

4.5 CULTURAL AND PALEONTOLOGICAL RESOURCES

This section describes the cultural and paleontological resources at the Project sites and general vicinity. Cultural resources include prehistoric and historic archaeological sites, archaeological districts, historic buildings and structures, and isolated occurrences of artifacts. Paleontological resources include vertebrate, invertebrate, and plant fossils.

Scoping Issues Addressed

During the scoping period for the Projects, two public scoping meetings were conducted and written comments were received regarding concerns about potential impacts on cultural or paleontological resources. Both letters were from the Native American Heritage Commission (NAHC). The NAHC recommends:

- Early consultation with local tribes in the project area to avoid unanticipated discoveries of cultural resources or burial sites during project excavation activities.
- Early consultation with culturally affiliated tribes that may have knowledge of the religious and cultural significance of the historic properties in the Area of Potential Effect (APE). A list of interested Native American tribe contacts was included as an attachment to the letter.
- Contacting the California Historic Resource Information System (CHRIS)/California Office of Historic Preservation for pertinent archaeological data within or near the APE.
- Avoiding all significant cultural resources that could be affected by the proposed Projects and including in the Environmental Impact Report (EIR), the processes to be followed if archaeological resources or human remains are accidentally unearthed during construction of the proposed Projects.

Applicant's Reports and Survey Results

Information used in preparing this section and in evaluating potential impacts on cultural resources was derived from surveys conducted by ASM Affiliates in August 2010 and in December 2012 (Appendices E-1 and E-2). In addition, a paleontological resources study was prepared by the San Diego Natural History Museum in 2011 (Appendix F). These documents are contained in Volume II (Technical Appendix) of this EIR. Due to the confidential nature of the location of cultural and paleontological resources, information regarding locations of these resources has been removed and is not included in the appendix.

4.5.1 EXISTING SETTING

REGIONAL SETTING

The HR-2 and SmCP-2 Project sites are located in the Salton Trough physiographic province and are underlain by geologic units composed of quaternary lake deposits of ancient Lake Cahuilla. These lakebed deposits have yielded paleontological fossils of freshwater shell beds, fish, seeds, pollen, diatoms, foraminifera, sponges, and wood from numerous localities in Imperial Valley. Vertebrate fossils such as birds, horses, bighorn sheep and reptiles also have been recovered from the area. The consequence of the area's rich paleontological resources is high paleontological sensitivity of the Project site (Demere and Ekdale 2011).

Much of the ground surface of the western portion of the Salton Trough in Imperial County is covered by a veneer of recent sediments varying in thickness from 0 to 20 feet. These sediments include eolian sand, as found in active sand dunes, and alluvial sand and gravel. These sediments are thought to be entirely of Holocene age and, while not considered sensitive for fossils (Demere and Ekdale 2011), may contain cultural resources.

The prehistoric era for Imperial Valley was influenced by the oscillating cycle of infilling and shrinking of ancient Lake Cahuilla, a large lake that once filled much of the valley. The lake was formed from overflow of the Colorado River as silt built up in the southern Colorado River delta and created a dam that blocked the regular draining of the river. The lake was re-filled through similar processes a number of times during the Holocene, with the water level dropping via evaporation after infilling episodes. Prehistoric human populations were drawn to the shores of the lake, and many prehistoric archaeological sites in the region can be attributed to the maximum lake level and receding shorelines.

Approximately 5 miles southwest of the Project area is Obsidian Butte, a Quaternary period volcanic formation. This formation became a regionally important prehistoric resource for the manufacture of flaked stone tools. Obsidian Butte and the shorelines of ancient Lake Cahuilla have influenced the archaeology of the Project site area.

The Colorado Desert has a documented cultural history that spans more than 12,000 years. This cultural history is divided into five major periods:

- PaleoIndian (San Dieguito) (12,000 to 7,000 before present [B.P.]).
- Archaic (Pinto and Amargosa) (7,000 to 1,500 B.P.).
- Late Prehistoric (Patayan) (1,500 to 300 B.P.).
- Ethnohistoric Tipai (Kumeyaay) and Cahuilla (300 B.P. to present).
- Historic Euro-American (300 B.P. to present).

PaleoIndian

Although the PaleoIndian period has been documented in adjacent areas such as San Diego County, the Mojave Desert, and Baja California, there is no local evidence for a PaleoIndian occupation in the Imperial Valley. It is commonly accepted that the Colorado Desert areas must have also witnessed human occupation during this time; however, physical evidence of this has been elusive (Laylander 2010).

Archaic

Traces of Archaic period occupation are found in the Imperial Valley in the form of diagnostic projectile points. It has been speculated that some of the non-ceramic-bearing sites that do not have diagnostic lithic artifacts may represent Archaic occupation; however, this has not been substantiated with empirical evidence. The largest number of sites that have been recorded date to the Late Prehistoric and Ethnohistoric periods (Laylander 2010).

Late Prehistoric

Most of the Late Prehistoric and Ethnohistoric period sites appear to be associated with the maximum stands of ancient Lake Cahuilla.

The lake was more than 100 miles long, 35 miles wide, and more than 300 feet deep. The height of the Colorado River delta that formed a natural dam at the south end of the lake determined the maximum shoreline of Lake Cahuilla and created a variety of wetland habitats that may have attracted Native Americans from the surrounding areas to fish, hunt migratory waterfowl, and gather marsh plants such as cattail and bulrush roots. Eventually, siltation on the north side of the Colorado River Delta enabled the river to reestablish a route back to the Gulf of California. Each time this happened, Lake Cahuilla receded from the maximum shoreline to the bottom of the Salton Trough at elevations lower than 200 feet below sea level. After each infilling, Native Americans likely followed the receding shoreline to establish temporary fish camps and to use the emerging vegetation that colonized the drying lake bed. Some Archaic period Lake Cahuilla human occupation is known, but most archaeological sites date to the last four phases of Lake Cahuilla infilling that occurred during the past 1,000 years. The final phase of inundation and recession occurred at the transition from the Late Prehistoric to the Ethnohistoric period between A.D. 1650 and 1700 (Laylander 1997; Shaefer 1994).

Ethnohistoric

The ethnographic pattern refers to a culture as it was observed during the historic period, primarily during the first half of the twentieth century, or to traditional culture as remembered during that period.

During the Ethnohistoric period, the Imperial Valley was used by the Kumeyaay (Kamia, Tipai), the Cahuilla, Quechan, and the Halchidhoma. The Kumeyaay were the most notable presence in the Project area.

The desert manifestation of the Kumeyaay group is seen as the Kamia. The Kamia are the focus of this discussion because of their specific adaptation to the wetlands of the Colorado River Valley and the prominence of ancient Lake Cahuilla in the Kamia origin myth. This adaptation is likely analogous to the Lake Cahuilla archaeological land-use patterns of the Imperial Valley. The home base of the Kamia included areas along the New and Alamo rivers as well as springs and walk-in wells in the Imperial Valley. During the Ethnohistoric period, the Kamia were politically and militarily allied with the Quechan-Mohave alliance in opposition to the Cocopah and Halchidhoma (Laylander 2010).

The built environment of the Kamia included rectangular semi-subterranean structures of post-and-beam construction with thatch and earthen roofs. They also built ramadas, lean-tos, and conical sweat houses. House pits lined with sandstone slabs may represent individual household units. The Kamia built their dwellings some distance apart, on or adjacent to arable alluvial terraces and as close as possible to running water, wells, or sloughs. There were no permanent villages, and residential moves depended on the availability of floodwater farming areas and the seasonal ripening of wild plants (Laylander 2010).

The Kamia practiced a mixed economy of horticulture and hunting and gathering. Mesquite (*Prosopis pubescens*) was the most important wild staple crop, just as with other groups in the Colorado Desert. Acorns were either obtained directly in the Peninsular Ranges or through trade with the Kumeyaay in exchange for cultigens, especially watermelons. The Kamia also procured baked and dried agave cakes from the Kumeyaay but otherwise did not participate in the early spring agave harvest (Laylander 2010).

Historic Euro-American

The Historic Euro-American period in Imperial Valley begins with the 1774–1775 and 1775–1776 Anza expeditions. These brought Spanish colonists from Sonora to coastal California via a route across the Colorado Desert at Yuma west to the foot of the Peninsular Ranges, then north and up San Felipe Creek to Borrego Valley, and from there northwest to the coast. The first detailed historic accounts of nearby Native Americans living at San Sebastian Marsh and Borrego Springs were made at this time. The Anza expedition opened what would become a branch of the Southern Immigrant Trail that brought Euro-Americans through the area during the Gold Rush and after (Laylander 2010).

Travel and transportation are two major themes of historical development for Imperial Valley. Historic activities in Imperial Valley were minimal but included the U.S. Army Corps of Topographic Engineers' scientific and topographic survey in 1853 for a proposed transcontinental railroad route. The U.S. General Land Office conducted surveys in 1856 that recorded the locations of several historic trails. The Southern Pacific Railroad line was constructed in 1877, and in the early twentieth century, State Route 111 was constructed near the Project site (Laylander 2010).

One of the surveyors who worked on the topographic survey, William Blake, recognized the fertility of the Salton Basin. In 1853, Blake proposed diverting Colorado River water into Imperial Valley for irrigation. During Blake's survey of the area, he observed that the Colorado River had flooded the Salton Trough through the New and Alamo rivers in the past. Construction of the Imperial Canal began in August 1900,

and construction of the Central Main Canal began in 1901. By 1903, more than 100,000 acres of Imperial Valley were irrigated. Construction of various canals and drains progressed through time. These canals and drains are still in active use today and are the impetus for the agricultural success of Imperial Valley. The East Highland Canal was completed in 1914 and the Coachella Canal was completed by 1949. These features shaped the modern-day economy in the Imperial Valley.

Water shortages in Imperial Valley were prevalent from 1902 through 1904 due to silting of the main intake canal. To overcome the silting problems, the California Development Company excavated a new channel without constructing a head gate to control the flow of water. In 1905, winter flooding caused the Colorado River to break its banks, overflowing through the New and Alamo River channels, flooding the Imperial Valley and creating the Salton Sea. The California Development Company declared bankruptcy, a result of litigation arising from the 1905 river break. The residents of Imperial Valley voted in favor of establishing the Imperial Irrigation District (IID) for the purpose of acquiring the rights and properties of the California Development Company and its Mexican subsidiaries. Once established, the IID held more than 570,000 acres of water stock. The IID proceeded to acquire the 13 water companies in Imperial Valley.

In 1923 and 1927, one of the early projects the IID undertook was to close the Low Line Canal that was seeping and flooding arable lands in the southeastern end of the Salton Sea. To replace this, irrigation laterals were constructed at half-mile intervals from the newly enlarged East Highline Canal.

Transportation was also an important theme in the historical development of Imperial Valley. The Southern Pacific Railroad constructed a rail line across the Salton Basin.

Salt mining from salt marsh or beds of dry salt was one of the early industrial uses of Imperial Valley. In 1884, the New Liverpool Salt Company began to commercially extract the pure 6- to 12-inch-thick salt crust. Salt reserves covered more than 1,000 acres at the north end of the Salton Basin.

In 1942, the Desert Training Center was opened and included areas of southern California and western Arizona. These areas were targeted for military training exercises during World War II and were under the command of George S. Patton, Jr. The Desert Training Center's purpose was to condition troops to desert warfare conditions and tactics in preparation for the North African Campaign.

Project Sites

The Project sites were surveyed for paleontological resources on June 22, 2011. During the survey, exposures of Lake Cahuilla sediments were observed along the banks of the drain, northeast of the intersection of English Road and Schrimpf Road. Small fossil shells of freshwater snails were observed in these sediments. Records research at the Colorado Desert District Stout Research Center, Anza-Borrego Desert State Park, and the Department of Paleontology, San Diego Natural History Museum revealed that there are no recorded fossil-collecting localities within the Project sites; however, several localities from Lake Cahuilla sedimentary deposits were discovered during construction of the Southern California Gas Line 6914 Loop Imperial Valley Project between Brawley and Calipatria. These documented occurrences,

as well as those discovered during paleontological monitoring of the State Route 78/111 Brawley Bypass Project, underscore the high paleontological resource potential of the area (Demere and Ekdale 2011).

The area in which the Projects would be located consisted of irrigated agricultural land since the early twentieth century (Environmental Management Associates, Inc. 2009). The earliest historic map noted during previous research on the Project site dates to 1943 and clearly shows the IID laterals and drains in place to facilitate agricultural development (Environmental Management Associates, Inc. 2009).

A cultural resources field survey of the Project sites on July 20 and 21, 2010 recorded 14 isolated artifacts dating to the historic period, one isolate dating to the prehistoric period, and three historic period sites (see Table 4.5-1). A cultural resources field survey conducted on January found no archaeological sites or isolates in the survey area.

TABLE 4.5-1 CULTURAL RESOURCES DOCUMENTED WITHIN THE PROJECT SITES

RESOURCE NAME	PERIOD	DESCRIPTION	CALIFORNIA REGISTER OF HISTORIC RESOURCES (CRHR) ELIGIBILITY
HUD-I-1	Historic	Isolate – 1 metal disk/blade fragment	Not Eligible
HUD-I-2	Historic	Isolate – 1 ceramic whiteware lid sherd	Not Eligible
HUD-I-3	Historic	Isolate - 2 milk glass jar fragments	Not Eligible
HUD-I-4	Historic	Isolate – 1 whiteware sherd	Not Eligible
HUD-I-5	Historic	Isolate – 1 clear glass fragment and 1 whiteware fragment	Not Eligible
HUD-I-7	Historic	Isolate – 1 lip and neck machine-made bottle fragment and one clear with brown tint machine-made whole medicine bottle	Not Eligible
HUD-I-8	Historic	Isolate – 1 sanitary can and whole brown machine-made medicine bottle	Not Eligible
HUD-I-9	Historic	Isolate – 1 whiteware sherd	Not Eligible
HUD-I-10	Historic	Isolate – 1 shaped wooden handle	Not Eligible
HUD-I-11	Historic	Isolate – 1 amethyst glass fragment	Not Eligible
HUD-I-12	Historic	Isolate – 1 large ceramic porcelain sherd (possible plumbing piece) and 1 roofing shingle	Not Eligible
HUD-I-13	Historic	Isolate – 1 metal fragment with a metal bolt and 1 clear glass fragment	Not Eligible
HUD-I-14	Historic	Isolate – 2 whiteware fragments	Not Eligible
HUD-I-15	Prehistoric	Isolate – 1 large <i>Chione</i> sp. shell	Not Eligible

TABLE 4.5-1 CULTURAL RESOURCES DOCUMENTED WITHIN THE PROJECT SITES

RESOURCE NAME	PERIOD	DESCRIPTION	CALIFORNIA REGISTER OF HISTORIC RESOURCES (CRHR) ELIGIBILITY
HUD-I-18	Historic	Isolate – 1 sanitary can	Not Eligible
HUD-1	Historic	Site – small historic period refuse scatter	Not Eligible
"O" Lateral	Historic	Site – approximately 1-mile section of the "O" lateral canal	Not Eligible
"N" Drain	Historic	Site – approximately 0.25-mile section of the "N" drain	Not Eligible

Source: Schaefer, Gunderman, and Laylander 2010

The Project sites are bounded by the "N" Drain and "O" Lateral which are IID irrigation features. Although these features illustrate the beginnings of the agricultural industry that has shaped Imperial Valley, the "N" Drain and "O" Lateral have been found to be ineligible for listing on the California Register of Historic Resources (CRHR) due to modern upgrades. These irrigation features were also recorded as cultural resources during the survey.

None of the cultural resources recorded as part of the Project surveys have been found to meet the CRHR eligibility criteria and are not, therefore, historic resources as defined by CEQA.

4.5.2 REGULATORY SETTING

FEDERAL AND STATE

There are no applicable federal regulations regarding cultural or paleontological resources.

State of California Public Resources Code (PRC) Sections

5020–5024. These sections are statutes that pertain to the protection of historical resources.

5097.98 (b) and (e). These sections require a landowner on whose property Native American human remains are found to limit further development activity in the vicinity until conferring with the most likely descendants (as identified by the NAHC) to consider treatment options.

5097.91–5097.991. These sections pertain to the establishment and authorities of the NAHC and also prohibit the acquisition or possession of Native American artifacts or human remains taken from a Native American grave or cairn, except in accordance with an agreement reached with the NAHC, and provide for Native American remains and associated grave artifacts to be repatriated.

5097.993–5097.994. These sections establish the Native American Historic Resource Protection Act, which makes it a misdemeanor crime for the unlawful and malicious excavation, removal, or destruction of Native American archaeological or historical sites on public or private lands.

21083.2. This section of the California Environmental Quality Act (CEQA) provides for protection of archaeological resources by directing the lead agency on any project undertaken, assisted, or permitted by the state to include in its environmental impact report for the Projects' a determination of the Projects' effect on unique archaeological resources. It enables a lead agency to require an applicant to make reasonable efforts to preserve or mitigate impacts on any affected unique archaeological resource and sets requirements for an applicant to provide payment to cover the costs of mitigation.

21084.1. This section of CEQA establishes that an adverse effect on a historical resource qualifies as a significant effect on the environment.

5097.5. Protects paleontological resources from knowing and willful excavation, removal, destruction, injury, and defacement if the resource is on public land or there is public authority jurisdiction.

30244. Requires reasonable mitigation for impacts on paleontological resources that occur as a result of development.

Government Code Sections

6254 (r). This section establishes the California Public Records Act, which protects Native American graves, cemeteries and sacred places maintained by the NAHC by protecting records of such resources from public disclosure.

25373, 37361. These sections allow city and county legislative bodies to acquire property for the preservation or development of a historic landmark and allow local legislative bodies to enact ordinances to provide special conditions or regulations for the protection or enhancement of places or objects of special historical or aesthetic interest or value.

65092. This section provides for notices of projects being considered for construction to be sent to California Native American tribes that are on the contact list maintained by the NAHC.

Health and Safety Code (HSC) Sections

7050–7054. These HSC sections are statutes that pertain to the disturbance and removal of human remains, felony offenses related to human remains, and depositing human remains outside of a cemetery.

8010–8011. These HSC sections establish the California Native American Grave Protection and Repatriation Act that is consistent with and facilitates implementation of the federal Native American Graves Protection and Repatriation Act.

Senate Concurrent Resolutions

Number 43 (1996). This resolution requires that all state agencies cooperate with programs of archaeological survey and excavation and preserve known archaeological resources whenever this is reasonable.

Number 87 (1978). This resolution provides for the identification and protection of traditional Native American resource-gathering sites on state land.

California Code of Regulations (CCR), Title 14, Section 1427

This section prohibits any person from collecting or removing any object or thing of archeological or historical interest or value. This section further provides that no person shall injure, disfigure, deface or destroy the physical site, location or context in which the object or thing of archeological or historical interest or value is found.

Administrative Code, Title 14, Section 4307

This section states that no person shall remove, injure, deface, or destroy any object of paleontological, archaeological, or historical interest or value.

Administrative Code, Title 14, Division 3, Chapter 1, Sections 4307 & 4309

This regulation addresses paleontological resources in two sections. Section 4307 states that no person shall destroy, disturb, mutilate, or remove earth, sand, gravel, oil, minerals, rocks, features of caves, or paleontological features. Section 4309 stipulates that the Department of Parks and Recreation may grant a permit to remove, treat, disturb, or destroy plants or animals or geological, historical, archaeological, or paleontological materials.

California Penal Code, Section 622.5

The California Penal Code, Section 622.5, states "Every person, not the owner thereof, who willfully injures, disfigures, or destroys any monument, work of art, or useful or ornamental improvement within the limits of any village, town, or city, or any shade tree or ornamental plant growing therein, whether situated upon private ground or on any street, sidewalk, or public park or place, is guilty of a misdemeanor."

California Environmental Quality Act (CEQA) Guidelines

CEQA requires that the potential effects of a project on archaeological resources be considered by a lead agency in the environmental evaluation of projects subject to CEQA. If a project may affect an archaeological resource, CEQA requires that the lead agency shall first determine if the archaeological resource is an "historical resource." CEQA Guidelines Section 15064.5(a) defines a "historical resource" as:

- A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (CRHR).
- A resource included in a local register of historical resources, as defined in ... the Public Resources Code ... or identified as significant in an historical resource survey meeting the requirements ... of the Public Resources Code, shall be presumed to be historically or culturally significant.

- Any ... building, structure, ... site ... which a lead agency determines to be historically significant or significant in the ... annals of California ... provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources.

Under CEQA Guidelines Section 15064.5(a)(3), even if a resource is not included on any local, state or federal register, or identified in a qualifying historical resources survey, a lead agency may still determine that a resource is an historical resource for the purposes of CEQA. A lead agency shall consider a resource to be historically significant if it finds that the resource meets the criteria for listing in the CRHR.

If a lead agency determines that the archaeological site is an historical resource, CEQA Guidelines, section 15126.4(b)(3) applies. "Public agencies should, whenever feasible, seek to avoid damaging effects on any historical resource of an archaeological nature." (CEQA Guidelines, § 15126.4(b)(3).) Preservation in place is the preferred manner of mitigating impacts to archaeological sites. (CEQA Guidelines, § 15126.4(b)(3)(A).) Preservation in place may be accomplished by planning construction to avoid an archaeological site; incorporating the site within open space; covering the site with soil and developing facilities without foundations (such as tennis courts and parking lots); or deeding the site into a permanent conservation easement. (CEQA Guidelines, § 15126.4(b)(3)(B).) When data recovery through excavation is the only feasible mitigation, a data recovery plan shall be prepared and adopted prior to any excavation being undertaken. (CEQA Guidelines, § 15126.4(b)(3)(C))

Even if an archaeological site does not meet the definition of a "historical resource", the lead agency may determine that the resource is a "unique archaeological resource." (CEQA Guidelines, § 15064.5(c)(3).) As defined in Public Resources Code Section 21083.2(g) "unique archaeological resource" is "an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person."

If a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to be made to permit any or all of these resources to be preserved in place or left in an undisturbed state.

LOCAL

County of Imperial General Plan

The County of Imperial General Plan (General Plan) provides goals, objectives, and policies for the identification and protection of significant cultural resources. Specifically, the Conservation and Open Space Element of the General Plan calls for the protection of cultural resources and scientific sites.

The General Plan does not specify any requirements for paleontological resources. Paleontological resources, however, are often considered a subcategory of cultural resources. The Conservation and Open Space Element of the General Plan contains requirements for cultural resources that involve the identification and documentation of significant historic and prehistoric resources and the preservation of representative and worthy examples. The Conservation and Open Space Element also recognizes the value of historic and prehistoric resources and the need to assess current and proposed land uses for impacts upon these resources.

The County does not have specific guidelines for addressing impacts on paleontological resources but instead relies on standard practices employed in other jurisdictions such as the Bureau of Land Management and/or the County of Riverside. The Bureau of Land Management (BLM), as well as other agencies (e.g., Department of Planning, County of Riverside), employ a three-tiered scale of paleontological resource potential that consists of the following categories: no, low, and high.

Table 4.5-2 identifies applicable General Plan policies related to cultural resources and addresses the HR-2 and SmCP-2 Projects' consistency with these policies.

TABLE 4.5-2 HR-2 AND SMCP-2 PROJECTS' CONSISTENCY WITH SIGNIFICANT CULTURAL RESOURCES GOALS, OBJECTIVES, AND POLICIES OF THE GENERAL PLAN

GENERAL PLAN POLICIES	CONSISTENCY	ANALYSIS
CONSERVATION AND OPEN SPACE ELEMENT (COSE)		
Preservation of Cultural Resources, COSE Goal 3: Important prehistoric and historic resources shall be preserved to advance scientific knowledge and maintain the traditional historic element of the Imperial Valley landscape.	Yes, with mitigation	Cultural resources investigations have been conducted for the proposed Project site. The proposed Projects are in compliance with this policy through incorporation of identified mitigation measures.
COSE Objective 3.1: Protect and preserve sites of archaeological, ecological, historical, and scientific value, and/or cultural significance.	Yes, with mitigation	Cultural resources investigations have been conducted for the proposed Project site. The proposed Projects are in compliance with this policy through incorporation of identified mitigation measures.

Source: County of Imperial 1993

While this Draft EIR analyzes the Projects' consistency with the County of Imperial General Plan pursuant to CEQA Guidelines, Section 15125(d), the County of Imperial Planning Commission will determine the Projects' consistency with the General Plan.

4.5.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

The impact analysis provided below is based on the following CEQA Guidelines, Appendix G. An impact is considered significant if the project would:

1. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.
2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.
3. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.
4. Disturb any human remains, including those interred outside of formal cemeteries.

ENVIRONMENTAL PROTECTION MEASURES

No environmental protection measures (EPMs) have been incorporated into the proposed Projects to minimize or avoid impacts on cultural resources.

METHODOLOGY

Cultural Resources

ASM Affiliates, Inc. performed archival and archaeological survey investigations for the Project sites in 2010 and 2012. The archival research did not yield any previously recorded cultural resources within the Project sites or within a half-mile radius of the Project sites. A total of 18 cultural resources were recorded during the walking survey. The cultural resources recorded included three historic period sites, 14 historic period isolates, and one prehistoric period isolate. The location of the Project sites within the recessional shoreline areas of ancient Lake Cahuilla and the location of nearby Obsidian Butte suggest the potential for prehistoric Native American cultural resources, while the history of agricultural development on the Project sites and surrounding area suggest a potential for historic period resources. Both historic and prehistoric resources were the focus of the field surveys.

Under CEQA, cultural resources are evaluated against a set of criteria as listed in Section 4.5.2 above. Only cultural resources that meet one or more of these criteria are considered to be 'historic resources' for management purposes. A cultural resource that is also considered an historic resource would require preservation and protection from development impacts or mitigation to reduce the impact of a development project to a level that would be considered less than significant. Impacts of the Projects to historic resources are considered below.

Paleontological Resources

By knowing the geology of a particular area and the fossil-yield potential of formations that occur in that area, it is possible to predict where fossils will or will not be encountered. In recognition of the direct relationship between paleontological resources and the geologic formations within which they are found, relevant published and unpublished geologic reports and published and unpublished paleontological reports on the Project area were reviewed. In addition, records were searched through the Colorado Desert District Stout Research Center at Anza-Borrego Desert State Park and the Department of Paleontology at the San Diego Natural History Museum.

A walking field survey of the Project sites was conducted on June 22, 2011 by San Diego Natural History Museum personnel to field check the results of the literature and record reviews and to directly evaluate the paleontological resource sensitivity of the geologic units that could be affected by the proposed Projects. This work primarily focused on the northern and southern portions of the Project sites and involved inspection for bedrock outcrops, geologic contacts, and the presence of paleontological resources (i.e., fossils).

HR-2 IMPACTS AND MITIGATION MEASURES

Impact CUL-1: The HR-2 Project would not result in a substantial adverse change in the significance of a historical resource that is either listed or eligible for listing in the National Register, the California Register or a local register of historic resources. However, the HR-2 Project could impact previously unrecorded prehistoric and historic resources.

Ground disturbing activities associated with the proposed Project during construction would have the potential to cause substantial adverse changes to resources that escaped detection on the survey and/or buried prehistoric and historic resources. If such resources are encountered during construction and those resources meet the eligibility criteria of the CRHR, the impact would cause a substantial adverse change in the significance of a historical or archaeological resource. This would be a potentially significant impact to cultural resources.

Although no historical resources (resources that meet the criteria for listing on the CRHR) were identified within the boundaries of the proposed Project, it is possible that subsurface historical resources are present that have not yet been identified. Although unlikely, Project-related ground-disturbing activities could uncover previously unknown prehistoric and historic resources within Project boundaries.

MM CUL-1.1: **Cultural Resources Construction Monitor**

Hudson Ranch Power II, LLC shall retain the services of a consultant who meets or exceeds the Secretary of the Interior Professional Qualifications Standards as

an archaeologist. The cultural resources monitor shall be present during all excavation or other earth-moving activities within the Project site in Holocene-aged deposits. The applicant shall immediately notify the Imperial County Planning and Development Services Department if any undocumented and/or buried prehistoric or historic resource is uncovered. All construction must stop in the vicinity of the find until the find can be evaluated for its eligibility for listing in the CRHR. The cultural resources monitor shall have the authority to halt construction activity in the immediate vicinity of the encountered historic resource for a sufficient interval of time to allow avoidance or recovery of the encountered historic resources and shall also have the authority to redirect construction equipment in the event that any cultural resource is inadvertently encountered. All cultural resources are assumed to be eligible for the CRHR until determined otherwise by the monitor. Work will not resume in the area of the discovery until authorized by the monitor.

Timing/Implementation: Credentials of the proposed consultant are to be submitted to Imperial County Planning and Development Department prior to issuance of a grading permit and subject to approval by the County.

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

MM CUL-1.2:

Evaluate Significance of Unanticipated Discoveries

The cultural resources monitor will evaluate the significance of the unanticipated discovery in conjunction with designated Native American representatives in order to provide proper management recommendations. If testing and evaluation of the site is recommended, the cultural resources consultant will prepare a research design, schedule, and budget for review and approval. During evaluation and testing, the local Native American tribes shall be notified in advance so that a tribal monitor can be present and assist with the work being conducted. At the completion of the monitoring program, the cultural resources consultant will prepare a report that describes the results of the monitoring efforts, the personnel used, the dates of performance, and findings, if any. If cultural resources are recovered, they shall be cleaned, catalogued, analyzed, and curated at an approved repository.

Timing/Implementation: Implemented if unanticipated discoveries are found during monitoring.

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

MM CUL-1.3:**Native American Construction Monitor**

The local Native American tribes shall be given the opportunity to provide one or more certified cultural monitors for the Project during all excavation or earth-moving within the Project site in Holocene-aged deposits. The applicant shall give the tribe's Preservation Officer (PO) or other designated representative two weeks' notice and shall provide a copy of such notice to the County Planning and Development Services Department. The notice shall include information regarding the scope of the proposed activity and the beginning and ending dates of the activity. The tribe has the authority and discretion to provide one or more monitors as determined necessary by the tribe.

Upon arrival at the job site, the tribal monitor(s) shall provide the Project superintendent with a current cultural monitor certification document. The tribal monitor(s) shall fully comply with all safety requirements established by the superintendent for the Project site at all times.

Timing/Implementation: The Native American tribe will be notified two weeks prior to commencement of ground disturbing activities. Implemented if human remains are found during monitoring.

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

MM CUL-1.4:**Unanticipated Discoveries Historic Treatment Plan**

If an unanticipated discovery is found to meet the eligibility criteria for listing on the CRHR, then the resource must either be protected in place and the Project altered to preserve the resource, or data recovery excavations must be conducted to mitigate the impact of the resource. The cultural resources consultant shall prepare a Historic Properties Treatment Plan (HPTP) for submittal to the County of Imperial for approval. The HPTP shall detail how much excavation is required and what excavation methods and other analytical tests would be required to mitigate the impact on the resource if avoidance or preservation in place is not feasible. The HPTP shall provide for reasonable efforts to be made to permit the resource to be preserved in place or left in an undisturbed state. Methods of accomplishing this may include capping or covering the resource with a layer of soil. To the extent that a resource cannot feasibly be preserved in place or not left in an undisturbed state, excavation as mitigation shall be restricted to those parts of resource that would be damaged or destroyed by the Project. Excavation as mitigation shall not be required for a unique archaeological resource if the treatment plan determines that testing or studies already completed have

adequately recovered the scientifically consequential information from and about the resource. After data recovery excavations are complete, a technical report detailing the results of the excavation and analysis results shall be prepared by the cultural resources consultant. All artifacts and documentation pertaining to the data recovery effort shall be cleaned, catalogued, analyzed, and curated at an approved repository. The HPTP shall require communication and consultation with Native American tribes that attach cultural significance to the Project area with regard to their perspectives and wishes for the treatment of the resources.

Timing/Implementation: Implemented if unanticipated discoveries are found during monitoring of ground disturbing activities.

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

Significance after

Mitigation:

Implementation of MM CUL-1.1 through MM CUL-1.4 would avoid damaging previously unrecorded historical resources through professional monitoring and avoidance, preservation or data recovery, and therefore would reduce impacts on cultural resources to less than significant.

Impact CUL-2:

Implementation of the HR-2 Project could result in impacts on previously unrecorded archaeological resources. If these resources meet the eligibility criteria of the CRHR, the impact would cause a substantial adverse change in the significance of an archaeological resource. This would be a potentially significant impact on cultural resources.

Although no eligible archaeological resources were identified within the boundaries of the proposed Project, it is possible that subsurface archaeological resources are present that have not yet been identified. Although unlikely, Project-related ground-disturbing activities could uncover previously unknown archaeological resources within Project boundaries.

Mitigation Measures:

See mitigation measures MM CUL-1.1 through MM CUL-1.4.

Significance after

Mitigation:

If unanticipated archaeological resources are discovered during Project construction, MM CUL-1.1 through MM CUL-1.4 shall be sufficient to reduce the impact to a level that is less than significant.

Impact CUL-3:

Implementation of the HR-2 Project could result in impacts on a unique paleontological resource or site or a unique geologic feature. This would be a

potentially significant impact on a paleontological resource or unique geologic feature.

Previously undisturbed Lake Cahuilla sediments underlie the entire Project area and contain proven and significant paleontological resources that likely will be negatively impacted by the proposed construction activities associated with the Project. These construction activities include excavation to construct containment basins, access roads, well pads, surface water drainage ditches, and related storm water pollution prevention structures. Although most of the Project site has been tilled, potentially disturbing paleontological remains within the plow zone, disturbance is likely to go below the plow zone in some areas. In addition, drilling operations for the proposed geothermal exploration and production wells would extend to a depth of approximately 9,000 feet and would penetrate not only Lake Cahuilla sediments but also older and more deeply buried geologic deposits with high paleontological resource potential (e.g., Brawley Formation, Borrego Formation, and Imperial Group).

Near surface excavation operations typically involve large-scale earthmoving equipment (e.g., bulldozers, scrapers, excavators, and/or back hoes) and generally generate spoil materials that are large enough to contain identifiable fossil remains. In contrast, well-drilling typically involves small-diameter drill bits and generally produce finely pulverized spoils that are often saturated with circulating drilling mud.

MM CUL-3.1:

Paleontological Construction Monitoring

A paleontological mitigation plan shall be prepared by a qualified paleontologist. The paleontological mitigation plan can be implemented before and/or during construction; however, the latter is more common on most construction projects. The paleontological mitigation plan shall include the following elements:

- A qualified paleontologist shall attend the pre-construction meeting to consult with the grading and excavation contractors concerning excavation schedules, paleontological field techniques, and safety issues. A qualified paleontologist is defined as an individual with an MS or Ph.D. in paleontology or geology that also is familiar with paleontological procedures and techniques, is knowledgeable in the geology and paleontology of the Project area, and has worked as a paleontological mitigation project supervisor in the area for at least one year.
- Ground-disturbing construction activities shall be monitored by a qualified paleontologist to assess, document, and recover unique fossils. A

paleontological monitor shall be on-site on a full-time basis during the original cutting of previously undisturbed deposits of high paleontological resource potential (e.g., Lake Cahuilla sediments) to inspect exposures for contained fossils. A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials. The paleontological monitor should work under the direction of a qualified paleontologist.

- If paleontological resources are discovered during ground-disturbing activities, the qualified paleontologist (or paleontological monitor) shall recover them. In most cases, this fossil salvage can be completed in a short period of time; however, some fossil specimens (such as a complete large mammal skeleton) may require an extended salvage period. In these instances, the paleontologist (or paleontological monitor) shall have the authority to temporarily direct, divert, or halt grading to allow sufficient time for the recovery of fossil remains. Paleontological resources of scientific value shall be identified and curated into an established, accredited, professional museum repository in the region with permanent retrievable paleontological storage.

Timing/Implementation: Paleontological Mitigation Plan to be submitted to Imperial County Planning and Development Services for review and approval prior to the issuance of the first grading permit.

Enforcement/Monitoring: Hudson Power II LLC. would be responsible for the implementation of this measure. Imperial County Planning and Development Services Department would be responsible for ensuring compliance.

Significance after Mitigation:

If paleontological resources are discovered during Project construction, implementation of MM CUL-3.1 would reduce the impact to a level that is less than significant by ensuring proper assessment, documentation, and recovery and curation of unique fossils.

Impact CUL-4:

Implementation of the HR-2 Project could result in impacts on human remains, including those interred outside of formal cemeteries. Ground-disturbing activities could disturb buried human remains.

Although no archaeological resources were identified within the boundaries of the proposed Project, it is possible that subsurface human remains are present that have not yet been identified. Although unlikely, Project-related ground-disturbing

activities could uncover previously unknown human remains within Project boundaries. This would be a potentially significant impact on human remains.

MM CUL-4.1:

Identification of Human Remains

If human remains are encountered, State Health & Safety Code Section 7050.5 and CEQA Guidelines Section 15064.5(e) state that no further disturbance can occur within the vicinity of the discovery until the county coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. The cultural resources monitor or construction contractor shall protect discovered human remains remaining in the ground from additional disturbance. The monitor or construction contractor shall immediately notify the county coroner of the find. The county coroner shall determine if the remains are of recent origin and if an investigation of the cause of death is required (Health and Safety Code, § 7050.5). If the remains are determined to be Native American and historic or prehistoric, the coroner shall notify the NAHC so that a most likely descendent can be identified as required under California Public Resources Code section 5097.98. With the permission of the landowner or his/her authorized representative, the most likely descendent may inspect the site of the discovery. The most likely descendent may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials or may simply request that the remains be removed and repatriated in a respectful manner. If the most likely descendent and the land owner cannot reach an agreement on the disposition of the remains, the NAHC may help in negotiations.

If the county coroner determines that the human remains are not Native American and not evidence of a crime, Project personnel shall coordinate with a qualified archaeologist(s) to develop an appropriate treatment plan. This may include contacting the next-of-kin to solicit input on subsequent disposition of the remains. If there is no next-of-kin, or recommendations by the next-of-kin are considered unacceptable by the landowner, the landowner will reinter the remains with appropriate dignity in a location outside the Project site and where they would be unlikely to be disturbed in the future.

Timing/Implementation: Implemented if human remains are found during monitoring of ground-disturbing activities.

Enforcement/Monitoring: Hudson Ranch Power II, LLC and/or landowner would be responsible for the implementation of this measure Imperial County Planning and Development Services Department would be responsible for ensuring compliance.

Significance after Mitigation:

If unanticipated human remains are discovered during Project construction, MM CUL-4.1 shall be sufficient to reduce the impact to a level that is less than significant.

SMCP-2 IMPACTS AND MITIGATION MEASURES

Impact CUL-1:

The SmCP-2 Project would not result in a substantial adverse change in the significance of a historical resource that is either listed or eligible for listing in the National Register, the California Register, or a local register of historic resources. However, the Project could impact previously unrecorded prehistoric and historic resources.

Ground disturbing activities associated with the proposed Project during construction would have the potential to cause substantial adverse changes to resources that escaped detection on the survey and/or buried prehistoric and historic resources. If such resources are encountered during construction, those resources meet the eligibility criteria of the CRHR, the impact would cause a substantial adverse change in the significance of a historical or archaeological resource. This would be a potentially significant impact to cultural resources.

Although no historical resources that meet the criteria for listing on the CRHR were identified within the boundaries of the proposed Project, it is possible that subsurface historical resources are present that have not yet been identified. Although unlikely, Project-related ground-disturbing activities could uncover previously unknown prehistoric and historic resources within Project boundaries.

MM CUL-1.1:

Cultural Resources Construction Monitor

Simbol, Inc. shall retain the services of a consultant who meets or exceeds the Secretary of the Interior Professional Qualifications Standards as an archaeologist. The cultural resources monitor shall be present during all excavation or other earth-moving activities within the Project site in Holocene-aged deposits. The applicant shall immediately notify the Imperial County Planning and Development Services Department if any undocumented and/or buried prehistoric or historic resource is uncovered. All construction must stop in the vicinity of the find until the find can be evaluated for its eligibility for listing in the CRHR. The cultural resources monitor shall have the authority to halt construction activity in the immediate vicinity of the encountered historic resource for a sufficient interval of time to allow avoidance or recovery of the encountered historic resources and shall also have the authority to redirect construction equipment in the event that any cultural resource is inadvertently encountered. All cultural resources are

assumed to be eligible for the CRHR until determined otherwise by the monitor. Work will not resume in the area of the discovery until authorized by the monitor.

Timing/Implementation: Credentials of the proposed consultant are to be submitted to Imperial County prior to issuance of a grading permit and subject to approval by the County.

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

MM CUL-1.2:

Evaluate Significance of Unanticipated Discoveries

The cultural resources monitor will evaluate the significance of the unanticipated discovery in conjunction with designated Native American representatives in order to provide proper management recommendations. If testing and evaluation of the site is recommended, the cultural resources consultant will prepare a research design, schedule, and budget for review and approval. During evaluation and testing, the local Native American tribes shall be notified in advance so that a tribal monitor can be present and assist with the work being conducted. At the completion of the monitoring program, the cultural resources consultant will prepare a report that describes the results of the monitoring efforts, the personnel used, the dates of performance, and findings, if any. If cultural resources are recovered, they shall be cleaned, catalogued, analyzed, and curated at an approved repository.

Timing/Implementation: Implemented if unanticipated discoveries are found during monitoring.

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

MM CUL-1.3:

Native American Construction Monitor

The local Native American tribes shall be given the opportunity to provide one or more certified cultural monitors for the Project during all excavation or earth-moving within the Project site in Holocene-aged deposits. The applicant shall give the tribe's Preservation Officer (PO) or other designated representative at least 24 hours notice and shall provide a copy of such notice to the County Planning and Development Services Department. The notice shall include information regarding the scope of the proposed activity, the number of monitors proposed, and the beginning and ending dates and times that the monitors will be needed. The tribe

has the authority and discretion to provide one or more monitors as determined necessary by the tribe.

Upon arrival at the job site, the tribal monitor(s) shall provide the Project superintendent with a current cultural monitor certification document. The tribal monitor(s) shall fully comply with all safety requirements established by the superintendent for the Project site at all times.

Timing/Implementation: The Native American tribe will be notified two weeks prior to commencement of ground disturbing activities.

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

MM CUL-1.4:

Unanticipated Discoveries Historic Treatment Plan

If an unanticipated discovery is found to meet the eligibility criteria for listing on the CRHR, then the resource must either be protected in place and the Project altered to preserve the resource, or data recovery excavations must be conducted to mitigate the impact of the resource. The cultural resources consultant shall prepare a Historic Properties Treatment Plan (HPTP) for submittal to County of Imperial for approval. The HPTP shall detail how much excavation is required and what excavation methods and other analytical tests would be required to mitigate the impact on the resource if avoidance or preservation in place is not feasible. The HPTP shall provide for reasonable efforts to be made to permit the resource to be preserved in place or left in an undisturbed state. Methods of accomplishing this may include capping or covering the resource with a layer of soil. To the extent that resource cannot feasibly be preserved in place or not left in an undisturbed state, excavation as mitigation shall be restricted to those parts of resource that would be damaged or destroyed by the Project. Excavation as mitigation shall not be required for a unique archaeological resource if the treatment plan determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the resource. After data recovery excavations are complete, a technical report detailing the results of the excavation and analysis results shall be prepared by the cultural resources consultant. All artifacts and documentation pertaining to the data recovery effort shall be cleaned, catalogued, analyzed, and curated at an approved repository. The HPTP shall require communication and consultation with Native American tribes that attach cultural significance to the Project area with regard to their perspectives and wishes for the treatment of the resources.

Timing/Implementation: Implemented if unanticipated discoveries are found during monitoring.

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

Significance after

Mitigation:

Implementation of MM CUL-1.1 through MM CUL-1.4 would avoid damaging previously unrecorded historical resources through professional monitoring and avoidance, preservation or data recovery, and therefore would reduce impacts on cultural resources to less than significant.

Impact CUL-2:

Implementation of the SmCP-2 Project could result in impacts on previously unrecorded archaeological resources. If these resources meet the eligibility criteria of the CRHR, the impact would cause a substantial adverse change in the significance of an archaeological resource. This would be a potentially significant impact on cultural resources.

Although no eligible archaeological resources were identified within the boundaries of the proposed Project, it is possible that subsurface archaeological resources are present that have not yet been identified. Although unlikely, Project-related ground-disturbing activities could uncover previously unknown archaeological resources within Project boundaries.

Mitigation Measures:

See mitigation measures MM CUL-1.1 through MM CUL-1.4.

Significance after

Mitigation:

If unanticipated archaeological resources are discovered during Project construction, MM CUL-1.1 through MM CUL-1.4 shall be sufficient to reduce the impact to a level that is less than significant.

Impact CUL-3:

Implementation of the SmCP-2 Project could result in impacts on a unique paleontological resource or site or a unique geologic feature. This would be a potentially significant impact on a paleontological resource or unique geologic feature.

Previously undisturbed Lake Cahuilla sediments underlie the entire Project site and contain proven and significant paleontological resources that likely will be negatively impacted by the proposed construction activities associated with the Project. These construction activities include excavation to construct containment basins, access roads, surface water drainage ditches, and related storm water pollution prevention structures. Although most of the Project site has been tilled,

potentially disturbing paleontological remains within the plow zone, disturbance is likely to go below the plow zone in some areas.

Near surface excavation operations typically involve large-scale earthmoving equipment (e.g., bulldozers, scrapers, excavators, and/or back hoes) and generally generate spoil materials that are large enough to contain identifiable fossil remains.

MM CUL-3.1:

Paleontological Construction Monitoring

A paleontological mitigation plan shall be prepared by a qualified paleontologist. The paleontological mitigation plan can be implemented before and/or during construction; however, the latter is more common on most construction projects. The paleontological mitigation plan shall include the following elements:

- A qualified paleontologist shall attend the pre-construction meeting to consult with the grading and excavation contractors concerning excavation schedules, paleontological field techniques, and safety issues. A qualified paleontologist is defined as an individual with an MS or Ph.D. in paleontology or geology that also is familiar with paleontological procedures and techniques, is knowledgeable in the geology and paleontology of Project area, and has worked as a paleontological mitigation Project supervisor in the area for at least one year.
- Ground-disturbing construction activities shall be monitored by a qualified paleontologist to assess, document, and recover unique fossils. A paleontological monitor shall be on-site on a full-time basis during the original cutting of previously undisturbed deposits of high paleontological resource potential (e.g., Lake Cahuilla sediments) to inspect exposures for contained fossils. A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials. The paleontological monitor should work under the direction of a qualified paleontologist.
- If paleontological resources are discovered during ground-disturbing activities, the qualified paleontologist (or paleontological monitor) shall recover them. In most cases, this fossil salvage can be completed in a short period of time; however, some fossil specimens (such as a complete large mammal skeleton) may require an extended salvage period. The paleontological monitor shall have the authority to temporarily direct, divert, or halt grading to allow sufficient time for the recovery of fossil remains. Paleontological resources of scientific value shall be identified and curated into an established, accredited,

professional museum repository in the region with permanent retrievable paleontological storage.

Timing/Implementation: Paleontological Mitigation Plan to be submitted to Imperial County Planning and Development Services for review and approval prior to issuance of the first grading permits.

Enforcement/Monitoring: Simbol, Inc. would be responsible for the implementation of this measure. Imperial County Planning and Development Services Department would be responsible for ensuring compliance.

Significance after

Mitigation:

If paleontological resources are discovered during Project construction, implementation of MM CUL-3.1 would reduce the impact to a level that is less than significant by ensuring proper assessment, documentation, and recovery of unique fossils.

Impact CUL-4:

Implementation of the SmCP-2 Project could result in impacts on human remains, including those interred outside of formal cemeteries. Ground-disturbing activities could disturb buried human remains.

Although no archaeological resources were identified within the boundaries of the proposed Project, it is possible that subsurface human remains are present that have not yet been identified. Although unlikely, Project-related ground-disturbing activities could uncover previously unknown human remains within Project boundaries. This would be a potentially significant impact on human remains.

MM CUL-4.1:

Identification of Human Remains

If human remains are encountered, State Health & Safety Code Section 7050.5 and CEQA Guidelines Section 15064.5(e) state that no further disturbance can occur within the vicinity of the discovery until the county coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. The cultural resources monitor or construction contractor shall protect discovered human remains remaining in the ground from additional disturbance. The monitor or construction contractor shall immediately notify the county coroner of the find. The county coroner shall determine if the remains are of recent origin and if an investigation of the cause of death is required (Health and Safety Code, § 7050.5). If the remains are determined to be Native American and historic or prehistoric, the coroner shall notify the NAHC so that a most likely descendent can be identified as required under California Public Resources Code section 5097.98. With the permission of the landowner or his/her authorized representative, the most likely

descendent may inspect the site of the discovery. The most likely descendent may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials or may simply request that the remains be removed and repatriated in a respectful manner. If the most likely descendent and the land owner cannot reach an agreement on the disposition of the remains, the NAHC may help in negotiations.

If the county coroner determines that the human remains are not Native American and not evidence of a crime, Project personnel shall coordinate with a qualified archaeologist(s) to develop an appropriate treatment plan. This may include contacting the next-of-kin to solicit input on subsequent disposition of the remains. If there is no next-of-kin, or recommendations by the next-of-kin are considered unacceptable by the landowner, the landowner will reinter the remains with appropriate dignity in a location outside the Project site and where they would be unlikely to be disturbed in the future.

Timing/Implementation: Implemented if human remains are found during monitoring of ground-disturbing activities.

Enforcement/Monitoring: Simbol Inc., and/or landowner would be responsible for the implementation of this measure. Imperial County Planning and Development Services Department would be responsible for ensuring compliance.

Significance after

Mitigation:

If unanticipated human remains are discovered during Project construction, MM CUL-4.1 shall be sufficient to reduce the impact to a level that is less than significant.

4.5.4 REFERENCES

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