, there would be **no impact** to the five isolates as a result of Project construction.

### **Operation**

As noted under the discussion of “Construction” above, no impacts to the five isolates would occur based on their existing state and lack of contextual information. Similarly, **no impact** would occur to the isolates during operation of the proposed Project.

### **Reclamation**

Reclamation activities would involve dismantling and demolition of above-ground structures; concrete removal; removal and dismantling of underground utilities; excavation and removal of soil; and final site contour. Because the five isolates have no primary contextual information, are not considered eligible for the CRHR, and are not considered significant under CEQA. Therefore, **no impact** would occur to the isolates during reclamation activities.

### **Mitigation Measures**

None required.

### **Significance After Mitigation**

Not Applicable.

### **Impacts to Archaeological Resources Potentially Eligible for the CRHR**

**Impact 4.7.3** Thirteen archaeological sites were identified during field surveys of the Project area. These archaeological sites have not been previously evaluated for eligibility for the CRHR or for significance under CEQA. Therefore, impacts these archeological sites are considered **potentially significant**.

Thirteen archaeological sites have been previously or currently identified within the survey area. Eight archaeological sites and four isolates were newly recorded within the survey area. Six archaeological sites and one isolate have been previously recorded within the survey area. However, two of the archaeological sites (IMP-1266 and IMP-8010) had been previously combined into IMP-1266. Two other sites (P-13-008586/IMP-8009 and P-13-009942/IMP-10005) were not re-located during the survey. The remaining archaeological sites were relocated within the survey area. Site P-13-008606/IMP-8029 was re-located approximately 15 meters to the southeast of its previously recorded location. Each site is identified in **Table 4.7-4** above and summarized below:

- P-13-008029 (subsumed 08587)/CA-IMP-1266 (subsumed 8010) - A large, low- density lithic and ceramic scatter with fire-affected rock
- P-13-008586/CA-IMP-8009 - A large, low-density lithic and ceramic scatter with fire-affected rock
- P-13-008606/CA-IMP-8089
- P-13-009941/CA-IMP-10004 - An extensive ceramic and lithic scatter composed of four loci
- P-13-009942/CA-IMP-10005 - A small ceramic and lithic scatter
- P-13-014438 - An isolated sandstone milling slab fragment
- JL\_S\_1 - A small ceramic and lithic scatter
- JL\_S\_2 - A small ceramic and lithic scatter



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- JL\_S\_3 - A moderate- sized ceramic and lithic scatter
- JL\_S\_4 - A moderate- sized ceramic and lithic scatter
- JL\_S\_5 - A small ceramic and lithic scatter
- JL\_S\_6 - A small ceramic and lithic scatter
- JL\_S\_7 - Two ceramic sherds and one mano
- JL\_S\_8 - Two flakes and two ceramic sherds

The locations of the sites are confidential. None of the archaeological sites within the survey area have been previously evaluated for the CRHR or for significance under CEQA.

### **Construction**

The archaeological sites discovered within the survey area primarily consist of ceramic and lithic scatters as well as a fire-affected rock and sandstone milling slab fragment, and one mano. These resources could sustain damage during Project construction. The sites have not yet undergone CRHR evaluation to determine eligibility or CEQA Significance. Thus, if the resources were impacted during construction, a potentially eligible CRHR resource could be damaged. Therefore, impacts to non-evaluated archaeological resources during Project construction area considered **potentially significant**.

### **Operation**

Once the Project is operational, the Project area would be developed and would not be subject to disturbance as would occur during construction. Therefore, **no impact** is anticipated with regard to archaeological resources during Project operation.

### **Reclamation**

Reclamation activities would involve dismantling and demolition of above-ground structures; concrete removal; removal and dismantling of underground utilities; excavation and removal of soil; and final site contour. Ground disturbing activities similar to those occurring during construction would take place. However, no new archaeological resources beyond those discovered at the time of construction are anticipated to be present. Therefore, **no impact** is anticipated with regard to archaeological resources during Project reclamation.

### **Mitigation Measures**

**MM 4.7.3a** If avoidance of archaeological sites P-13-008029 (subsumed 08587)/CA-IMP-1266 (subsumed 8010), P-13-008586/CA-IMP-8009, P-13-008606/CA-IMP-8089, P-13-009941/CA-IMP-10004, P-13-009942/CA-IMP-10005, P-13-014438, JL\_S\_1, JL\_S\_2, JL\_S\_3, JL\_S\_4, JL\_S\_5, JL\_S\_6, JL\_S\_7, JL\_S\_8, JL\_I\_3, JL\_I\_4, JL\_I\_6A and JL\_I\_6B is not possible, a formal evaluation for eligibility for the CRHR under CEQA Guidelines and the Imperial County General Plan Renewable Energy and Transmission Element MMRP CUL-1d (Site Characterization, Sitting and Design and Construction) shall be undertaken. Evaluation shall include a combination of surface mapping and collection, excavation, and special analyses designed to understand site formation and human habitation of the resource in a regional context.

*Timing/Implementation:* Avoidance, during construction/Evaluation by Qualified Archaeologist prior to construction.

*Enforcement/Monitoring:* Imperial County Department of Planning and Development Services.

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**MM 4.7.3b** In keeping with mitigation measures CUL-1d and CUL-3 of the MMRP for the Final Programmatic Environmental Impact Report for the Imperial County Renewable Energy and Transmission Element Update, Imperial County, California, construction monitoring by a qualified archaeologist and a local Native American monitor of all ground disturbance is recommended due to the presence of numerous prehistoric cultural resources within the survey area and 1-mile record search radius.

*Timing/Implementation:* During all ground disturbing activities/Native American Monitor.

*Enforcement/Monitoring:* Imperial County Department of Planning and Development Services.

### **Significance After Mitigation**

In the event that avoidance of known cultural resources is not possible, implementation of mitigation measure MM 4.7.3a requires evaluation of the various archaeological resources and MM 4.7.3b requires Native American Monitoring to oversee all ground disturbing activities. Following implementation of mitigation measures MM 4.7.3a and MM 4.7.3b, impacts to archeological resources would be reduced to **less than significant**.

### **Unrecorded Subsurface Cultural Resources**

#### **Impacts to Unrecorded Subsurface Archaeological Resources**

**Impact 4.7.4** Unrecorded subsurface archaeological resources in the Project area could potentially be damaged during construction of the proposed Project. This is considered a **potentially significant impact**.

#### ***Construction***

Past farming activities caused the loss of primary contextual information of approximately 60 acres of the Project site. However, the potential for subsurface archaeological resources within the boundaries of the Project site still exists as the remainder of the 146 (Fixed Frame Configuration) or 174 (HSAT Configuration) is low gradient desert land. Unrecorded cultural resources may be present beneath the ground surface of the Project site which could be exposed during construction. Therefore, potential to encounter subsurface archaeological resources is considered a **potentially significant impact**.

#### ***Operation***

During operation of the Project, no additional impacts to unrecorded subsurface archaeological resources would be anticipated because the soil disturbing activities would have already occurred and been mitigated during construction. Therefore, **no impact** to unrecorded subsurface archaeological resources would occur during Project operation.

#### ***Reclamation***

Reclamation of the Project site would involve removal of all on-site facilities. No PV panels, transmission lines, inverters, etc. would remain and the Project site would be reclaimed to its end state to approximate the existing low gradient desert lands or idle farmland. Despite the amount of disturbance occurring during reclamation activities, the potential for additional impacts to unrecorded subsurface archaeological resources is unlikely because any impacts to such resources would have already occurred and been mitigated during construction. Therefore, impacts to unrecorded subsurface archaeological resources during reclamation are considered **less than significant**.

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### Mitigation Measure

**MM 4.7.4** If subsurface deposits are discovered during construction, all work shall halt within a 200-foot radius of the discovery. A qualified professional archaeologist shall be retained to evaluate the significance of the find. A local Native American monitor, following the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites established by the NAHC, may also be required. Work cannot continue at the discovery site until the archaeologist 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 archaeologist, lead agency, and project proponent 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.

*Timing/Implementation:* During construction.

*Enforcement/Monitoring:* Qualified Archaeologist and Imperial County Department of Planning and Development Services.

### Significance After Mitigation

Implementation of mitigation measure MM 4.7.4 requires construction activities to be halted in the event that potential subsurface resources are discovered during construction. No further construction would occur until after an assessment of the resource by a qualified professional archaeologist has been made. Following implementation of mitigation measure MM 4.7.4, impacts to unrecorded subsurface archaeological resources would be **less than significant**.

### **Impacts to Subsurface Human Remains**

**Impact 4.7.5** It is unknown whether there are human remains in the Project area that could be discovered during construction. Therefore, impacts to subsurface human remains are considered a **potentially significant impact**.

### **Construction**

No human remains were identified anywhere in the survey area (ASM 2017, p. 31) However, there is a possibility that unknown human remains could be present beneath the ground surface which could be exposed during construction. Therefore, potential to encounter subsurface human remains is considered a **potentially significant impact**.

### **Operation**

During operation of the Project, no additional impacts to subsurface human remains would be anticipated because the soil disturbing activities would have already occurred and been mitigated during construction. Therefore, **no impact** to subsurface human remains would occur during Project operation.

### **Reclamation**

Reclamation of the Project site would involve removal of all on-site facilities. No PV panels, inverters, etc., would remain and the Project site would be reclaimed to its end state to approximate the existing low gradient desert lands or idle farmland. Despite the amount of disturbance occurring during reclamation activities, the potential for additional impacts to subsurface human remains is unlikely because any impacts would have already occurred and been mitigated during construction. Therefore, impacts to subsurface human remains during reclamation are considered **less than significant**.

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### Mitigation Measure

**MM 4.7.5** 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 Native American, the Coroner will notify the NAHC which will designate a Most Likely Descendant (MLD) for the Project (Section 5097.98 of the Public Resources Code). The designated MLD then has 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains (AB 2641). If the landowner 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 landowner must rebury the remains where they will not be further disturbed (Section 5097.98 of the Public Resources Code). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a document with the county in which the property is located (AB 2641).

*Timing/Implementation:* During construction.

*Enforcement/Monitoring:* NAHC, Imperial County Coroner, and Imperial County Department of Planning and Development Services.

### Significance After Mitigation

Implementation of mitigation measure MM 4.7.5 requires construction activities to be halted or diverted in the event that human remains are discovered. The County Coroner and NAHC will be notified as appropriate. Following implementation of mitigation measure MM 4.7.5, impacts to subsurface human remains would be reduced to **less than significant**.

### Paleontological Resources

#### **Impacts to Unknown Fossil Remains**

**Impact 4.7.6** Unknown fossil remains, if discovered in the Project area, could be destroyed by excavation and other earth-moving activities occurring during construction. This is considered a **potentially significant impact**.

As indicated by the review of maps, literature and an institutional records search, geologic units with high potential for paleontological resources are present within the Project area (Paleo Solutions 2017, p. 14). The Paleontological Resources Study states that

*Direct adverse impacts on surface or subsurface paleontological resources are the result of destruction by breakage and crushing as the result of surface disturbing actions including construction excavations. In areas that contain paleontologically sensitive geologic units, ground disturbance has the potential to adversely impact surface and subsurface paleontological resources of scientific importance. Without mitigation, these fossils and the paleontological data they could provide if properly recovered and documented, could be adversely impacted (damaged or destroyed), rendering them permanently unavailable to science and society.*

*Indirect impacts typically include those effects which result from the continuing implementation of management decisions and resulting activities, including normal ongoing operations of facilities constructed within a given project area. They also occur as the result of the construction of new roads and trails in areas that were previously less*

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*accessible. This increases public access and therefore increases the likelihood of the loss of paleontological resources through vandalism and unlawful collecting. Human activities that increase erosion also cause indirect impacts to surface and subsurface fossils as the result of exposure, transport, weathering, and reburial (Paleo Solutions 2017, p. 14).*

The greatest potential for direct and indirect impacts would occur during Project construction.

### **Construction**

According to the paleontological record search completed by the SDNHM, there are no localities within the Project area or within one mile of the Project area (Paleo Solutions 2017, p. 4 & 14). However, the SDNHM also reported that the Lake Cahuilla Beds have produced well-preserved remains of freshwater invertebrates (e.g., clams and snails) and freshwater vertebrates (e.g., bony fish) (Paleo Solutions 2017, p. 14).

Although the potential for encountering paleontological resources (fossils) in the Project area is unknown, there is a possibility that fossil remains (mineralized, partially mineralized, or un-mineralized bones and teeth, soft tissues, shells, wood, leaf impressions, footprints, burrows, and microscopic remains) are present beneath the ground surface, and that such remains could be exposed during construction activities. Therefore, Project-related excavation and other earth-moving activities have the potential to physically destroy unknown non-renewable scientifically important paleontological resources resulting in a **potentially significant impact**.

### **Operation**

During operation of the Project, no additional impacts to unknown fossil remains would be anticipated because the soil disturbing activities would have already occurred and been mitigated during construction. Therefore, **no impact** to unknown fossil remains would occur during Project operation.

### **Reclamation**

Reclamation of the Project site would involve removal of all on-site facilities. No PV panels, inverters, etc., would remain and the Project site would be reclaimed to its end state to approximate the existing low gradient desert and idle farmland. However, the IID-owned facilities (e.g. IID Switching Station) would not be decommissioned until IID determined that these improvements were no longer needed and could be retired and removed. Despite the amount of disturbance occurring during reclamation activities, the potential for additional impacts to unknown fossil remains is unlikely because any such impacts would have already occurred and been mitigated during construction. Therefore, impacts to unknown fossil remains during reclamation are considered **less than significant**.

### **Mitigation Measure**

**MM 4.7.6a** Prior to the start of construction, a paleontological resource monitoring plan shall be prepared. The plan shall include specific locations and construction activities requiring monitoring, procedures to follow for monitoring and fossil discovery, and a curation agreement with the SDNHM or other approved repository.

*Timing/Implementation:* Prior to construction.

*Enforcement/Monitoring:* Imperial County Department of Planning and Development Services; Paleontological Monitor; Project Applicant.

**MM 4.7.6b** A qualified paleontological monitor shall be present during ground-breaking activities associated with Project construction. The depth of excavation that requires

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paleontological monitoring shall be determined by the paleontological monitor and the construction contractor based on initial observations during construction earth moving.

The paleontological monitor will 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 are 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 vertebrates. Fossil specimens shall be curated by accessioning them into an established, accredited museum repository with permanent retrievable paleontological storage. A report of findings with an appended itemized inventory of specimens will be prepared. The report and inventory, when submitted to the Imperial County Department of Planning and Development Services, along with confirmation of the curation of recovered specimens into an established, accredited museum repository, will signify completion of the program to mitigate impacts to paleontological resources.

In general, a paleontological monitor will not be required after possible fossil bearing sediments have been fully explored.

*Timing/Implementation:* During construction.

*Enforcement/Monitoring:* Imperial County Department of Planning and Development Services; Paleontological Monitor; and Construction Contractor.

### **Significance After Mitigation**

Implementation of mitigation measure MM 4.7.6a requires preparation of a paleontological resources monitoring plan. Mitigation measure MM 4.7.6b requires that a qualified paleontological monitor be present when conducting construction ground-breaking activities take place. The monitor would be empowered to halt or divert construction away from fossil specimens and to access and report findings as appropriate. Implementation of these mitigation measures would reduce impacts to fossil remains, if present, to **less than significant**.

### **4.7.4 CUMULATIVE SETTING, IMPACTS AND MITIGATION MEASURES**

#### **A. CUMULATIVE SETTING**

##### **Cultural Resources**

The geographic scope of the cumulative setting for cultural resources includes surrounding desert-like land within a one-mile radius of the survey area. One hundred and forty-one cultural resources have been previously recorded within the record search area. Seven cultural resources, two of which were combined into one resource have been previously recorded within or adjacent to the survey area (ASM 2017, p. 22). None of the cumulative projects listed Table 3.0-1 in Chapter 3.0, Introduction to the Environmental Analysis and Assumptions are within one mile of the Project site. The closest project is the Ocotillo Wells Solar Project approximately 3.5 miles to the west.

##### **Paleontological Resources**

The geographic scope of the cumulative setting for paleontological resources includes Lake Cahuilla which encompasses the entire Imperial Valley. All cumulative projects listed Table 3.0-1 in Chapter 3.0,

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Introduction to the Environmental Analysis and Assumptions would fall within the area underlain by deposits left from Lake Cahuilla.

### B. CUMULATIVE IMPACTS AND MITIGATION MEASURES

#### Cumulative impacts to Archaeological and Historic Resources

**Impact 4.7.7** Implementation of the proposed Project, in combination with large-scale proposed, approved and reasonably foreseeable renewable energy projects in the region, has the potential to result in impacts to archaeological and historic resources. However, impacts are addressed on a project-by-project basis. Therefore, this is considered a **less than cumulatively considerable impact**.

#### *Construction*

Cumulative development of the large scale proposed, approved and reasonably foreseeable renewable energy projects identified in Table 3.0-1 in Chapter 3.0, Introduction to the Environmental Analysis and Assumptions Used, would result in the loss and/or degradation of archaeological and historic resources. The potential disturbance of human remains would also increase. These cumulative effects of development on cultural resources would be addressed on a project-by-project basis. As discussed under Impact 4.7.3, there are thirteen archaeological resource sites that have not been evaluated that may potentially eligible for listing in the CRHR. This potential impact would be mitigated through implementation of mitigation measures MM 4.7.3a (a formal evaluation for eligibility for the CRHR) and MM 4.7.3b (construction monitoring by a qualified Native American monitor).

In addition, the potential exists for previously unrecorded subsurface archaeological resources and human remains to be located within the boundaries of the Project site and the cumulative projects listed in Table 3.0-1. Project-specific mitigation measures would also reduce potential project impacts to unrecorded subsurface archaeological resources (MM 4.7.4) and human remains (MM 4.7.5) during construction of the proposed Project. Future projects with potentially significant impacts to archaeological and historical resources would be required to comply with federal, state, and local regulations and ordinances protecting cultural resources through implementation of similar project-specific mitigation measures during construction. Therefore, through compliance with regulatory requirements, standard conditions of approval, and mitigation measures MM 4.7.3a, MM 4.7.3b, MM 4.7.4 and MM 4.7.5, the proposed Project would have a **less than cumulatively considerable contribution** to impacts to archaeological and historical resources. Likewise, because individual projects must also comply with applicable regulatory requirements and site-specific mitigation on a project-by-project basis, cumulative impacts to cultural and historical resources are considered **less than cumulatively considerable**.

#### *Operation*

During Project operation, no additional cumulative impacts to archeological or historical resources or human remains would be anticipated because the soil disturbance would have already occurred and been mitigated during construction. Thus, the proposed Project would result in a **less than cumulatively considerable contribution** to impacts to archaeological and historical resources during operations. Likewise, the proposed Project would result in a **less than cumulatively considerable impact** to archaeological and historic resources during operation.

#### *Reclamation*

Reclamation of the Project site would involve removal of all on-site facilities. No PV panels, inverters, etc. would remain and the Project site would be reclaimed to its end state to approximate the existing low gradient desert and idle farmland. However, the IID-owned facilities (e.g. IID Switching Station) would not

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be decommissioned until IID determined that these improvements were no longer needed and could be retired and removed. Despite the amount of disturbance occurring during reclamation activities, additional cumulative impacts to archeological or historical resources or human remains are anticipated to be low. This is because potential impacts to these resources resulting from soil disturbance that occurred during construction would have been mitigated. Thus, the proposed Project would result in a **less than cumulatively considerable contribution** to impacts to archaeological and historical resources during reclamation. Likewise, the proposed Project would result in a **less than cumulatively considerable impact** to archaeological and historic resources during reclamation.

### Mitigation Measures

Implement mitigation measures MM 4.7.3a, MM 4.7.3b, MM 4.7.4 and MM 4.7.5.

### Significance After Mitigation

Implementation of project-specific mitigation measures would address potential impacts to archaeological and historic resources through construction monitoring by a qualified paleontological monitor (MM 4.7.3a); addressing potential impacts to archaeological and historic resources through the expertise of a qualified archaeological monitor (MM 4.7.3b); halting construction and analyzing the finds which may have significance (MM 4.7.4); and proper handling of human remains if discovered (MM 4.7.5). Therefore, following implementation of these mitigation measures, cumulative impacts associated with archaeological and historic resources would be **less than cumulatively considerable**.

### **Cumulative Impacts to Paleontological Resources**

**Impact 4.7.8** Implementation of the proposed Project in combination with other large-scale proposed, approved and reasonably foreseeable renewable energy projects in region, has the potential to result in impacts to fossil remains and fossil bearing geological formations. However, such impacts are addressed on a project-by-project basis. Therefore, this is considered a **less than cumulatively considerable impact**.

### **Construction**

The geographic scope of the cumulative setting for paleontological resources includes Lake Cahuilla which encompasses the entire Imperial Valley. Due to the abundance of invertebrate and vertebrate fossils discovered in the Lake Cahuilla Beds, this formation has a high paleontological potential (Paleo Solutions 2017, p. 12). Cumulative development occurring within the boundaries of Lake Cahuilla has the potential to destroy or otherwise impact paleontological resources. Excavation activities associated with the proposed Project in conjunction with other large scale proposed, approved and reasonably foreseeable renewable energy projects in the region could contribute to the progressive loss of fossil remains. While the potential for paleontological resources beneath the Project area is unknown, this does not negate the presence of such resources given the underlying Lake Cahuilla Beds. If present, paleontological resources beneath the Project area, as well as within the boundaries of the cumulative projects listed in Table 3.0-1, could be impacted during construction.

A cumulative impact would occur if the proposed Project, in combination with other cumulative projects, would damage or destroy paleontological resources. However, with the implementation of mitigation measure MM 4.7.6a (preparation of a paleontological resources monitoring plan) and MM 4.7.6b (a qualified paleontological monitor shall be present during ground-breaking activities), the proposed Project would have a **less than cumulatively considerable contribution** to impacts to paleontological resources during construction. Likewise, other projects in the cumulative setting would be required to comply with existing regulations and undergo CEQA review to assure that any paleontological impacts are



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appropriately evaluated and, if necessary, mitigated on a project-by-project basis. Therefore, through compliance with regulatory requirements and standard conditions of approval, cumulative impacts to paleontological resources during construction are considered **less than cumulatively considerable**.

### ***Operation***

During Project operation, no additional cumulative impacts to paleontological resources would be anticipated because the soil disturbance would have already occurred and been mitigated during construction. Thus, the proposed Project would have a **less than cumulatively considerable contribution** to impacts to paleontological resources during operations. Likewise, the proposed Project would result in a **less than cumulatively considerable impact** to paleontological resources during operation.

### ***Reclamation***

Reclamation of the Project site would involve removal of all on-site facilities. No PV panels, inverters, etc., would remain and the Project site would be reclaimed to its end state to approximate the existing low gradient desert and idle farmland. However, the IID-owned facilities (e.g. the IID Switching Station) would not be decommissioned until IID determined that these improvements were no longer needed and could be retired and removed.

During reclamation, on-site soils would be ripped to the depth necessary to remove all miscellaneous buried solar project equipment. However, despite the amount of disturbance occurring during reclamation activities, additional cumulative impacts to paleontological resources are anticipated to be low. This is because potential impacts to these resources resulting from soil disturbance and excavation and well installation that occurred during construction would have been mitigated. Thus, the proposed Project would result in **less than cumulatively considerable impacts** to paleontological resources during reclamation.

### **Mitigation Measures**

Implement mitigation measures MM 4.7.6a and MM 4.7.6b.

### **Significance After Mitigation**

Implementation of mitigation measure MM 4.7.6a would require preparation of a paleontological resources monitoring plan prior to project construction. Mitigation measure MM 4.7.6b would also require a qualified paleontological monitor to be present during Project ground-breaking activities. If potential resources are identified, the paleontological monitor would temporarily halt or divert equipment to allow removal of abundant or large specimens. These mitigation measures would reduce Project-related impacts to paleontological impacts as well as cumulative impacts to paleontological resources. Therefore, Project impacts to paleontological resources would be **less than cumulatively considerable**.