

ENVIRONMENTAL, CULTURAL, AND OTHER CLEARANCE SURVEYS

Project Summary..... 1
Project Location..... 1
Blackhawk Environmental Biological Study..... 3
Evans & De Shazo, LLC Cultural Resource Study (Redacted Version)..... 4
Paleontological Study..... 5
Engineering/Remediation Resources Group (ERRG) UXO (MEC) Clearance..... 5
Conclusions..... 5

Attachments to Appendix A

- Attachment A: Blackhawk Environmental Biological Report
- Attachment B: Evans & De Shazo, LLC Cultural Resource Report
- Attachment C: Evans & De Shazo, LLC Paleontological Report
- Attachment D: Engineering/Remediation Resource Group Completion Report



EVANS & DE SHAZO, LLC
ARCHAEOLOGY HISTORIC PRESERVATION

**THE IMPERIAL COUNTY ENVIRONMENTAL,
CULTURAL AND OTHER CLEARANCE
SURVEY PROJECT, IMPERIAL COUNTY,
CALIFORNIA
(C2015-020)**

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Summary Report

Project Summary

Evans & De Shazo, LLC was contracted by the California State Lands Commission (CSLC) to provide an environmental review that included a biological study and cultural resource study, as well as UXO (MEC) clearance for the *Imperial County Environmental, Cultural and Other Clearance Survey Project* in compliance with the California Environmental Quality Act (CEQA). Evans & De Shazo, LLC teamed with Provenience Group, Blackhawk Environmental and Engineering/Remediation Resources Group, Inc. (ERRG) to provide the CSLC with services that include:

- Biology Literature Search, Review and Survey, including Letter Report.
- Cultural: Literature Search, Review, Mapping, Survey, Report, and Department of Parks and Recreation (DPR) forms.
- UXO (also known as MEC) avoidance and escort services in support of the biological and cultural resource survey teams. Services included a support plan, mobilization and demobilization.

On August 17th, a project kick-off meeting was held that included Safety Training, a review of potential biological and cultural resource, as well as a brief site visit. The field survey ran from August 18 to through August 20. The Project Director was Carole Denardo, M.A. RPA (sub-contracted from Provenience Group), and the Deputy Project Director was Stacey De Shazo, M.A. from Evans & De Shazo, LLC. Although there is no current project planned for the 30 and 160-acre parcels field survey was conducted to analyze potential effects to biological and cultural resources due to the planned subdivision and sale of the land. The studies were conducted in compliance with CEQA.

The following Summary Report provides a brief overview of the biological and cultural resources identified during the field survey, as well as UXO clearance results and recommendations. The biological resource letter report, cultural resource report, and UXO clearance document are included as attachments to this summary report.

Project Location

The Project Area is located approximately two miles east-northeast of Niland, Imperial County, California located south/southeast of the Salton Sea, and approximately 80 miles southeast of Palm Springs within Imperial County. It is located in the central basin of the Colorado Desert within the Salton Trough (Salton Sink), a northwestern landward continuation of the Gulf of California rift that is bounded on the east by the Chocolate Mountains. The Project Area includes the 30-acre parcel referred to as "East Jesus" and a 160-acre parcel referred to as "Salvation Mountain. The East Jesus parcel is located in the northern quarter of Section 36 and the proposed 160-acre Salvation Mountain parcel, which encompasses the southwest quarter of Section 36 (see Figure 1).

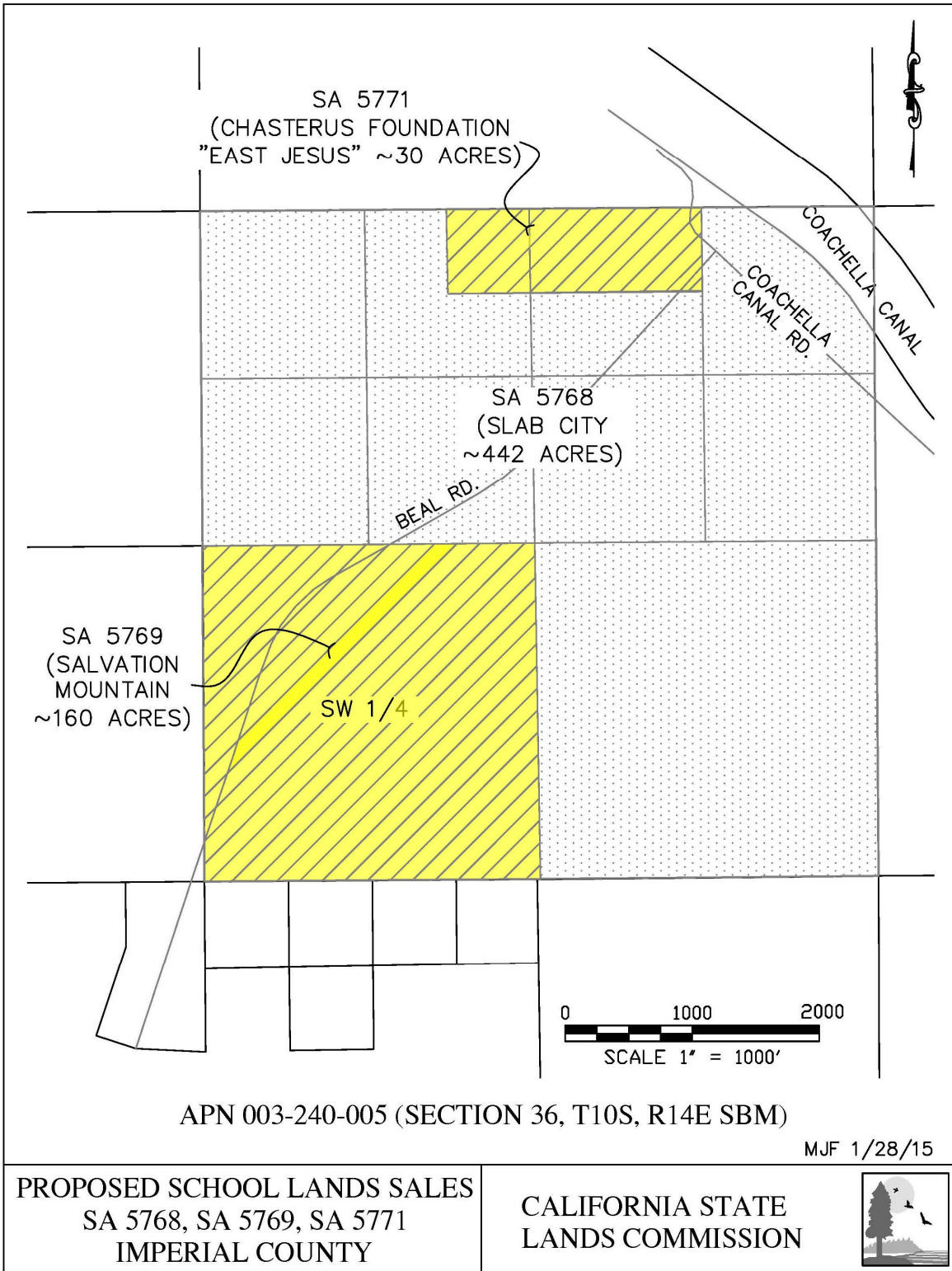


Figure 1: CSLC map showing the East Jesus and Salvation Mountain Project Areas.

Blackhawk Environmental Biological Study

Blackhawk Environmental was sub-contracted by Evans & De Shazo, LLC to conduct a Biological Study focused on determining the potential for occurrence of sensitive plant and wildlife species within the Project Area. The Biological team included biologists Kris Alberts, Ian Maunsell, and Seth Reimers who conducted a field survey on August 18 and 19, 2015 to assess the 30-acre and 160-acre Project Area for their existing conditions and capacities to potentially harbor sensitive biological resources (target species).

Blackhawk Environmental biologists performed a pedestrian survey of the entire 190-acre Project Area. Methods included belt transects spaced approximately 15 meters apart in addition to meandering transects. Where appropriate, biologists paused at select vantage points to assess full visual coverage of the Project Area. During the field survey, all plant and wildlife species observed or detected were recorded in field notebooks and binoculars were used as needed to identify wildlife species. Plant species observed were identified to species level when feasible. Vegetation communities were described according to dominant plant(s) species and annotated on high-resolution aerial photographs of the Project Area. Potentially jurisdictional water resources were reviewed on high-resolution aerial photograph and topographic maps during the field survey for documentation associated vegetation/communities, presence of ordinary high watermarks or streambeds, substrates, hydrological indicators and potential connectivity.

Biological Habitat Assessment Results

A total of two vegetation communities were observed within the Project Area that included Desert Wash and Desert Scrub. The Biological study also noted developed sections within the Project Area that included paved roadways, encampments, folk art structures, materials and vehicle storage areas, and disposal/dump areas. There were no sensitive natural communities observed within the Project Area during the field survey; however, literature review prior to field survey revealed a list of 14 sensitive wildlife species and four special status plant species with the potential to occur within the Project Area. Potentially sensitive riparian areas were also reviewed within the Project Area that includes two USGS topographic map blue-line drainage features draining south and west and eventually connecting to the Salton Sea. However, these areas are likely considered USACE non-wetland Waters of the US, RWQCB non-wetland Waters of the State and CDFW jurisdictional streambeds. The Imperial County General Plan and CDFW have identified areas within and adjacent to the Project Area as Sensitive Wildlife Areas for the federally and state-endangered razorback sucker. CNDDDB and USFWS indicate historic occurrences for this species within the vicinity of the Project Area. Habitat was evaluated during the field survey, and since no permanent water sources are within the Project boundaries, no suitable habitat was identified for this species on the Project Area.

No other Sensitive Wildlife Areas or sensitive natural communities were identified during the literature review or the field survey effort.

All details regarding the Biological Study are included as Attachment A.

Evans & De Shazo, LLC Cultural Resource Study

Evans & De Shazo, LLC conducted the Cultural Resource Study to determine the presence or absence of potentially significant cultural resources within the 190-acre Project Area. The Cultural Resource Team included Principal Archaeologist Sally Evans, M.A. RPA, Field Director Robert Peterson, Ph.D., Field Technician Jason Collins, B.A., and Deputy Project Manager Stacey De Shazo, M.A.

A record search was conducted at the South Coastal Information Center (SCIC) and Imperial Valley Desert Museum and Information Center. The Native American Heritage Commission (NAHC) was also contacted regarding the potential for Sacred Sites to occur within the Project Area. The Sacred Lands search yielded negative results, and they recommended contacting local Native American groups. Letters were sent to Native American organizations recommended by the NAHC as potentially having knowledge of Sacred Sites or other Native American resources within the Project Area.

A field survey of the 30-acre parcel occurred on August 18, 2015; the 160-acre parcel was surveyed from August 18 to 19, 2015. A total of 11 cultural resources were observed during the field survey, including one previously recorded Guard Post building and 10 newly identified cultural resources. One is located within the 30-acre parcel, ten are located in the 160-acre parcel, and one bisects both project areas. The 11 cultural resources identified in the study include the following.

Number	Description	Age	Association/Theme	Location
P-13-003182 (EDS-13)	Guard Post Building	1942	WWII Camp Dunlap/Military	Salvation Mountain
EDS-01	Levee	>50 years	Unknown without further research. Associated with irrigation or Camp Dunlap	East Jesus
EDS-02 (part of P-13-0011464)	Niland-Blythe Road	1860s	Transportation	East Jesus, Salvation Mountain
EDS-03	Levee	>50 years	Unknown without further research. Associated with irrigation or Camp Dunlap	Salvation Mountain
EDS-04	Historic Isolate	1942	WWII Camp Dunlap/Military	Salvation Mountain
EDS-05	Water Retention Basin	1942	WWII Camp Dunlap/Military	Salvation Mountain
EDS-06	Wastewater Treatment Facility	1942	WWII Camp Dunlap/Military	Salvation Mountain
EDS-07	Can Scatter	1942	WWII Camp Dunlap/Military	Salvation Mountain
EDS-08	Fence Remnants	1942	WWII Camp Dunlap/Military	Salvation Mountain
EDS-10	Water Tanks/basin	1942	WWII Camp Dunlap/Military	Salvation Mountain
EDS-11	Historic Isolate	1942	WWII Camp Dunlap/Military	Salvation Mountain

All details regarding the Cultural Resource Study are included as Attachment B.

Paleontological Study

A desktop Paleontological Study was conducted to determine the presence or absence of fossils within the Project Area. The research revealed that two geologic units are mapped within the Project Area and that the paleo-shoreline of Lake Cahuilla rests at approximately 12-meter (40-foot) elevation, and is present within the 160-acre Salvation Mountain Project Area as a distinct escarpment.

During the field survey archaeologists, cross-trained in the identification of paleontological resources, observed six locations with fossil shell. These finds are discussed in the paleontological report prepared for this project (see Attachment C). Asiatic clam (*C. fluminea*) shell was also observed within the drainage that traverses the East Jesus parcel. This shell is not paleontological in nature or associated with ancient Lake Cahuilla, but is modern shell that has washed downstream from the old Coachella Canal located few hundred feet to the northeast.

All details regarding the Paleontological Study are included as Attachment C.

Engineering/Remediation Resources Group (ERRG) UXO (MEC) Clearance

ERRG was sub-contracted by Evans & De Shazo, LLC to conduct a UXO (MEC) clearance to provide safe execution of unexploded ordnance (UXO) escort and avoidance support services during cultural resources and natural resources surveys performed by Evans & De Shazo, LLC and Blackhawk Environmental at 30-acre East Jesus site and the 160-acre Salvation Mountain site. To achieve this objective, UXO Technician III David Williams provided a visual swept the ground surface within the Project Area by walking ahead of biological and cultural resource surveyors. On August 17th, prior to fieldwork, the field team was presented with an Accident Prevention Plan (APP) and work plan review to provide awareness and ensure a safe field survey.

The visual field survey within the 30-acre East Jesus parcel revealed the following items:

- One MK 76 Practice Bomb
- Two Inert Training Smoke Grenades
- Two MK 76 Practice Bomb Fins
- Numerous small arms brass

The visual field survey within the 160-acre Salvation Mountain parcel did not reveal any hazardous ammunitions or explosives.

All details regarding the ERRG UXO (MEC) clearance are included as Attachment D.

Conclusions

Based on research, survey, and identification as a result of the *Imperial County Environmental, Cultural and Other Clearance Survey Project*, the potential sale of the proposed Salvation Mountain parcel does not appear that it will impact Biological, Cultural, or Paleontological Resources. Therefore, no further recommendations are warranted for the proposed subdivision and sale of the Salvation Mountain parcel. However, if the proposed sale of the Project Area results in a physical change to the land, further

Biological review under CEQA may be required to address sensitive species having the potential to occur that may require additional surveys and/or mitigation measures to comply with CESA and/or FESA. In addition, a formal jurisdictional delineation may be required to determine the jurisdiction and extent of aquatic resources potentially under the jurisdiction of the USACE, RWQCB and/or CDFW within the Project Area for compliance with the Clean Water Act of 1972 (CWA), Rivers and Harbors Act of 1899, CDFW Lake and Streambed Alteration Program, and the Porter-Cologne Water Quality Control Act of 1966. Furthermore, should any future project propose activities that could cause adverse effects to cultural resources identified as a result of this study, further evaluation is warranted to determine historic significance using the applicable state or federal criteria and guidelines.



EVANS & DE SHAZO, LLC
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Attachment A

Blackhawk Environmental Biological Report



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August 27, 2015

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**California State Lands Commission
Proposed East Jesus and Salvation Mountain Parcels
Existing Biological Conditions Letter Report**

Niland, Imperial County, CA

1.0 INTRODUCTION

Blackhawk Environmental was subcontracted under Evans & De Shazo, LLC by the California State Lands Commission (CSLC) to conduct environmental surveys and provide habitat assessment letter reports for approximately 640 acres of School Lands located in Niland, Imperial County, California. The CSLC manages these lands, granted by Congress, in support of California's public schools. The CSLC is proposing to subdivide approximately 640 acres of land into three parcels (East Jesus, 30 acres; Salvation Mountain, 160 acres; and Slab City, 450 acres) and sell them. As trustee of the School Land Bank Trust, the CSLC has the authority to exchange or sell these lands with the proceeds deposited to the School Land Bank Fund in support of the California State Teachers' Retirement System.

Prior to subdividing and selling the parcels, the CSLC must first determine if special status plant or wildlife species occur or have the potential to occur within the area. This report describes the results of a literature evaluation and a habitat assessment for only the 30-acre and 160-acre parcels (Project/Survey Area). The habitat assessment focused on determining the presence or potential for occurrence of sensitive biological resources required for review under the California Environmental Quality Act (CEQA) review process. A subsequent field survey is planned in October 2015 for the remaining 450-acre parcel referred to as "Slab City."

2.0 PROJECT SETTING

The Project Area is located in the central basin of the Colorado Desert within the Salton Trough (aka Salton Sink), a northwestern landward continuation of the Gulf of California rift that is surrounded by mountains, including the Chocolate Mountains to the east, except on the south side where a barrier formed by the Colorado River Delta separates the Salton Trough from the Gulf of California (Waters 1981). Much of the Salton Trough lies below sea level, and at its lowest elevation in Imperial County

lies the Salton Sea, a 376-square mile saltwater lake. The Trough extends 140 miles northwest from the head of the Gulf of California and ranges in width from a few miles at its northwest end to 70 miles at the United States-Mexico border. It was formed by a gradual sinking of the land concurrent with the uplift of the surrounding mountains during the Miocene, Pliocene and Pleistocene eras (Dibblee 1954).

The Colorado Desert is a hot, dry desert region that consists of low valleys and high mountainous areas. The average annual rainfall and temperature vary with elevation. Throughout much of the lower region, rainfall is approximately 5 cm per year; but some locations receive as little as 2.5 cm per year, while others receive as much as 20 to 25 cm of precipitation per year. The marked elevation changes in the area also reflect variations in temperature. In most of the Colorado Desert, summer high temperatures range between 100° and 120° F, while in the mountainous regions, summer high temperatures tend to hover around 90° F. The winters are windier and more variable in temperature, but rarely reach below freezing (University of California, Santa Barbara 2015).

The vegetation reflects the arid environment, and variations in rainfall and temperature result in regional differences in vegetation. Within the Colorado Desert, the lack of frost enables succulents and other frost-sensitive plants to thrive, such as cholla, ocotillo, agave, barrel cactus and rabbit brush. Creosote bush scrub (including ocotillo and cholla cactus) is the dominant plant cover type throughout the lower elevations of the Colorado and Mojave Deserts, which forms a monotonous cover over vast areas and surrounds riparian plant communities located in large washes and other locations where water is available. Plant communities around springs, marshes, and streambeds include tules, cattails, and various grasses. In the washes, mesquite, saltbush, desert ironwood, smoke tree, and palo verde are found. In the higher elevations, the creosote bush community gives way to the black bush community, including yuccas and agaves. Fault lines, such as those located east of the Salton Sea, and the high western mountains create many springs that support California fan palm oases and reflect characteristics of a wetter past climate (University of California, Santa Barbara 2015).

Locally common fauna consist of jackrabbits, desert cottontails, wood rats and various small rodents, lizards and snakes. Large game animals, such as bighorn sheep, mule deer, and pronghorn, are rare in most places.

3.0 METHODS

Methods described below focused on determination of potential for occurrence of sensitive plant and wildlife species. Species are considered to be sensitive, and are therefore subject to analysis in this section, if they meet one or more of the following criteria:

- Plant and animal species listed as endangered (FE), threatened (FT), or candidates (FC) for listing under the Federal Endangered Species Act (FESA);
- Plant and animal species listed as endangered (SE), threatened (ST), or candidates (SC) for listing under the California Endangered Species Act (CESA);
- Animals designated as Fully Protected Species (FP), as defined in California Fish and Game Code Sections 3511, 4700, 5050, and 5515;

- Animal species designated as Species of Special Concern (SSC) by the CDFW;
- Bat species designated as High Priority (H) by the Western Bat Working Group;
- Plants that are state-listed as Rare¹; or
- Plant species ranked by the California Native Plant Society (CNPS) as having a California Rare Plant Rank (CRPR) of 1 or 2.²

Sensitive natural communities are communities that have a limited distribution and are often vulnerable to the environmental effects of projects. These communities may or may not contain sensitive species or their habitats. For purposes of this assessment, sensitive natural communities are considered to be any of the following:

- Vegetation communities listed in the California Natural Diversity Database (CNDDDB);
- Communities listed in the Natural Communities List with a rarity rank of S1 (critically imperiled), S2 (imperiled), or S3 (vulnerable); or
- Imperial County General Plan (ICGP) Sensitive Wildlife Areas

3.1 Literature Review

Blackhawk Environmental conducted a database records search (July 2015) centered on the US Geological Service (USGS) 7.5' Iris Wash and Iris quadrangles, Section 36, Township 10S, Range 14E. The CDFW California Natural Diversity Database (CNDDDB) (CDFW 2015), the US Fish & Wildlife Service (USFWS) Species Occurrence Database (USFWS 2015), and the California Native Plant Society's (CNPS) Electronic Inventory (EI) of Rare and Endangered Vascular Plants of California (CNPS 2015) were reviewed for the quadrangles containing and surrounding the Survey Area; a 5-mile radius surrounding the Project Area was reviewed. CNDDDB contains records of reported occurrences of federal- and state-listed species, proposed endangered or threatened species, Federal Birds of Conservation Concern, California Species of Special Concern (SSC), or otherwise sensitive species or communities that may occur within or in the vicinity of the Project Area. This database and literature review was used to provide details on species that have a potential to occur within the Survey Area prior to conducting habitat assessment or focused survey efforts.

Utilizing the background data described above, Blackhawk Environmental biologists Kris Alberts, Ian Maunsell and Seth Reimers conducted field surveys from August 17 through 19, 2015 to assess the 30-acre and 160-acre Project Area for their existing conditions and their capacities to potentially harbor sensitive biological resources identified in the literature review (target species).

3.1 Habitat Assessment

The habitat assessment was conducted over the course of two days, on August 18 and August 19, 2015. Blackhawk Environmental biologists performed a pedestrian survey of the entire 190-acre Project Area. Methods included belt transect spaced approximately 15 meters apart in addition to meandering transects. Where appropriate, biologists paused at select vantage points to provide full

¹ Plants that were previously state listed as "Rare" have been re-designated as state threatened.

² Under the CEQA review process, only CRPR 1 and 2 species are considered, as these are the only CNPS species that meet CEQA's definition of "rare" or "endangered." Impacts to List 3 and 4 species do not meet CEQA's definition of "rare" or "endangered."

visual coverage of the Project Area. During the field survey, all plant and wildlife species observed or detected were recorded in field notebooks. Binoculars were used as needed to identify wildlife species. Plant species observed were identified to species level when feasible according to the nomenclature in *The Jepson Manual: Vascular Plants of California Edition 2* (2012). Vegetation communities were described according to dominant plant(s) species and annotated on high-resolution aerial photographs of the Project Area. The habitat assessment did not include focused or protocol level surveys for any sensitive plant or wildlife species.

Potentially jurisdictional water resources were reviewed on high-resolution aerial photograph and topographic maps. If potentially jurisdictional features were observed during the field surveys, biologists documented associated vegetation/communities, presence of ordinary high watermarks or streambeds, substrates, hydrological indicators and potential connectivity. The habitat assessment did not include a formal jurisdictional delineation effort.

Representative photos of the Project Area, habitats and existing site conditions are included in Attachment A.

Following the habitat assessment, potentials for sensitive species to occur were evaluated based on proximity, recency and abundance of known occurrences, availability of suitable habitats, and historic distributions of the species. Potentials for occurrence were generally evaluated based on the following criteria:

- **Present** – The species was observed within the Project Area during the survey effort.
- **High** – Historic records indicate that the species has been known to occur within the vicinity of the Project Area (5 miles), and suitable habitat occurs onsite.
- **Moderate** – Historic records indicate that the species has been known to occur within the vicinity of the Project Area, but low quality suitable habitat occurs onsite, or; no historic records occur within the Project Area, but the Project Area occurs within the historic range of the species, and moderate to high quality habitat occurs.
- **Low** – Historic records indicate that the species has not been known to occupy the immediate vicinity of the Project Area, and low quality habitat for the species exists onsite.
- **Absent** – The species is restricted to habitats not occurring within the Project Area or is considered extirpated from the Project Area.

4.0 RESULTS

4.1 Literature Review Results

The literature review resulted in a total of 14 sensitive wildlife species and four sensitive plant species known to occur within 5 miles of the Project Area. Of these, five wildlife species are listed as threatened or endangered under the CESA and four wildlife species are listed as threatened or endangered under the FESA. No state or federally listed plant species were recorded to occur within 5 miles of the Project Area. The resulting list of species is included in Tables 1 and 2 below.

4.2 Habitat Assessment Results

A total of two vegetation communities were observed within the Project Area. Vegetation communities are preliminarily described according to those described in the ICGP Conservation and Open Space Element. Specific habitats were further described based on dominant plant(s) species generally characterizing the specific vegetation community.

Desert Wash

The ICGP Conservation and Open Space Element describes desert wash habitats as “characterized by the presence of arborescent, often spiny, shrubs generally associated with intermittent streams (washes) or alluvial deposits adjacent to washes. This habitat occurs throughout the drier portions of the County. Canopy species typically found in washes include palo verde (*Parkinsonia microphylla*), desert ironwood (*Olneya tesota*), smoketree (*Psoralea argemone*), cat-claw acacia (*Senegalia greggii*), mesquite (*Prosopis* spp.), and tamarisk (*Tamarix* spp.). Plants of the sub-canopy include desert broom (*Lepidospartum squamatum*), desert willow (*Chilopsis linearis*), crucillo (*Ziziphus* spp.), Anderson's wolfberry (*Lycium andersonii*), and arrowweed (*Pluchea sericea*). Groundcover species include white brittlebush (*Encelia farinosa*), desert goldenbush (*Isocoma acradenia*), saltbush (*Atriplex* spp.), barrel cactus (*Ferocactus* spp.), white bursage (*Ambrosia dumosa*), desert lavender (*Condea emoryi*), snakeweed (*Gutierrezia sarothrae*), as well as a variety of forbs and grasses.”

Within the Project Area, desert wash habitats are more specifically characterized as mesquite washes, ironwood – mesquite complexes, big galleta grass washes and disturbed variants thereof. Mesquite washes within the Project Area are dominated by honey mesquite (*Prosopis glandulosa*) with associated species that include saltcedar (*Tamarix ramosissima*), athel tree (*Tamarix aphylla*), palo verde, desert thorn (*Lycium brevipes*), desert ironwood, bush seepweed (*Suaeda nigra*), big galleta grass (*Hilaria rigida*), spurges (*Chamaesyce* sp.), and sparse forbs. Overall vegetation cover is generally unevenly distributed, with the majority of vegetation occurring along the margins of drainage features providing an average of approximately 30 percent ground cover with dense thickets forming in small isolated patches.

Within the Project Area, ironwood–mesquite complexes are co-dominated by desert ironwood and honey mesquite with associated species that include desert saltbush (*Atriplex polycarpa*), creosote bush (*Larrea tridentata*), and palo verde. This community generally occurs in habitat interface areas between washes and the surrounding upland desert scrub communities, and provides 20 to 40 percent ground cover. Current land use suggests that components of this community may have been planted in decades past for landscaped shading and therefore may not otherwise occur naturally in some of the higher density stands as those observed onsite.

Within the Project Area, big galleta grass wash habitat is dominated by big galleta grass. Additional non-dominant species observed to occur within this habitat include desert saltbush, white bursage, desert thorn, palo verde, and spurges. This community generally occurs in the upper reaches and headwater areas of washes where braided channels form. Vegetation within this community is sparse and provides approximately 15 to 20 percent ground cover.

Disturbed variants of these wash habitat types are evidenced by off-road vehicle usage, trash, past earthmoving operations, human encampments, and large areas of barren ground.

Desert Scrub

The (ICGP) Conservation and Open Space Element describes desert scrub habitats as, “the most widespread habitat in the California deserts. They are well-developed on valley floors and alluvial deposits adjacent to washes. Creosote bush is generally the dominant plant species in this habitat. Other species include saltbush, indigo bush (*Psoralea schottii*), desert goldenbush, white brittlebush, white bursage, catclaw acacia, bladderpod (*Peritoma* spp.), desert agave (*Agave deserti*), barrel and hedgehog cacti (*Ferocactus* spp. and *Echinocereus* spp.), branched pencil and teddybear cholla (*Cylindropuntia* spp.), Palmer's coldenia (*Tiquilia palmeri*), Wiggin's croton (*Croton wigginsii*), desert globemallow (*Sphaeralcea ambigua*), jojoba (*Simmondsia chinensis*), little-leaf rhatany (*Krameria bicolor*), ocotillo (*Fouquieria splendens*), beavertail (*Opuntia basilaris*), prickly-pear (*Opuntia* spp.), Douglas and rubber rabbitbrush (*Chrysothamnus* spp.), desert sand verbena (*Abronia villosa*), desert senna (*Senna armata*), desert thorn (*Lycium brevipes*) and Mojave yucca (*Yucca schidigera*). Forbs and grasses include triangle evening primrose (*Cammissonia* spp.), big galleta grass, and Spanish-needles (*Bidens bipinnata*).”

Within the Project Area, desert scrub habitats are more specifically characterized as creosote–saltbush complex, creosote scrub, and disturbed variants thereof. Creosote–saltbush complex within the Project Area is co-dominated by sparse creosote bush and desert saltbush, with associated species that include desert goldenbush, white bursage, palo verde, honey mesquite, puncture vine (*Tribulus terrestris*), spurges, and forbs. Overall vegetation cover within this community provides approximately 10 to 20 percent ground cover.

Within the Project Area, creosote scrub habitat is dominated by nearly monotypic creosote bush. Creosote scrub within the Project Area is dominated by sparse creosote bush with associated species that include desert saltbush, white bursage, cheesebush, puncture vine, spineflower (*Chorizanthe* sp.), Palmer's coldenia, spurges, and forbs. Overall vegetation cover within this community provides approximately 5 to 15 percent ground cover.

Disturbed variants of these desert scrub habitat types are evidenced by off-road vehicle usage, trash, past earthmoving operations, human encampments, and large areas of barren ground.

Developed Areas

Within the Project Area, developed areas are characterized by the absence or near absence of native vegetation communities and high levels of anthropogenic disturbance. Developed areas include paved roadways, encampments, folk art structures, materials and vehicle storage areas, and disposal/dump areas.

4.2.1 Sensitive Natural Communities

No sensitive natural communities were observed to occur within the Project Area.

4.2.2 Sensitive Species

The literature review resulted in a list of 14 sensitive wildlife species with the potential to occur within the Project Area. These species and their potentials for occurrence are further described in Table 1 below. A complete list of wildlife species observed is included in Attachment B.

Table 1. Sensitive Wildlife Species Potentially Occurring Within the Project Area

Species Name	Status	Habitat Requirements	Potential for Occurrence
BIRDS			
Burrowing owl (burrow sites and some wintering sites) <i>Athene cunicularia</i>	Federal: BCC State: None CDFW: SSC	Shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), coastal dunes, desert floors, and some artificial, open areas as a year-long resident. Occupies abandoned ground squirrel burrows as well as artificial structures such as culverts and underpasses.	Moderate. Suitable habitat is found on the Project Area, and this species is not uncommon in the Project Area vicinity.
California black rail <i>Laterallus jamaicensis coturniculus</i>	Federal: BCC State: ST CDFW: FP	Salt marshes, freshwater marshes, and wet meadows that serve for breeding, foraging and overwintering.	Absent. Several recent records exist 3 to 5 miles from the Project Area, but no suitable habitat occurs within the Project Area.
Mountain plover (wintering) <i>Charadrius montanus</i>	Federal: BCC State: None CDFW: SSC	Wintering habitats include desert flats and fallowed or plowed agricultural fields.	Low. Limited suitable habitat occurs in the vicinity of the Project Area for wintering.
Southwestern willow flycatcher (nesting) <i>Empidonax trailii extimus</i>	Federal: FE State: SE CDFW: None	Breeds in dense riparian tree and shrub communities associated with rivers, swamps, and wetlands, including lakes and reservoirs.	Absent. Suitable habitat does not occur within the Project Area.
Yellow warbler (nesting) <i>Setophaga petechia</i>	Federal: BCC State: None CDFW: SSC	Breeds in shrubby thickets and woods, particularly along watercourses and in wetlands.	Absent. Suitable habitat does not occur within the Project Area.

Species Name	Status	Habitat Requirements	Potential for Occurrence
'Yuma' Ridgway's rail <i>Rallus obsoletus</i>	Federal: FE State: ST CDFW: FP	Emergent wetlands and brackish wetland areas often dominated by cattails and bulrush. May also occur within vegetated irrigation canals.	Absent. Suitable habitat does not occur on the Project Area.
FISH			
Razorback sucker <i>Xyrauchen texanus</i>	Federal: FE State: SE CDFW: FP	Typically associated with large rivers and found at depths of 4-10 feet. Adults prefer strong currents and backwaters.	Absent. Suitable habitat does not occur on the Project Area.
MAMMALS			
Couch's spadefoot toad <i>Scaphiopus couchii</i>	Federal: None State: None CDFW: SSC	Desert and arid regions of grassland, prairie, mesquite, creosote bush, thorn forest, and sandy washes.	Low. Limited suitable habitat occurs on the Project Area, and known occurrences are within five miles.
Pocketed free-tailed bat <i>Nyctinomops femorosaccus</i>	Federal: None State: None CDFW: SSC WBWG: M	Inhabits semi-arid desert lands using day-roosts in caves, crevices in cliffs, and under the roof tiles of buildings.	Moderate for foraging; Absent for roosting. Limited suitable roosting habitat occurs within the Project Area, however foraging bats may occasionally use the Project Area.
Western mastiff bat <i>Eumops perotis californicus</i>	Federal: None State: None CDFW: SSC WBWG: H	Large open areas of the desert southwest. Requires roosts with at least 20 feet of vertical drop in order to take flight.	High for foraging; Absent for roosting. Suitable foraging habitat exists within the Project Area, however roost sites are restricted to areas outside of the Project Area.
Yuma hispid cotton rat <i>Sigmodon hispidus eremicus</i>	Federal: None State: None CDFW: SSC	Found along margins of watercourses in the region of the Colorado River and near the Salton Sea	Absent. Suitable habitat does not occur on the Project Area.

Species Name	Status	Habitat Requirements	Potential for Occurrence
REPTILES & AMPHIBIANS			
Desert tortoise <i>Gopherus agassizii</i>	Federal: FT State: ST	Arid sandy or gravelly locations along riverbanks, washes, sandy dunes, alluvial fans, canyon bottoms, desert oases, rocky hillsides, creosote flats, and hillsides.	Low. Limited suitable habitat is found within the Project Area, and there are no recent records, but this species is known to occur in contiguous surrounding habitat well to the north.
Lowland leopard frog <i>Lithobates yavapaiensis</i>	Federal: None State: None CDFW: SSC	Slackwater aquatic habitats dominated by bulrushes, cattails, and riparian grasses near or under an overstory of Fremont's cottonwoods and willows. Also documented in canals, roadside ditches, and ponds.	Absent. Suitable habitat does not occur within the Project Area, and the species is possibly extirpated in California.
Sonoran Desert toad <i>Incilius alvarius</i>	Federal: None State: None CDFW: SSC	Inhabits grasslands, arid desert lowlands, mountain canyons with oaks and sycamores, and pinyon-oak-juniper mountain forests. Found in washes, river bottoms, springs, reservoirs, canals, irrigation ditches, streams temporary pools, and away from water.	Absent. Limited suitable habitat occurs within the Project Area; however, this species may be extirpated in California.

Although not identified during the literature review due to no reported observations within five miles, low to moderately suitable habitat for the State Candidate Species flat-tailed horned lizard (*Phrynosoma mcallii*) is found throughout the Project Area. These lizards typically inhabit sandy desert hardpan or gravel flats with scattered sparse vegetation of low native shrub species diversity. Isolated areas of fine, wind-blown sand within sparse desert scrub habitats provide low to moderate quality habitat for this species within the Project Area. According to the California Herps website, observations occur in all directions surrounding the Project Area, including contiguous lands (www.californiaherps.com/lizards/pages/p.mcallii.html, accessed August 2015). As such, this species has a low to moderate potential to occur within the Project Area.

Also not identified during the literature review, but observed directly within the Survey Area, was the loggerhead shrike (*Lanius ludovicianus*). This species is a CDFW SSC (during nesting) and a USFWS Bird of Conservation Concern (BCC). The loggerhead shrike is a widely distributed species, but not common anywhere within its range. It tends to prefer open habitats with scattered large bushes or

small trees, such as savannahs, sparse woodlands, and open deserts. This species is known to nest within 10 miles of the Project Area, and was found present during the field surveys in habitats it is known to nest in. Therefore, it is considered present and has a high potential to nest onsite.

4.2.3 Special Status Plant Species

The literature review resulted in a list of four sensitive plant species with the potential to occur within the Project Area. These species and their potentials for occurrence are further described in Table 2 below. A complete list of plant species observed is included in Attachment C.

Table 2. Sensitive Plant Species Potentially Occurring Within the Project Area

Species Name	Status	Habitat Requirements	Potential for Occurrence
Glandular ditaxis <i>Ditaxis claryana</i>	Federal: None State: None CRPR: 2B.2	Perennial herb that occurs in sandy soils of creosote bush scrub. Blooms Dec. – Mar. Elevation: 0-100 m.	Moderate. Suitable habitat is present within the Project Area.
Gravel milk-vetch <i>Astragalus sabulonum</i>	Federal: None State: None CRPR: 2B.2	Annual herb that occurs in sandy or gravelly areas of the desert. Blooms Nov. – Apr. Elevation: -50-900 m.	Moderate. Suitable habitat is present within the Project Area.
Harwood's milk-vetch <i>Astragalus insularis</i> var. <i>harwoodii</i>	Federal: None State: None CRPR: 2B.2	Annual herb that occurs in sandy or gravelly areas of the desert. Blooms Jan.- May. Elevation: 0-500 m.	Moderate. Suitable habitat is present within the Project Area.
Munz's cholla <i>Cylindropuntia munzii</i>	Federal: None State: None CRPR: 1B.3	Perennial stem succulent that occurs in gravelly or sandy soils of washes and canyon walls in the Sonoran Desert and northern Baja California. Blooms Mar. – May. Elevation: 150-600 m.	Low. Suitable habitat is present within the Project Area.

The field survey effort and habitat assessment was conducted outside of the typical blooming period for all sensitive plant species identified during the literature review. Suitable habitat and elevation ranges for each of the species included in Table 2 above was observed to occur, but no focused survey effort was conducted to determine the presence or absence of targeted sensitive plant species. However, Munz's cholla is a perennial stem succulent and would have been potentially observed during the field effort based on growth form. As such, this species is considered to have the potential to occur, albeit low. The remaining three species are herbaceous species unlikely to have been observed given the survey timing and extended drought occurring within Southern California. As such, these species are considered to have a moderate potential to occur.

4.3 Sensitive Riparian Areas

The Project Area is generally bisected by two USGS topographic map blue line drainage features draining south and west and eventually connecting to the Salton Sea. These features are best described as ephemeral desert washes characterized by gravel and sand beds exhibiting signs of moderate to high volume flows. Ordinary high water marks (OHWM) within these features range from 15 to 40 feet in width, with bank-to-bank (BTB) measurements averaging approximately 20 to 75 feet in width. Banks within these washes show shelving, scouring, sediment sorting, surface cracks, and drift deposits. Vegetation communities within these washes are dominated by upland plant species and are therefore not likely considered CDFW riparian. Wetland waters under the jurisdiction of the United States Army Corps of Engineers (USACE), State Regional Water Quality Control Board (RWQCB) and CDFW are not expected to occur. However, these washes are likely considered USACE non-wetland Waters of the US, RWQCB non-wetland Waters of the State and CDFW jurisdictional streambeds.

Hydrologic input for the washes described above occurs through a series of tributary features from the surrounding upland areas that may be subject to USACE, RWQCB and/or CDFW jurisdiction. Tributaries within the Project Area are un-vegetated or dominated by upland vegetation exhibiting moderate- to low-frequency flow regimes within OHWM and BTB areas averaging 2 to 6 feet in width.

Further hydrology within the Project Area occurs within a series of swales and erosional features lacking evidence of OHWM and/or connectivity, where low-frequency flow apparently dissipates into upland areas lacking connectivity with traditionally navigable waters (TNW).

4.4 Existing Conditions Analysis

4.4.1 East Jesus Parcel

Existing conditions within the proposed 30-acre East Jesus parcel include large areas of folk art and encampments. The majority of the East Jesus parcel is currently occupied by a small resident group of individuals with several permanently established encampments within the site. Evidence of human disturbances are prevalent throughout and include trash piles, dump sites, vehicle tracks, ammunition casing, and temporary structures. Natural vegetation communities occurring within the East Jesus parcel are generally sparse and, in some areas, stunted by repeated vehicular traffic. Topographically, the site is generally flat with soils consisting of fine to coarse sands. Previous land uses include a decommissioned section of Beal Road and levees. The northern section of the parcel is bisected by an un-named wash, which generally drains to the west towards Salton Sea. The area to the north of the un-named wash is unoccupied by humans but is highly disturbed from vehicular activity.

4.4.2 Salvation Mountain Parcel

Existing conditions within the proposed 160-acre Salvation Mountain parcel include occasional and scattered encampments generally associated with decommissioned water tank facilities from US

Marine Corps Camp Dunlap. The Salvation Mountain structure occurs within the site and consists of a small, developed and disturbed area devoid of native plant communities. Evidence of human disturbances are prevalent throughout and include trash piles, dump sites, vehicle tracks, ammunition casing, folk art, and temporary structures. Natural vegetation communities occurring are generally sparse, absent in areas, and stunted by repeated vehicular traffic and off-highway vehicle (OHV) use. Topographically, the site is generally flat with soils consisting of fine to coarse sands and gravel. The Project occurs within the Imperial Fault Zone. Within the central portion of the site, a small bluff-like formation extends from a fault line from the desert floor to approximately 60 feet above mean sea level (amsl), near Salvation Mountain and running northwest-southeast, separating the relatively flat terrains from lower elevations in the west to higher elevations in the eastern mesa. Previous land uses include a decommissioned water retention system, levees, and water tanks. Beal Road bisects the parcel running northeast and southwest. The northern section of the parcel is bisected by a series of braided washes composing a second wash that generally drains to the west and south towards Salton Sea.

4.4.3 Sensitive Wildlife Areas

The Imperial County General Plan and CDFW have identified areas within and adjacent to the Project Area as Sensitive Wildlife Areas for the federally and state-endangered razorback sucker. CNDDDB and USFWS indicate historic occurrences for this species within the vicinity of the Project Area. Habitat was evaluated during the field survey, and since no permanent water sources are within the Project boundaries, no suitable habitat was identified for this species on the Project Area.

No other Sensitive Wildlife Areas or sensitive natural communities were identified during the literature review or the field survey effort.

CONCLUSION & RECOMMENDATIONS

Blackhawk Environmental biologists conducted a literature review for the Project Area resulting in a list of 14 sensitive wildlife species and four sensitive plant species to evaluate during the ensuing field surveys and habitat assessment. The habitat assessment determined that of the 14 sensitive wildlife species evaluated, four were determined to have a low to moderate potential for occurrence within the Project Area. One CESA candidate species, the flat-tailed horned lizard, was not identified during the literature review; however, based on distribution and suitable habitat onsite, it was determined that this species has a low to moderate potential to occur. One California Species of Special Concern and USFWS Bird of Conservation Concern, the loggerhead shrike, was found present onsite, and is considered to have a high potential to nest on the Project Area.

Two wildlife species, pocket-free tailed bat and western mastiff bat are considered to have a moderate or high potential to forage within the Survey Area. However, these species are considered to be absent for roosting due to lack of suitable roost sites within the Project Area.

Due to the presence of appropriate habitats and elevation requirements, the habitat assessment determined that of the four sensitive plant species evaluated, all were determined to have low to moderate potentials for occurrence within the Project Area.

The site visit determined that two un-named desert washes (one within the East Jesus parcel and a second with the Salvation Mountain Parcel) occur within the Project Area. These washes and their associated tributaries may be subject to jurisdiction by the USACE, RWQCB and/or CDFW.

With the proposed sale of the Project Area by the CSLC, proposed changes in land use may require further review under CEQA. Under the CEQA review process, sensitive species with the potential to occur may require additional surveys and/or mitigation measures to comply with CESA and/or FESA. In addition, a formal jurisdictional delineation may be required to determine the jurisdiction and extent of aquatic resources potentially under the jurisdiction of the USACE, RWQCB and/or CDFW within the Project Area for compliance with the Clean Water Act of 1972 (CWA), Rivers and Harbors Act of 1899, CDFW Lake and Streambed Alteration Program, and the Porter-Cologne Water Quality Control Act of 1966.

If there are any questions or concerns regarding the findings of this report, please contact me at 206-920-3266 or ian@blackhawkenv.com.

Sincerely,

Ian Maunsell
Project Biologist & Project Manager



ATTACHMENTS

- A: Representative Site Photos**
- B: Wildlife Species Observed List**
- C: Plant Species Observed List**

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ATTACHMENT A

Representative Site Photos





Photo 1: The dry wash feature shown here that bisects the 30-acre parcel is the typical primary channel type found on both the 30-acre and 160-acre parcels. Erosional gullies, potentially jurisdictional drainages and sheetflow features all serve as tributaries to the primary channels.



Photo 2: The disturbed creosote-saltbush scrub depicted here characterizes most of the 30-acre East Jesus parcel. Interspersed ironwood and palo verde trees in the background are more dominant components in several stands onsite, often associated with dwellings.



Photo 3: Years of human occupancy on the Project parcel have resulted in large amounts of trash left onsite, including burnt trash. Winds have concentrated much of the trash around larger shrubs, but substantial amounts remain at existing and formerly occupied areas.



Photo 4: The sparse, disturbed creosote-saltbush scrub shown here is from the northwest corner of the 30-acre parcel looking east. Tire tracks and bare ground were common elements of the disturbed vegetation types found on both the 30- and 160-acre parcels.



Photo 5: The erosional gullies, potentially jurisdictional drainages and/or sheetflow features shown here are tributaries to the primary dry wash channel of the 160-acre parcel. This photo is from near the northwest edge of the 160-acre parcel, looking north toward the 30-acre parcel.



Photo 6: The sparse creosote-saltbush scrub shown here is characteristic of the majority of the 160-acre Salvation Mountain parcel, where bare ground covers over 90 percent of the overall area.



Photo 7: The mesquite wash depicted here occurs adjacent to the east side of Beal Road, within the 160-acre Salvation Mountain parcel. The channel itself is essentially devoid of vegetation while its banks contain mesquite, palo verde, bush seepweed and Anderson's wolfberry.



Photo 8: This photo shows the developed and disturbed grounds associated with the Salvation Mountain folk-cultural site. Vegetation is negligible to non-existent, with regular human foot and vehicle traffic and maintenance activities keeping the site largely free of vegetation.

ATTACHMENT B

Wildlife Species Observed List



WILDLIFE SPECIES LIST

AVES	BIRDS
CAPRIMULGIFORMES	Nightjars
<i>Chordeiles acutipennis</i>	lesser nighthawk
CARDINALIDAE	Cardinals & Relatives
<i>Piranga ludoviciana</i>	western tanager
CATHARTIDAE	Storks & Relatives
<i>Cathartes aura</i>	turkey vulture
COLUMBIDAE	Pigeons & Doves
* <i>Streptopelia decaocto</i>	Eurasian collared-dove
<i>Zenaida asiatica</i>	white-winged dove
<i>Zenaida macroura</i>	mourning dove
EMBERIZIDAE	New World Sparrows & Buntings
<i>Pipilo aberti</i>	Abert's towhee
HIRUNDINIDAE	Swallows
<i>Petrochelidon pyrrhonota</i>	cliff swallow
<i>Stelgidopteryx serripennis</i>	northern rough-winged swallow
LANIIDAE	Shrikes
<i>Lanius ludovicianus</i>	loggerhead shrike
ODONTOPHORIDAE	New World Quails
<i>Callipepla gambelii</i>	Gambel's quail
POLIOPTILIDAE	Gnatcatchers & Gnatwrens
<i>Polioptila melanura</i>	black-tailed gnatcatcher
REMIZIDAE	Penduline-Tits
<i>Auriparus flaviceps</i>	verdin
TROCHILIDAE	Hummingbirds
<i>Calypte costae</i>	Costa's hummingbird
TROGLODYTIDAE	Wrens
<i>Campylorhynchus brunneicapillus</i>	cactus wren

MAMMALIA	MAMMALS
CANIDAE	Foxes, Wolves & Allies
* <i>Canis lupus familiaris</i>	domestic dog
<i>Vulpes macrotis</i>	kit fox (den complex)
CHIROPTERA (Order)	Bats
<i>unidentified bat species</i>	unidentified bat species
HETEROMYIDAE	Kangaroo Rats
<i>Dipodomys sp.</i>	kangaroo rat (burrows, tracks)
LEPORIDAE	Rabbits & Hares
<i>Lepus californicus</i>	black-tailed jackrabbit
SCIURIDAE	Squirrels, Chipmunks, Marmots, Prairie Dogs
<i>Xerospermophilus tereticaudus</i>	round-tailed ground squirrel

REPTILIA	REPTILES
COLUBRIDAE	Constrictors
<i>Masticophis flagellum</i>	red coachwhip
IGUANIDAE	Iguanas
<i>Dipsosaurus dorsalis</i>	desert iguana
PHRYNOSOMATIDAE	Spiny Lizards
<i>Callisaurus draconoides</i>	zebra-tailed lizard
TEIIDAE	Whiptails & Racerunners
<i>Aspidoscelis tigris tigris</i>	Great Basin whiptail

* Non-native species

ATTACHMENT C

Plant Species Observed List



PLANT SPECIES LIST

**ANGIOSPERMS
MONOCOTS**

POACEAE	Grass Family
<i>Hilaria rigida</i>	big galleta
** <i>Schismus barbatus</i>	Mediterranean schismus

DICOTS

AMARANTHACEAE	Amaranth Family
<i>Tidestromia suffruticosa var. oblogifolia</i>	honeysweet
ASTERACEAE	Sunflower Family
<i>Ambrosia dumosa</i>	white bursage
<i>Ambrosia salsola</i>	cheesebush
<i>Isocoma acradenia</i>	desert goldenbush
BORAGINACEAE	Borage Family
<i>Tiquilia palmeri</i>	Palmer's crinklemat
CHENOPODIACEAE	Goosefoot Family
<i>Atriplex polycarpa</i>	desert saltbush
** <i>Salsola tragus</i>	Russian Thistle
<i>Sueada nigra</i>	bush seepweed
EUPHORBIACEAE	Spurge Family
<i>Chamaesyce sp.</i>	spurge
FABACEAE	Legume Family
<i>Olneya tesota</i>	desert ironwood
<i>Parkinsonia microphylla</i>	yellow palo verde
<i>Prosopis glandulosa</i>	honey mesquite
<i>Senegalia greggii</i>	catclaw acacia
KRAMERIACEAE	Krameria Family
<i>Krameria bicolor</i>	rhatany
POLYGONACEAE	Buckwheat Family
<i>Chorizanthe sp.</i>	spineflower
SOLANACEAE	Nightshade Family
<i>Lycium brevipes</i>	desert thorn
TAMARICACEAE	Tamarisk Family
** <i>Tamarix aphylla</i>	athel tree
** <i>Tamarix ramosissima</i>	saltcedar
VISCACEAE	Christmas Mistletoe Family
<i>Phoradendron californicum</i>	desert mistletoe
ZYGOPHYLLACEAE	Caltrop Family
<i>Larrea tridentata</i>	Creosote bush
** <i>Tribulus terrestris</i>	puncture vine

Key to Symbols: * Non-native; ** Non-native and Invasive according to the California Invasive Plant Council

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EVANS & DE SHAZO, LLC
ARCHAEOLOGY HISTORIC PRESERVATION

Attachment B

Evans and DeShazo, LLC Cultural Resource Report



EVANS & DE SHAZO, LLC
ARCHAEOLOGY HISTORIC PRESERVATION

**A CULTURAL RESOURCE INVENTORY FOR
THE IMPERIAL COUNTY ENVIRONMENTAL,
CULTURAL AND OTHER CLEARANCE
SURVEY PROJECT, IMPERIAL COUNTY,
CALIFORNIA.**

[REDACTED VERSION]

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October 2015



STATEMENT OF CONFIDENTIALITY

This report identifies the locations of cultural resources, which are confidential. As nonrenewable resources, archaeological sites can be significantly impacted by disturbances that can affect their cultural, scientific, and artistic values. Disclosure of this information to the public may be in violation of both federal and state laws. To discourage damage, vandalism, and artifact looting, archaeological site locations shall be kept confidential and report distribution restricted to applicable land managers and those meeting the U.S. Secretary of the Interior's professional standards or California State Personnel Board criteria for Associate State Archaeologist or State Historian II. Applicable U.S. laws include, but may not be limited to, Section 304 of the National Historic Preservation Act (16 USC 470w-3) and the Archaeological Resources Protection Act (16 USC 470hh). California state laws that apply include, but may not be limited to, Government Code Sections 6250 *et seq.* and 6254 *et seq.* Furthermore, disclosure of archaeological site location information to individuals other than those meeting the U.S. Secretary of the Interior's professional standards or California State Personnel Board criteria for Associate State Archaeologist or State Historian II violates the California Office of Historic Preservation's records access policy. Location information regarding aspects of the built environment is not restricted.

REDACTED VERSION

This report has been revised to exclude sensitive and confidential information related to cultural resource locations.



TABLE OF CONTENTS

STATEMENT OF CONFIDENTIALITY	1
MANAGEMENT SUMMARY	1
1.0 INTRODUCTION	2
2.0 PROJECT LOCATION AND DESCRIPTION	2
3.0 REGULATORY SETTING	5
3.1 THE CALIFORNIA ENVIRONMENTAL QUALITY ACT.....	5
3.2 CALIFORNIA REGISTER OF HISTORICAL RESOURCES	6
3.3 IMPERIAL COUNTY OPEN SPACE/PRESERVATION GOALS, OBJECTIVES AND POLICIES	7
4.0 NATURAL SETTING	9
5.0 CULTURAL SETTING	10
5.1 PREHISTORY.....	10
5.2 ETHNOHISTORY	14
5.3 HISTORIC PERIOD	18
6.0 METHODS.....	27
6.1 RECORD SEARCH	27
6.2 NATIVE AMERICAN CONSULTATION	27
6.3 FIELD SURVEY	27
7.0 REPORT OF FINDINGS	28
7.1 RECORD SEARCH	28
7.2 RESULTS OF NATIVE AMERICAN SACRED LANDS INVENTORY.....	36
7.3 RESULTS OF FIELD SURVEY	38
8.0 CONCLUSIONS	50
8.1 INTERPRETATION OF CULTURAL RESOURCES RECORDED DURING THE FIELD SURVEY	51
9.0 MANAGEMENT CONSIDERATIONS.....	51
9.1 30-ACRE EAST JESUS PARCEL.....	51
9.2 160-ACRE SALVATION MOUNTAIN PARCEL.....	52
9.3 REMAINING 450-ACRE SLAB CITY PARCEL.....	52
10.0 REFERENCES CITED	53



LIST OF TABLES

TABLE 1: PREVIOUS CULTURAL RESOURCE STUDIES WITHIN THE PROJECT AREAS.	29
TABLE 2: CULTURAL RESOURCES RECORDED WITHIN THE PROJECT AREAS.	29
TABLE 3: CULTURAL RESOURCE STUDIES WITHIN 1/2-MILE OF PROJECT AREAS.	31
TABLE 4. CULTURAL RESOURCES LOCATED WITHIN 1/2-MILE OF PROJECT AREAS.	32
TABLE 5: NATIVE AMERICAN INDIVIDUALS AND ORGANIZATIONS CONTACTED.	37
TABLE 6: CULTURAL RESOURCES LOCATED WITHIN THE 30 AND 160-ACRE PROJECT AREAS.	50

LIST OF FIGURES

FIGURE 1: CSLC MAP SHOWING THE EAST JESUS AND SALVATION MOUNTAIN PROJECT AREAS.	3
FIGURE 2: PROJECT AREAS SHOWN ON THE USGS 7.5' IRIS WASH AND IRIS QUADRANGLE MAPS.....	4
FIGURE 3: CULTURAL RESOURCE SENSITIVITY MAP (IMPERIAL COUNTY GENERAL PLAN).	8
FIGURE 4: APPROXIMATE LOCATION OF TRIBAL GROUPS IN THE COLORADO DESERT.	15
FIGURE 5: CIRCA 1940 PHOTO OF THE ENTRANCE TO CAMP DUNLAP.	23
FIGURE 6: ARTICLE THAT APPEARS IN THE MARINE CORPS CHEVRON, JANUARY 12, 1946.....	24
FIGURE 7: FIRST SALVATION MOUNTAIN BEFORE IT COLLAPSED IN 1990.	26
FIGURE 8: CURRENT VIEW OF SALVATION MOUNTAIN AND SLAB CITY.....	26
FIGURE 9: 1977 PHOTOGRAPH OF CA. WWII CAMP DUNLAP AIRPLANE REPAIR SHOP.....	30
FIGURE 10: BLACKBURN'S MAP OF IMPERIAL COUNTY (1943).	35
FIGURE 11: MAP OF CULTURAL RESOURCE LOCATIONS [REDACTED].....	36
FIGURE 12: LOOKING WEST AT THE ENTRANCE TO EAST JESUS ART INSTALLATION.	39
FIGURE 14: ART INSTALLATION THAT INCORPORATES OLD CANS LOCATED AT THE ENTRANCE TO EAST JESUS.	40
FIGURE 13: LOOKING NORTHEAST AT SALVATION MOUNTAIN ART INSTALLATION.....	40
FIGURE 15: LOOKING NORTHWEST AT LEVEE (EDS-01) WITHIN THE EAST JESUS PARCEL.....	41
FIGURE 16: USGS 7.5' IRIS WASH QUADRANGLE MAP FROM 1956 SHOWING LEVEES EDS-01 AND EDS-03 AND ROUTE OF THE NILAND-BLYTHE ROUTE (EDS-02/P-13-011464).....	42
FIGURE 17: EDS-05.....	43
FIGURE 18: EDS-06, FEATURE 1 FROM TOP OF FEATURE 3 SHOWING ARTWORK BY ANGELINA CHRISTINA ON LOCATED SOUTH SIDE OF TANK (F1).....	44
FIGURE 19: SKETCH OF EDS-06 SHOWING ASSOCIATED FEATURES.....	45
FIGURE 20: EDS-10, FEATURE 1.	46
FIGURE 21: SKETCH MAP OF EDS-10 SHOWING FEATURE LOCATIONS.....	47
FIGURE 22: EDS-13. FORMER CAMP DUNLAP MAIN GATE GUARD POST BUILDING, P-13-003182.	48
FIGURE 23: MAP SHOWING LOCATIONS OF CULTURAL RESOURCES OBSERVED AND RECORDED [REDACTED].	49

LIST OF ATTACHMENTS:

- ATTACHMENT A: SCIC Literature Search Results [REDACTED TO EXCLUDE CULTURAL RESOURCE LOCATION MAP]
- ATTACHMENT B: Native American Correspondence
- ATTACHMENT C: DPR 523 Forms [REDACTED TO EXCLUDE EDS-04, EDS-07 and EDS-11]

MANAGEMENT SUMMARY

Evans & De Shazo, LLC was contracted by the California State Lands Commission (CSLC) to conduct a cultural resource study for the *Imperial County Environmental, Cultural, and Other Clearance Survey Project*. The Project includes the subdivision of a 640-acre parcel into three parcels (30, 160 and 450-acres in size) that the CSCL proposes to sell. The parcel is located two miles east-northeast of Niland, Imperial County, California and encompasses all of Section 36 of Township 10 South, Range 14 East. The Project Area includes the 30-acre parcel referred to as "East Jesus" and the proposed 160-acre parcel referred to as "Salvation Mountain." A record search was conducted for the entire 640-acre parcel, but only the proposed 30 and 160-acre parcels were subject to a field survey. A subsequent field survey is planned in October 2015 for the remaining 450-acre parcel referred to as "Slab City."

In accordance with the California Environmental Quality Act (CEQA), "Projects" within the State of California are required to undergo an environmental review to determine if there are environmental impacts associated with implementing a project. Although there is no current project planned for the 30 and 160-acre parcels, a cultural resource study was conducted to analyze potential effects to cultural resources due to the planned subdivision and sale of the land. As such, the entire 640-acre parcel is being treated as part of the environment under CEQA based on the potential subdivision and sale of the parcels.

This cultural resource study includes a background literature review and records search conducted by the South Coastal Information Center (SCIC) located in San Diego, California; a search of the Sacred Lands file conducted by the Native American Heritage Commission (NAHC); and a reconnaissance level field survey of the proposed 30 and 160-acre parcels. The results, conclusions and management considerations are presented in this report.

The results of the record search indicate that the 640-acre parcel was previously surveyed for cultural resources (BLM 2004, 2001; von Werlhof 1985), and the Salvation Mountain Project Area contains two previously recorded cultural resources: P-13-003181 and P-13-003182, associated with the Camp Dunlap Marine Corps base that operated within the parcel from 1942 to 1945. [REDACTED]

A reconnaissance level field survey of the proposed 30-acre East Jesus and 160-acre Salvation Mountain parcels was conducted between August 18 and 20, 2015. Archaeologists revisited the locations of previously recorded cultural resources within the Project Area, including P-13-003181 and P-13-003182, associated with Camp Dunlap. P-13-003181, a former airplane repair building, was not relocated. P-13-003182 and 10 additional cultural resources (EDS-01, EDS-02, EDS-03, EDS-04, EDS-05, EDS-06, EDS-07, EDS-08, EDS-10 and EDS-11) were identified and recorded on Department of Parks and Recreation (DPR) 523 forms (Attachment C). One of the historic-era resources is located within the 30-acre East Jesus Project Area; nine are located within the 160-acre Salvation Mountain Project Area; and one bisects both Project Areas. No prehistoric resources were identified.

1.0 INTRODUCTION

Evans & De Shazo, LLC was contracted by the California State Lands Commission (CSLC) to conduct environmental, cultural, and other clearance surveys for approximately 640 acres of land located in Niland, Imperial County, California. The CSLC manages these lands, granted by Congress, in support of California's public schools. The CSLC is proposing to subdivide the 640-acre parcel into three parcels, a 30-acre, a 160-acre, and a 450-acre parcel, and sell them individually. As trustee of the School Land Bank Trust, the Commission has authority to exchange or sell these lands with the proceeds deposited to the School Land Bank Fund in support of the California State Teachers' Retirement System.

Prior to subdividing and selling the parcels, the CSLC must first determine if there are any historical resources present that could be affected by the proposed subdivision and sale. According to the California Environmental Quality Act (CEQA), cultural resources are aspects of the environment that require identification and assessment (14 CCR 15064.5 and PRC 21084.1) prior to implementation of any non-exempt project. Evans & De Shazo, LLC was retained to conduct a cultural resource evaluation to inventory potentially significant cultural resources located within the 640-acre parcel and evaluate potential effects to those resources from the proposed sale.

The methods used to determine the presence or absence of potentially significant cultural resources includes a record search and literature review of the entire 640-acre parcel and a field survey of the proposed 30-acre and 160-acre parcels. The study was based on specific guidelines regulating the implementation of CEQA, the principal statute mandating environmental assessment of projects in California, codified in the California Code of Regulations (CCR), Title 14, Chapter 3, Sections 15000 et seq. This report follows Archaeological Resource Management Reports (ARMR) Recommended Contents and Format (ARMR Guidelines) developed by the California Office of Historic Preservation (OHP) for the preparation of archaeological reports.

2.0 PROJECT LOCATION AND DESCRIPTION

The 640-acre parcel is located two miles east-northeast of Niland, Imperial County, California. Niland is a small community on the southeast side of the Salton Sea, approximately 80 miles southeast of Palm Springs and 19 miles north of Brawley. The parcel is accessed via Beal Road, which heads east from Niland's Main Street and traverses the property in a southwest-northeast direction.

The CSLC is proposing to subdivide the 640-acre parcel, known as Assessor's Parcel Number 003-240-005, into three parcels to facilitate their sale. The Chasterus Foundation, a 501(c)3 tax-exempt, non-profit organization, currently operates an art installation at the north end of the 640-acre property called East Jesus and are proposing to purchase the 30-acre lot that contains art installations associated with "East Jesus." The non-profit group, Salvation Mountain Inc. proposes to purchase the southwest quarter of the 640-acre parcel, which encompasses 160-acres referred to as Salvation Mountain. It includes the large folk art style installation called "Salvation Mountain." The remaining 450-acre parcel, referred to as Slab City, will be the focus of a subsequent survey before being sold in the future to an unknown buyer.

The 640-acre parcel encompasses all of Section 36 within Township 10 South, Range 14 East. The Project Area includes the proposed 30-acre East Jesus parcel, located in the northern quarter of Section 36 and the proposed 160-acre Salvation Mountain parcel, which encompasses the southwest quarter of Section 36 (see Figure 1), as depicted on the USGS 7.5' Iris Wash (1992) and Iris (1992) quadrangles (Figure 2). The Universal Transverse Mercator (UTM) grid coordinates to the approximate center of each Project Area are:

East Jesus UTM:

3681456 meters North
642826 meters East, Zone 11

Salvation Mountain UTM:

3680280 meters North
642244 meters East, Zone 11

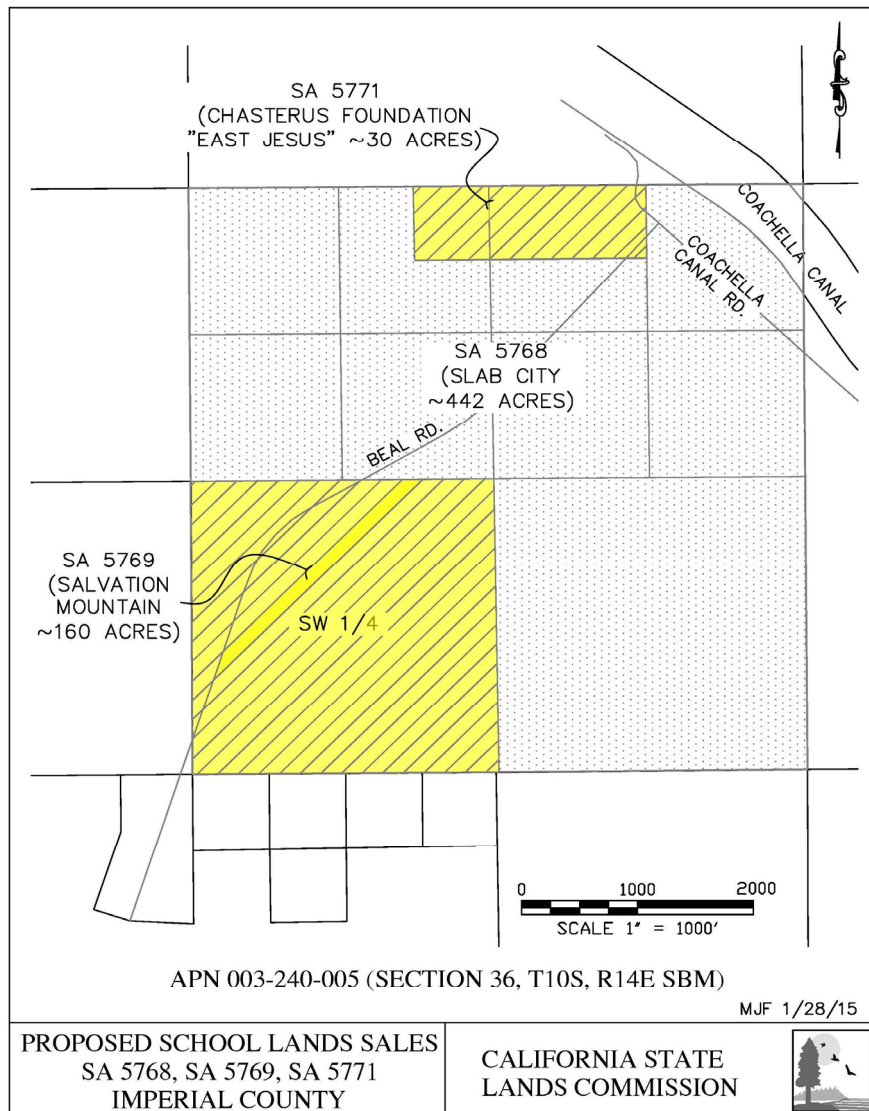


Figure 1: CSLC map showing the East Jesus and Salvation Mountain Project Areas.

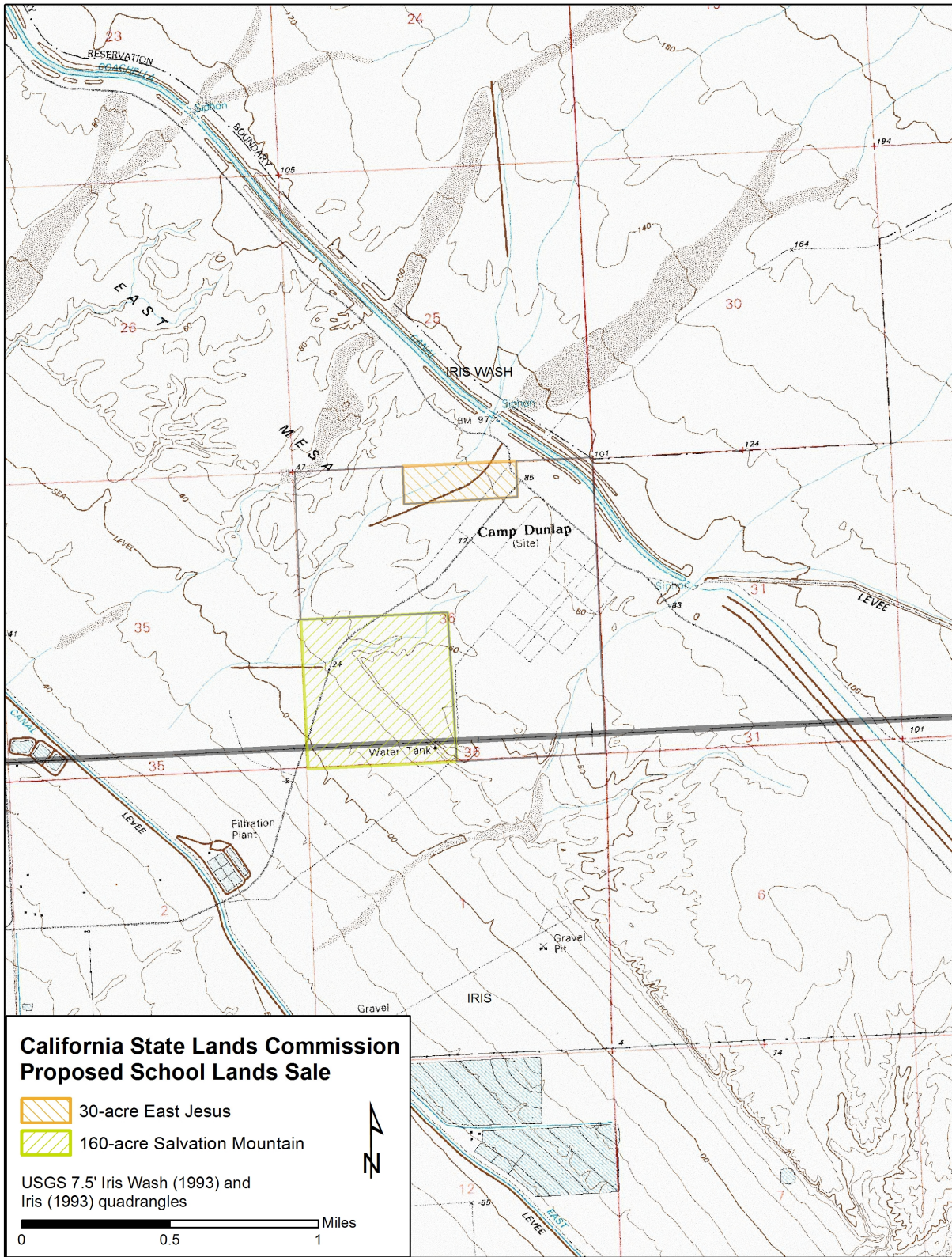


Figure 2: East Jesus and Salvation Mountain Project Areas shown on the USGS 7.5' Iris Wash and Iris quadrangle maps.

3.0 REGULATORY SETTING

3.1 THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

CEQA requires that potential impacts to the environment be identified and assessed prior to commencement of any project that has the potential to effect the environment. Historical resources are recognized as part of the environment under CEQA (14 CCR 15064.5 and PRC 21084.1). The five classes of cultural resources defined by the OHP include:

- **Building:** A structure created principally to shelter or assist in carrying out any form of human activity. A “building” may also be used to refer to an historically and functionally related unit, such as a courthouse and jail or a house and barn.
- **Structure:** A construction made for a functional purpose rather than creating human shelter. Examples include mines, bridges, and tunnels.
- **Object:** Construction primarily artistic in nature or relatively small in scale and simply constructed. It may be movable by nature or design or made for a specific setting or environment. Objects should be in a setting appropriate to their significant historic use or character. Examples include fountains, monuments, maritime resources, sculptures, and boundary markers.
- **Site:** The location of a significant event. A prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archaeological value regardless of the value of any existing building, structure, or object. A site need not be marked by physical remains if it is the location of a prehistoric or historic event and if no buildings, structures, or objects marked it at that time. Examples include trails, designed landscapes, battlefields, habitation sites, Native American ceremonial areas, petroglyphs, and pictographs.
- **District:** Unified geographic entities which contain a concentration of historic buildings, structures, or sites united historically, culturally, or architecturally.

According to California Code of Regulations Section 15064.5, cultural resources are significant if:

- The resource is listed in, or eligible for listing in the California Register of Historic Resources (CRHR) (Public Resources Code 5024.1, Title 14 CCR, Section 4850 et. seq.);
- Listed in, or eligible for listing in, the National Register of Historic Places (NRHP);
- Included in a local register of historical resources, as defined in an historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resource Code; or
- Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the lead agency’s determination is supported by substantial evidence in light of the whole record.

3.2 CALIFORNIA REGISTER OF HISTORICAL RESOURCES

A cultural resource is any resource related to human activity that is at least 45 years of age. An historical resource (including prehistoric and historic sites) is at least 45 years of age and eligible for listing in CRHR. The CRHR is an authoritative guide to the state's historical resources and to which properties are considered significant for the purposes of CEQA. A resource may be listed as an historical resource in the CRHR if it has integrity and meets any of the following criteria:

1. 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. Associated with the lives of persons important to local, California or national history;
3. 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. Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

The CRHR defines "integrity" as, "the authenticity of an historical resource's physical identity, evidenced by the survival of characteristics that existed during the resource's period of significance" (OHP 1997). Enough of these characteristics must remain to convey the reasons for its significance. These regulations specify that integrity is a quality that applies to historical resources in seven ways: **location, design, setting, materials, workmanship, feeling, and association**. An historical resource must retain **most** of these qualities to possess integrity.

CEQA (PRC 21083.2) also distinguishes between two classes of archaeological resources: archaeological sites that meet the definition of an historical resource as described above, and "**unique archaeological resources**." A "unique archaeological resource" has been defined in CEQA as 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, or
- 3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

The fact that a resource is not listed in, or determined to be eligible for listing in the CRHR, or included in a local register of historical resources (pursuant to Section 5020.1(k) of the PRC), or identified in an historical resources survey (meeting the criteria in Section 5024.1(g) of the PRC) does not preclude a lead agency from determining that the resource may qualify as an historical resource as defined in PRC sections 5020.1(j) or 5024.1.

3.3 IMPERIAL COUNTY OPEN SPACE/PRESERVATION GOALS, OBJECTIVES AND POLICIES

The Conservation and Open Space Element of Imperial County's General Plan provides detailed plans and measures for the preservation and management of biological and cultural resources. The goals and objectives outlined in the Conservation/Open Space Element pertaining to cultural resources states:

- **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.
 - **Objective 3.1** Protect and preserve sites of archaeological, ecological, historical and scientific value, and/or cultural significance.

It is the Policy of Imperial County to identify and document significant historic and prehistoric resources, and provide for the preservation of representative and worthy examples; and to recognize the value of historic and prehistoric resources, and assess current and proposed land uses for impacts upon these resources.

3.3.1 County Programs

- The County will use the environmental impact report (EIR) process to conserve cultural resources. Public awareness of cultural heritage will be stressed. All information and artifactual resources recovered in this process will be stored in an appropriate institution and made available for public exhibit and scientific review.
- Encourage the use of open space easements in the conservation of high value cultural resources.
- Consider measures which would provide incentives to report archeological discoveries immediately to the Imperial Valley College - Baker Museum.
- Coordinate with appropriate federal, state, and local agencies to provide adequate maps identifying cultural resource locations for use during development review. Newly discovered archeological resources shall be added to the "Sensitivity Map for Cultural Resources" (see Figure 3).
- Discourage vandalism of cultural resources and excavation by persons other than qualified archaeologists. The County shall study the feasibility of implementing policies and enacting ordinances toward the protection of cultural resources, as can be found in California Penal Code, Title 14, Point 1, Section 622-1/2.

3.3.2 Local Preservation Ordinance

To help meet this goal and objective, Imperial County has designated an S-2 zone, which is considered to be the open space preservation zone implemented with the intent to preserve the cultural, biological and open space areas that are rich and natural, as well as cultural resources. While certain uses are allowed within the S-2 zone, such uses must be compatible with the intent of the open space and conservation element of the general plan.

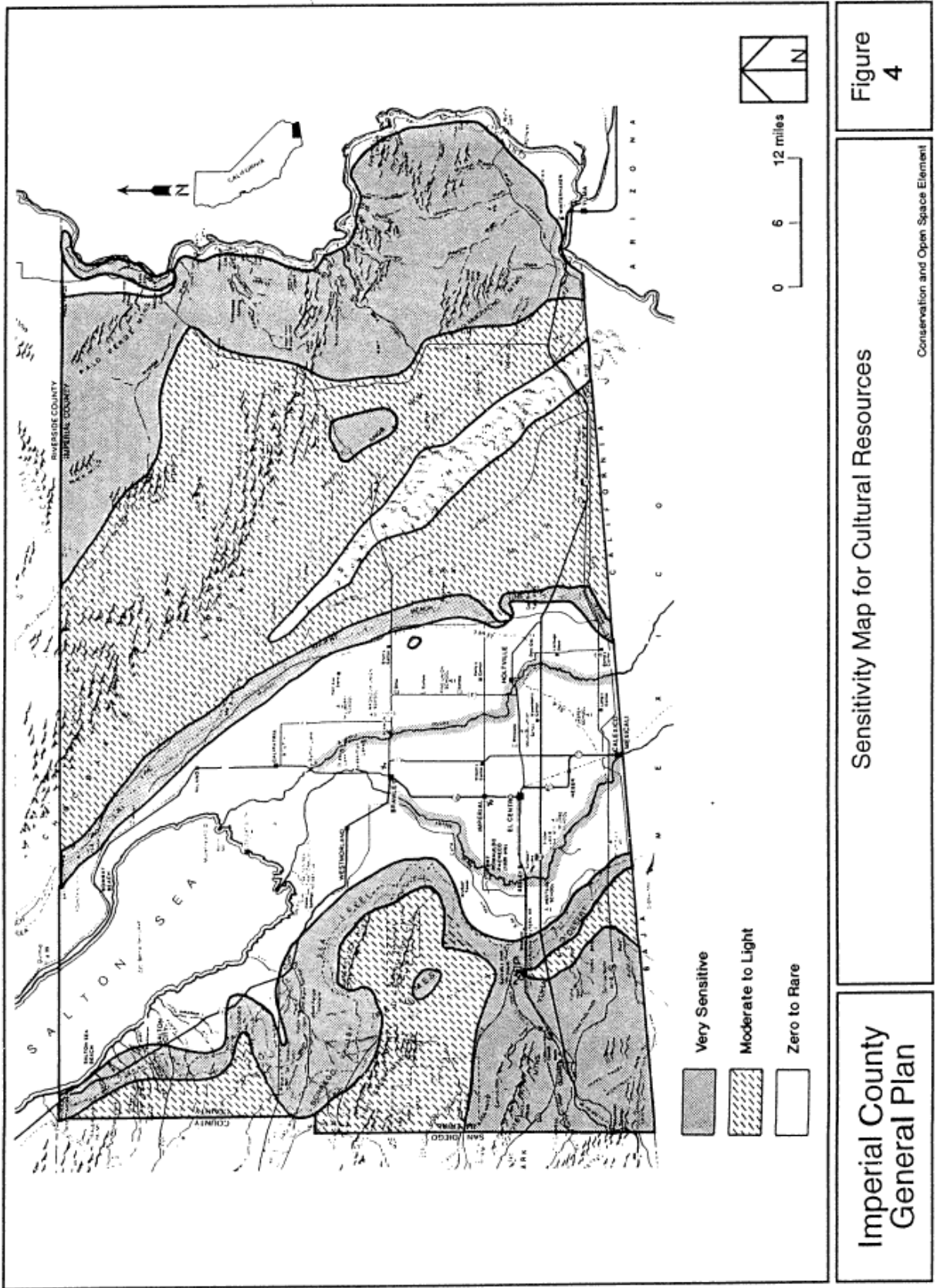


Figure 3: Cultural Resource Sensitivity Map (Imperial County General Plan).

4.0 NATURAL SETTING

The Project Area is located in the central basin of the Colorado Desert within the Salton Trough (aka Salton Sink), a northwestern landward continuation of the Gulf of California rift that extends 140 miles northwest from the head of the Gulf of California. The Trough ranges in width from a few miles at its northwest point to 70 miles at the United States-Mexico border and is surrounded by mountains, except at the south side where a barrier formed by the Colorado River Delta separates the Salton Trough from the Gulf of California (Waters 1981). The Trough is traversed by the San Andreas Fault and bordered on the east by the Chocolate Mountains, which stretch more than 60 miles in a northwest to southeast direction and rise to an elevation of 2,475 feet (ft) above sea level (asl). The Trough was formed by a gradual sinking of the land concurrent with uplift of the surrounding mountains during the Miocene, Pliocene, and Pleistocene eras (Dibblee 1954). Much of the Salton Trough lies below sea level. At its lowest elevation lies the Salton Sea, a 376-square mile saltwater lake located about six miles to the east of the Project Area.

The Colorado Desert is a hot, dry desert region that consists of low valleys surrounded by high mountains. The average annual rainfall and temperature vary with elevation. In much of the lower region rainfall ranges from 2.5 centimeters (cm) to 5 cm per year; while other areas receive as much as 20 to 25 cm of precipitation per year. The marked elevation changes in the area also reflect variations in temperature. In most of the Colorado Desert, summer temperatures range between 100° and 120° Fahrenheit (F), while in the mountainous regions, summer temperatures tend to hover around 90° F. The winters are windier and more variable in temperature than in the summer, but rarely reach below freezing (University of California, Santa Barbara 2015; Warren 1984:342).

The vegetation reflects the arid environment and variations in rainfall and temperature, which results in regional differences in vegetation. Within the Colorado Desert, the lack of frost enables succulents and other frost sensitive plants to thrive, such as Cholla Bloom, Munz cholla, Ocotillo, Agave, Barrel cactus, and Encelia (rabbit brush). The creosote bush (including ocotillo and cholla cactus) is the dominant plant type throughout the lower elevations of the Colorado and Mojave deserts. The creosote bush forms a monotonous cover over vast areas and surrounds riparian plant communities in large washes and other locations where water is available. Plant communities around springs, marshes, and streambeds include tule, cattail, and various types of grasses. In washes, mesquite, saltbush, Desert ironwood, Smoke tree, and Palo verde are found. In higher elevations, the creosote bush community gives way to the black bush community, including yuccas and agaves. Fault lines, such as those located east of the Salton Sea, and the high western mountains create many springs that support California fan palm oases and reflect characteristics of a wetter past climate (University of California, Santa Barbara 2015). Local fauna consist of jackrabbits, desert cottontails, wood rat and various small rodents, lizards and snakes. Large game animals, such as mountain sheep, deer, and pronghorn are rare in most places.

Periodically in the past, when the Colorado River shifted its course and flowed north instead of south into the Gulf of California, the Salton Trough filled and formed a large freshwater lake called Lake Cahuilla. Eventually, the river diverted back to its original course, cutting off water supply to Lake Cahuilla, which then slowly evaporated and disappeared. This cycle occurred countless times during the Pleistocene glacial age and into the Holocene (Morton 1977). The last filling is thought to have been in the 1600s; the last of up to four cycles that may have occurred since A.D. 1000 (Love and Dahdul 2002;

Waters 1981; Wilke 1978). Lake Cahuilla was six times the size of the Salton Sea, stretching almost 100 miles long, 35 miles across at its widest point, and 300 feet deep (Waters 1981:374; Wilke 1978). The lake appears to have retreated in steps, as more than a dozen separate shorelines are shown in aerial photos of the western shore and the Coachella Canal between Niland and Mecca. When the lake finally disappeared, it left a dry, smooth, hard packed surface, or playa (Singer 2015).

In 1901, for farming purposes, water was intentionally diverted from the Colorado River through a canal into the Salton Trough. When silt eventually blocked the entrance to the canal, several unprotected cuts were made into the river and water was again diverted into Imperial Valley. However, in 1905, due to heavy spring run-off, the Colorado River broke through unprotected diversion points and headed north, flooding the Valley. When the breaks were finally repaired, a year and a half later, the Colorado River reversed its course and began flowing into the Gulf of California. The flood waters that were left behind settled into the lowest elevations of the Salton Trough forming the Salton Sea.

The Project Area is between zero and 80 ft asl and contains fine-grained Colorado River sediments surrounded by locally derived coarse-grained alluvium and colluvium. Lake Cahuilla sediments and Holocene alluvial fan deposits are located within the Project Area, and an old shoreline of Lake Cahuilla is located near the 40-foot contour line within the 160-acre Salvation Mountain parcel.

In the past, variations in elevation, temperature, and rainfall produced varied distributions of plants and animal resources that supported Native American populations who adapted to this type of resource distribution. Most Native American groups developed a complex and detailed knowledge of local plants and animals, and moved seasonally to take advantage of resources as they became available throughout the year (Warren 1984:343). When water was present in Lake Cahuilla, several species of fish, shellfish, migratory aquatic birds, and riparian flora and fauna flourished, which attracted more permanent human settlement along its shores.

5.0 CULTURAL SETTING

This section describes the prehistoric, ethnographic and historic settings of the Project Area. Each context provides the basis for understanding cultural resources that are present and how they may relate to broader patterns of resource use and settlement of the region.

5.1 PREHISTORY

The cultural chronologies, settlement patterns, and cultural process of the Colorado Desert is a synthesis based on several studies grounded in the pioneering work of Malcolm J. Rogers (1939, 1945, 1966) who conducted wide-ranging surveys and limited excavations throughout the Colorado and Sonoran deserts. Since his early work, other prehistorians have added new data and interpretations drawn from Cultural Resource Management (CRM) projects and academic research that have refined our understanding of the region's cultural chronology (Crabtree 1981; Schaefer 1994b; Schaefer and Laylander 2007; Warren 1984; Wilke 1976).

The general cultural chronology for the Colorado Desert is divided into four distinct periods that span a 12,000 year period (Schaefer 1994a:63-66). They include the Paleo-Indian Period, the Early Archaic Period, the Late Archaic Period, and the Late Prehistoric Period. The dates herein represent estimates

based on radiocarbon dates corrected for changes in atmospheric carbon, and are associated with calibrated (cal) ages of calendar dates represented in years before the present (BP), or the equivalent ages identified as B.C. or A.D. In this region of California, the term Archaic Period refers to a period of time preceding the introduction of ceramics. The Late Prehistoric Period marks the introduction of ceramic technology in this region.

5.1.1 Paleo-Indian Period, Malpais, San Dieguito I (ca. 8,000 - 10,000 B.C. to 6,000 B.C.)

Solid evidence of human occupation in the Colorado Desert during this period is scarce and poorly understood. However, there have been several discoveries of isolated fluted points in various locations adjacent to the Colorado Desert, including finds in the Pinto Basin, the Yuha Desert, and at Ocotillo Wells (Dillon 2002; Rondeau 2001). These fluted points have no direct associated radiometric dates to anchor their age, but are thought to be similar in cultural affiliation and age as fluted projectile points associated with the Clovis tradition dating to around 11,500 cal years BP. While isolated fluted points are rare in the Colorado Desert, well-documented fluted point finds have been recorded in the Mojave Desert to the north and in coastal southern California to the west. The lack of evidence within the Colorado Desert is thought to be due to instability of landforms in the Salton Basin and Colorado River Valley and limited archaeological investigations (Schaefer and Laylander 2007:247). Lithic assemblages in this region, due to their heavy patination, were thought to be reflective of a very ancient culture (23,000 - 18,000 BC) that Rogers referred to as Malpais (Rogers 1939, 1945).

Rogers first applied the name Malpais to designate the most ancient cultural materials found in the Colorado Desert, but later re-classified these materials as San Dieguito I (Rogers 1939). Hayden (1976) applied San Dieguito I to similar flaked stone materials, including heavily patinated choppers, scrapers and other core-based tools found on ancient desert pavement surfaces. Hayden also identified shell tools, aboriginal trails, cleared circles, and geoglyphs as elements of the very early Malpais cultural pattern. The heavy patina on the surface of the lithic artifacts was the principal bases for Hayden establishing their antiquity.

The San Dieguito Complex is now recognized as a terminal Pleistocene and early Holocene cultural tradition with the Colorado Desert area. Rogers (1939) initially identified this pattern based on surveys he conducted in coastal southern California and in the Colorado Desert in the 1930s. The San Dieguito archaeological assemblage consists mostly of flaked stone materials, such as percussion-flaked cores and flake tools, crescents, dome-shaped and keeled choppers, planes, and scrapers. Other artifacts in the assemblage include less intensively flaked spokeshaves, leaf-shaped points, and large, stemmed lanceolate-shaped dart points of the Western Stemmed Series (Lake Mojave and Silver Lake types). Groundstone artifacts are rare or completely absent (Warren and Crabtree 1986). Similar San Dieguito-like artifacts have been discovered around Pleistocene lakes, on old river terraces, at Ventana Cave in Arizona, and close to the San Diego coast (Rogers 1966; Warren 1966). Such materials are part of a wide-spread prehistoric complex known as the Western Pluvial Lakes Tradition (Bedwell 1970), which is related to the Lake Mojave Complex first identified in the Mojave Desert to the north (Campbell et al. 1937; Warren 1967).

At the Salton Sea Test Base sites, situated on the bed of ancient Lake Cahuilla 30 meters below sea level, a flaked stone assemblage was found that includes projectile points and artifacts similar to the San

Dieguito or Lake Mojave Complex. Two eccentric crescents and a Lake Mojave dart point found there attest to early cultures being active in this region (Apple et al. 1997; Wahoff 1999).

Native settlements during this time were concentrated around bodies of water created by glacial melting. Sites of the San Dieguito complex tend to occur on flat areas, with larger settlements on mesas and terraces overlooking major washes and around lake shores where a variety of plant and animal resources were obtained. These sites exhibit a wide array of stone implements thought to be reflective of a specialized focus on hunting. Faunal remains reveal a broad spectrum subsistence pattern including procurement of many small game animals. It appears that small, mobile bands exploited both small and large game and collected a variety of seasonally available wild plants over a large geographic region. An absence of milling stones indicates that processing of hard seeds and nuts was not emphasized.

5.1.2 Early Archaic Period, Pinto, and Amargosa (6,000 B.C. to 2,000 B.C.)

The Early and Late Archaic Periods, regional populations were expanding, leading to diversification and intensification of resources, and regional communication and exchange networks were becoming better established. However, there is a distinct lack of archaeological evidence for prehistoric sites dating to this time in the Colorado Desert (Schaefer 1994b; Warren 1984). Some researchers suggested the Altithermal, a mid-Holocene warm-dry interval that lasted from about 5,000 to 2,000 B.C., created unstable and inhospitable environmental conditions in the California deserts that may have forced mobile hunter-gatherers to shift subsistence pursuits towards more hospitable regions (Crabtree 1981; Schaefer 1994; Wilke 1976). Other researchers believe that occupations dating to this time period underlay more recent archaeological assemblages and have been difficult to recognize or may have been misidentified as earlier San Dieguito I-era sites (Schaefer 1994a, 1994b). At lower elevations in the Salton Trough, actions of ancient Lake Cahuilla and extensive agricultural activities may have obliterated these early occupations.

Archaic sites are typically identified by diagnostic dart points (classified as members of the Pinto, Elko, and Gypsum Series) and the lack of pottery. Pinto and Amargosa patterns were regional specializations within general hunting and gathering adaptations that characterize the Early and Late Archaic periods. These patterns tend to occur more frequently in the northern Great Basin, and in the Mojave and Sonoran deserts; however a few Pinto or Amargosa (Elko series) projectile point types have been identified at sites located in the Colorado Desert. Dart points, milling equipment, and rock-lined storage pits were discovered at Indian Hill Rockshelter in Anza-Borrego Desert State Park and at a rockshelter in Tahquitz Canyon (McDonald 1992; Schaefer 1994a, 1994b; Wilke et al. 1986). At Indian Hill Rockshelter (CA-SDI-2537) three burials were also discovered that were inhumations, rather than the more typical lower Colorado River burial pattern of cremations. One burial was dated to 4,072 cal BP (McDonald 1992). During the Salton Sea Test Base surveys, several large dart points were identified as apparent grave offerings associated with a flexed burial (CA-IMP-109), which was found under a rock cairn dating to ca. 5790 ± 250 cal BP (Taylor et al. 1985; Warren 1984). Additionally, two open-air campsites recognized near the ancient shores of Lake Cahuilla in the northern Coachella Valley date to a time before 1000 cal B.C. and represent an occupation terminating at cal A.D. 700. These sites contained fish, shell fish, and waterfowl remains deeply buried in sand dunes near the maximum shoreline of Lake Cahuilla, which testifies to a lakeside adaptation during this period (Love and Dahdul 2002).

5.1.3 Late Archaic Period (ca. 2000 B.C. to A.D. 500)

The Late Archaic Period is characterized by increased adaptation to warmer and drier conditions and possible periodic infilling of Lake Cahuilla (Waters 1981:386). There also appears to have been a slight increase in population (Love and Dahdul 2002:72). Mobile hunter-gatherer bands utilizing atlatls for hunting and milling stones for seed and nut processing operated out of a limited number of base camps located in optimal areas on the boundaries of the Salton Trough and on the shoreline of ancient Lake Cahuilla. There also appears to have been a decrease in the availability of game animals and an increased reliance on plant resources. Later Archaic components see a replacement of Pinto projectile points by Elko and Gypsum types. Dart points that are more finely crafted with pressure retouch and finishing are also present. During this time, milling slabs (metates) and handstones (manos) become more common, suggesting that plant procurement (particularly of hard nuts and seeds) were an important part of the subsistence base. Mortar and pestle technology is also added to the assemblage at the very end of the Late Archaic Period (Warren 1984).

Occupation during the Late Archaic Period is well established from investigations at a dozen or so sites located at the north end of ancient Lake Cahuilla (Love and Dahdul 2002). Deeply buried midden deposits with clay-lined features, living surfaces, cremations, hearths, and a rockshelter deposit have been found at various sites in association with calibrated radiocarbon dates ranging from before 1000 B.C. to A.D. 700. Radiocarbon dates of almost 1000 B.C. and associated bird and fish bone confirm a Late Archaic Period occupation at Lake Cahuilla. Larger habitation sites remained elusive in the Colorado Desert until 2006, when a series of deeply buried midden deposits and some house floor features were discovered under alluvial fan and dune formations at the very northern end of the Coachella Valley near Desert Hot Springs.

In general, archaic adaptation in the Colorado Desert appears to be associated with wide-spectrum foraging and an emphasis on processing and storing seeds and nuts. Mobile foragers followed a pattern of transhumance - timing their movements and establishing their settlements to correlate with the differential seasonal availability of key plant and animal resources (Schaefer 1994). They may have also strategically located more permanent sites on the edges of the Salton Basin and near the ancient shores of Lake Cahuilla.

5.1.4 Late Prehistoric Period, Patayan, Hakataya, Yuman (A.D. 500 to A.D. 1700)

The Late Prehistoric Period dates from A.D. 500 to approximately A.D. 1700. Prehistoric sites are more frequently represented during the Late Prehistoric than in any other time period. This period is marked by significant changes in subsistence practices and settlement patterns. Paddle and anvil pottery (buff and brownware ceramics) and floodplain farming (corn, beans, and squash) first appear, and these technological innovations are believed to have been introduced either directly from Mexico or indirectly via the Hohokam, on the Gila River in the American Southwest (McGuire and Schiffer 1982; Rogers 1945; Schroeder 1975, 1979). Ceramic containers allowed populations to preserve seeds, dried meats, and other food materials for long periods of time, which allowed for more predictable seasonal rounds and gathering forays to be extended further from base camp. The bow and arrow is also introduced during this time, as evident by Cottonwood and Desert Site-notched point types. Treatment of the dead shifted from the method of inhumation to cremation, and more expedient flake stone tool types emerge.

During this period, small mobile groups practiced a wide-spectrum resource procurement strategy, occupying residential bases and temporary logistical camps as needed to procure seasonally available wild plants and animal resources (Schaefer 1994a:66). Groups traveled between the Colorado River and Lake Cahuilla when it was present. Lake Cahuilla infilled at least four times during this period; no lacustral intervals have been identified between A.D. 1 and 700 (Waters 1981:384-386). During times of infilling, the shores of ancient Lake Cahuilla attracted dense settlement, and during times of desiccation, people moved away from the receding lakeshore towards streams and rivers, such as the Colorado River, and into the mountains (Schaefer 1994a:66).

Social and ecological adaptations to the environment are reflected in the diversity of site types and artifact assemblages. Residential base camps contain anthropogenic soil, numerous house pits and a greater number of artifacts, while sites having only sparse artifact associations are suggestive of short-term use. Faunal assemblages also vary between site types. Some sites contain mostly fish, others mostly migratory waterbirds, while some contain more diverse resources, including lagomorphs and large mammals. Artifact assemblages include brown and buff-colored ceramics, a variety of groundstone items, projectile points, ornaments, and cremations (Love and Dahdul 2002:72).

The Late Prehistoric Period is associated with the Patayan cultural pattern that is characterized by cremations placed in ceramic vessels and a well-established trail system. The term Patayan was developed by Hargrave (1938) from a Walapai word for "old people" and was meant to designate the ancestral peoples related to the contemporary Yuman linguistically affiliated cultures, but also with reference to the linguistically unrelated Desert Cahuilla. Schroeder (1961, 1975, 1979) expanded on Roger's Yuman pattern by introducing the concept of the Hakataya, which linked ceramic types with historically identified ethnolinguistic groups. The Patayan cultural complex was subdivided into Patayan I-III. Patayan I dates from ca. A.D. 800 to 1050 and is a time when small mobile groups with ceramic technology seasonally settled along the Lower Colorado River and employed a similar tool kit as the Hohokam (Altschul 1994:30). Patayan II (ca. A.D. 1050 to 1500) is coeval with the infilling of Lake Cahuilla and the presence of locally manufactured ceramic types. Patayan III is associated with the recession of Lake Cahuilla approximately 500 years ago and a ceramic type known as the Colorado Buff.

Trade and travel was well established by this time. Trails functioned for "travel to special resource collecting zones, trading expeditions, and possibly warfare" (Schaefer 1994a:30). Non-random concentrations of ceramics (pot drops), trail-side shrines and other evidence of transitory activities are associated with these trails (McCarthy 1993). Trade and travel is also indicated by the distribution of localized resources, such as obsidian from Obsidian Butte (CA-IMP-452) located at the south end of what is now the Salton Sea, soapstone and marine shell from the Gulf of California and the Pacific Coast, Wonderstone (a rock that is naturally stained with bands of red and orange iron oxide and hydroxide) from the south end of the Santa Rosa Mountains, and certain ceramic types.

The Late Prehistoric Period ended with contact between indigenous groups and European explorers. The following period, known as the Protohistoric Period, was brief and marked by small mobile bands settling along the Lower Colorado River and depending on small-scale agriculture, and seasonal hunting, fishing and gathering for subsistence (Altschule 1994:31-32).

5.2 ETHNOHISTORY

At the time of European contact, the Salton Basin was occupied by two distinct native ethnolinguistic groups, the Cahuilla and the Desert Tipai. The Cahuilla occupied the northern half of the basin, while the Desert Tipai (also referred to as Kamia, Kumeyaay, Tipai, and Diegueno) occupied the southern half. The Project Area is located near the boundary of these two groups (see Figure 4). Both groups are described below.

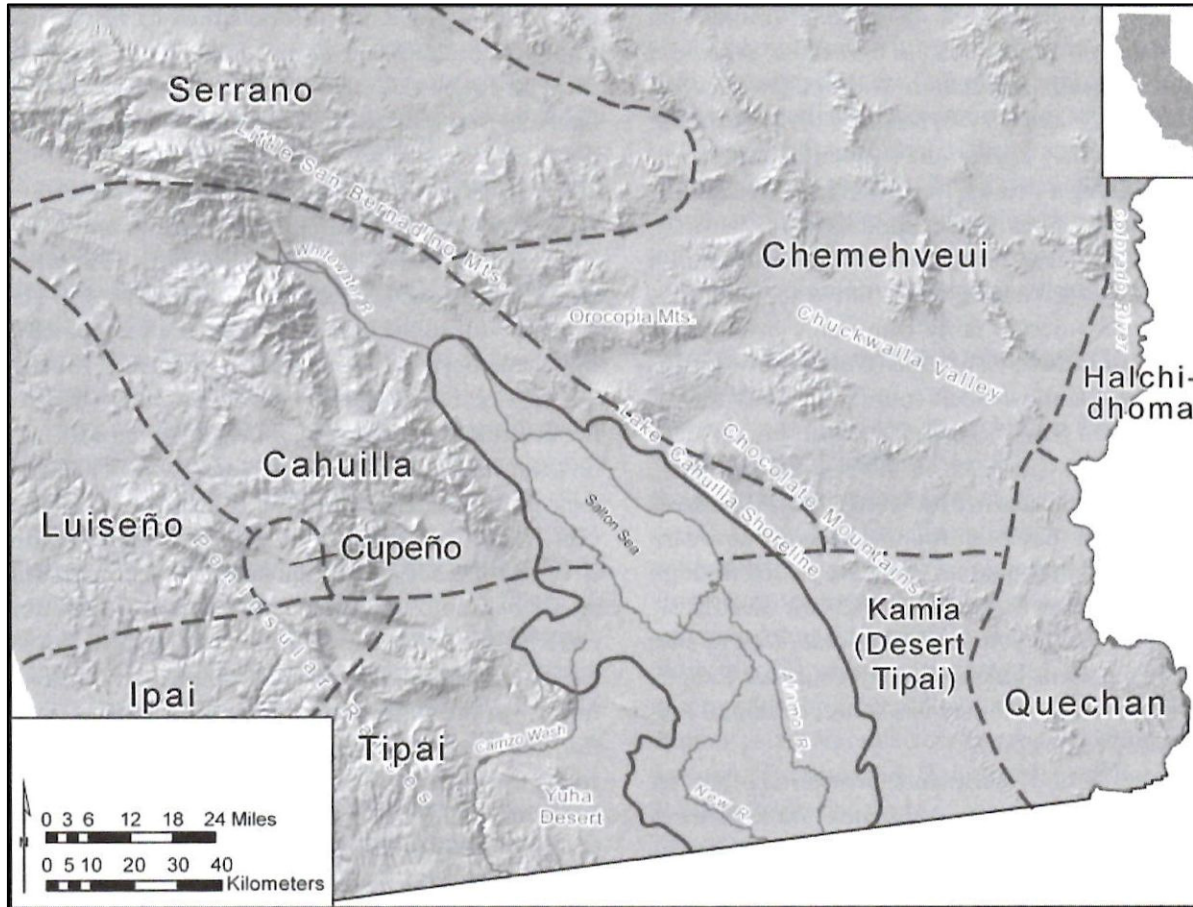


Figure 4: Approximate location of tribal groups in the Colorado Desert (Schaefer and Laylander 2007:256).

5.2.1 The Cahuilla

The Cahuilla have been described by several ethnographers (Bean 1972, 1978; Bean and Saubel 1972; Curtis 1926; Drucker 1937; Hooper 1920; Kroeber 1908; Strong 1929). The Cahuilla language belongs to the Cupan subgroup of the Takic family of the Uto-Aztecan stock. Among the four Cupan languages, Cahuilla is more similar to Cupeño than it is to Luiseño. The Cahuilla occupied most of the area from the summit of the San Bernardino Mountains in the north to Borrego Springs and the Chocolate Mountains in the south, a portion of the Colorado Desert west of Orocopia Mountain to the east, and the San Jacinto Plain near Riverside and the eastern slopes of Palomar Mountains to the west (Bean 1978:575). The Cahuilla territory covered about 2,400 square miles. Natural boundaries such as the Colorado Desert

separated the Cahuilla from the Mohave, Halchidoma, Ipai and Tipai groups, although these groups interacted regularly by intermarriage, trade, ritual, and war. Their territory was bisected by a major trade route called the Cocopa-Maricopa Trail, and at the periphery of two others, called Santa Fe and Yuman. Networks of trails used for hunting, trading and social visiting interconnected village sites.

Villages were typically situated in canyons or on alluvial fans near areas where subsistence resources could be obtained, such as fresh water, and also in locations that provided a natural defense from the wind. Areas near village sites were communally owned, while other lands were divided into tracts that were owned by clans, families, and individuals. Numerous sacred sites marked by petroglyphs and pictographs were associated with each lineage village (Bean 1978:575).

Buildings ranged in size and included brush shelters, dome-shaped buildings, rectangular-shaped houses up to 20 feet long, sweathouses, granaries for storing seeds and food, and ceremonial houses used for rituals, curing and recreational activities. Dome-shaped houses were made by bending willow branches and covering them with palm fronds, tule, or a similar type of plant material that was available. Each house had a front opening and a hearth in the center of the interior with a hole at the top of the roof for smoke to escape. Tule mats covered the doorway and the interior dirt floor.

Acorns were an important food source gathered by men, women, and children during a two to three week period in October and November. After acorns were gathered they were pulverized into flour and leached to remove the tannin. The mesquite produced edible blossoms in June and seed pods in July and August. Cactus, agave, yucca, screwbean, fruits, berries, tubers, roots, and seed-producing plants such as sunflowers, chia, ocotillo, wild squash, and juniper were also eaten. The Cahuilla ate a variety of large game such as deer, and small game such as rabbits, mice, chipmunks, squirrels, and raccoons. Birds were a very important part of the diet as well, and included quail, ducks, and geese. Eagles and ravens were not eaten, but they were both caught and used in ritual activities. Reptiles, including rattlesnakes and lizards, were also food items, as were a variety of insects including ants, grasshoppers, cricket pupae, cicadas, and moth larvae. Fish were caught with arrows, nets, and traps.

Cahuilla pottery was often painted and incised. It was a light, thin, red-ware made by coiling narrow cylinders of clay ropes that were patted between a smooth, rounded stone and a wooden paddle. Vessel types included small-mouthed jars, cooking pots, open bowls, dishes, and pipes (Kroeber 1908). Stone implements, other than milling stone equipment, included soapstone arrow straightners that were incised with linear designs noted to have magical connotations and indicating ownership. Ceremonial implements included charmstones, bull-roarers, clappers, rattles, feathered headdresses and wands, and eagle-feathered skirts.

Members of the Juan Bautista de Anza expedition were some of the first Europeans to pass through their territory in 1774. For the most part, the Cahuilla were unaffected, although some were baptized at missions in San Gabriel, San Luis Rey, and San Diego, and were incorporated into the mission system right away. In 1819, several mission outposts, called "asistencias" were established near the Cahuilla area (San Bernardino, Santa Ysabel, Pala). Some Cahuilla worked seasonally for the Spanish and became influenced by Spanish customs related to cattle ranching, agricultural, trade, wage labor, clothing, language, and religion. When California gained statehood in 1850 the Cahuilla maintained their political and economic autonomy and remained on their lands, making a living by practicing a combination of

traditional activities and wage labor until reservations were established in 1877. After 1891 their economic, political, and social life became closely supervised and suppressed by the federal government until the passing of the Indian Reorganization Act in 1934, which decreased federal control of American Indian affairs and increased Indian self-government and responsibility.

In the 1960s, various government programs financed by the Office of Economic Opportunity and other agencies offered new opportunities and improved conditions for the Cahuilla in terms of their health and education. Although somewhat modified, many traditional values remain important to the Cahuilla, including the use of traditional foods, kin relationships, concern for individualistic ownership of productive goods, reciprocity, the practice of personal and communal rituals, and treatment of the dead.

5.2.2 Tipai-Ipai (Desert Tipai)

The Tipai-Ipai have been described by several ethnographers (Gifford 1918, 1931; Kroeber 1920, 1925; Luomala 1978; Forde 1931). Tipai and its cognate Ipai are names meaning "people" that anthropologists began to use instead of Diegueño and Kamia to designate closely related Yuman-speaking bands that, in the sixteenth century, occupied nearly the entire southern extreme of California and adjoining portions of northern Baja. Since the 1940s, occasional Tipai and Ipai have employed Kameyaay as their tribal name (Luomala 1978). Ipai-Tipai territory extended from approximately 33° 15' latitude in the north to about 31° 30' latitude in the south. The eastern-most Tipai, called the Desert Tipai or Kamia, lived along sloughs like New River and in the adjoining desert, including the Project Area. Their eastern boundary irregularly fronted other Yuman speakers, who often migrated because of feuds or changes in the Colorado floodplains.

The Kamia were directly related by language and culture to the western Ipai, Kumeyaay, and Tipai groups from the mountains and coastal areas of San Diego County and northern Baja. They were more remotely related to the Cocopa and other Yumans in the Colorado River Delta area. Villages consisted of campsites occupied throughout a year. Campsites were selected for access to water and other subsistence resources, boulder outcrops, or natural protection from weather and ambush. Structures varied in form according to locality, need, and available raw materials. Semi-subterranean, dome-shaped dwellings were constructed with a pole framework covered with thatch, grass, and earth. Each structure had two small, arched doorways placed opposite of each other and directed to avoid the wind. Rectangular-shaped, sand, and palm-covered houses were also constructed. Dance structures consisted of a brush fence circling a leveled dance floor. Other structures included rectangular-shaped, flat-roofed, open brush shelters, and semicircular ceremonial structures with an open eastern front and two flag poles that faced a brush dance circle with a pit at the far end (Luomala 1978:597).

Each tribelet, or band, had a clan chief and at least one assistant chief that were positions inherited by the eldest son; some also had a village chief. Desert Tipais did not designate clan chiefs, but instead had a tribal chief. A chief directed clan and inter-clan ceremonies, admonished people on behavior, advised about marriages, and resolved family disputes. Communally, bands claimed the rights to land and spring water within their boundaries and the right to kill thieves and trespassers; water and cached foods were available to any person who had the intent to reciprocate.

In the spring and summer months, bands dispersed to take advantage of ripening plant foods as they became available. Two or three families would arrive at a campsite, joined later by others, to gather, process, and cache seasonal vegetable foods, and to hunt small and large game. March through May provided buds, blossoms, and herbs from canyons and lower foothills, as well as agave. In early June, cactus fruits were collected, dried, and cached. From June through August wild seeds became available, as did wild plums and other fruits in higher elevations. Desert Tipais gathered mesquite pods in July. From September through November acorns and sometimes piñon nuts were collected. Deer, rodents, and birds found feeding on the nuts were also hunted. When winter began, people returned to village sites in lower elevations. Most meat came from rodents, although birds, lizards, snakes, insects and larvae were also eaten (Luomala 1978:600-601). Tipais and Ipais traded more frequently with each other than with unrelated tribes; however, major intertribal trails, such as the Yuma, crossed their territory. Coastal Tipai and Ipai traded salt, dried seafood, dried greens, and abalone shells for inland acorns, agave, mesquite beans, and gourds.

Tipais and Ipais remained within their protohistoric boundaries during Spanish, Mexican, and Anglo-American settlement because they resisted foreign efforts to Christianize them. "Of all mission tribes in the Californias, Tipais and Ipais most stubbornly and violently resisted Franciscan or Dominican control. Severe, sedentary, mission regimen with disruption of seminomadic routine adjusted for survival in familiar microhabitats triggered uprisings; twice within the first six years attacks on San Diego Mission ended with fatalities" (Luomala 1978:595). Nevertheless, in 1779 Mission San Diego had missionized and converted 1,405 Tipais and Ipais. After the missions were secularized following Mexico's independence from Spain, Ipais and Tipais became serfs and trespassers on former ancestral lands that had been granted to Mexican citizens. Euro-American settlers further seized Tipai and Ipai land as California boomed following the Civil War and the discovery of gold in Julian in 1870.

The first reservations for the Tipai and Ipai were formed 1875 and were mainly located where native villages still existed, but were inadequate to support the aboriginal economy, and so Tipai and Ipai were forced to work on ranches, in mines, and in towns as laborers. In 1968, the Tipai-Ipai had 12 reservations and shared the Pala Reservation with Takic speakers. Tipai in Imperial County shared reservations with other tribes.

5.3 HISTORIC PERIOD

5.3.1 Exploration

The historic period within the southeastern California region first started with European exploration in 1540, when Hernando de Alarcón, sent by Spanish Viceroy Mendoz, traveled through the region with instructions to explore the Colorado River and unite land explorations under Francisco de Coronado. Alarcón traveled up the Colorado River from the Gulf of California to at least as far as present day Yuma, Arizona. He is thought to have left letters at the foot of a large cross erected at the mouth of the river for Spanish explorer Melchior Diaz, who was in the service of Hernán Cortés (Cory 1915). Diaz traveled overland to the Imperial Valley area and is considered to be the first non-native to walk upon the Colorado Desert. Upon completion of Alarcón and Diaz explorations, routes across the desert region were utilized as an exploration passageway between destinations.

In 1774, two-hundred and thirty-four years later, Father Francisco Garcés accompanied an expedition led by Captain Juan Bautista de Anza from Sonora (now southern Arizona) to California to find an overland route to supply the early California missions and presidios and to initiate strong colonization efforts to secure Spanish control over the region (Bean and Vane 2002). Under Captain Anza's leadership, the first expedition established formal and friendly relationships with the Yuma tribe at the juncture of the Gila and Colorado rivers, and elicited the active support of the tribe's chief, Salvador Palma. This support turned out to be crucial for ensuring safe passage over rivers and preventing death from thirst and starvation when Anza was forced to retrace his steps after becoming lost in the sand dunes. According to maps of the trail, Anza and his expedition passed approximately 30 miles west of the Project Area (National Park Service 2013). On March 22, 1774, Anza and a portion of his expedition arrived at Mission San Gabriel (near present day Los Angeles), having successfully found a route through near waterless deserts and uncharted mountain passes, establishing an overland route to Alta California. The new route from the Colorado River to coastal southern California, known now as the Juan Bautista de Anza National Historic Trail, was available for use in transporting supplies and colonists to the outermost reaches of what was once considered northern New Spain.

Anza was soon promoted to Lieutenant-Colonel and charged to take an expedition of settlers over the newly opened route to the recently formed presidio located near the San Francisco Bay. In March of 1775, Juan Bautista de Anza assumed the responsibility of recruiting families and organizing supplies for the first colonizing expedition through the Imperial Valley to northern California. Anza led some 240 men, women, and children on an epic journey across the newly established route to set-up the first non-Native settlement in the San Francisco Bay area. Although Spanish missions dotted the California coast, they never spread inland, and the desert within the region remained relatively unexplored and unsettled by Europeans.

In 1821, Mexico won its independence from Spain and during this period, it continued to promote settlement of California with the issuance of land grants. In 1833, Mexico secularized the missions, reclaiming the majority of mission lands and redistributing them as land grants to Mexican citizens. Mexico ceded California to the United States as part of the Treaty of Guadalupe Hildalgo, which ended the Mexican-American War (1846-1848). California officially became a state in 1850 (Starr 2007). A United States Government Land Office (GLO) survey party, led by H.S. Washburn, mapped out the area known as Imperial Valley and cattle rustlers began to use the old Anza trail throughout the early American period (Beattie 1925). By the 1880s, more legitimate cattle ranches were established in an area known as Julian-Kane Springs. The road saw cattle drives between the Peninsular Ranges and Imperial Valley for many decades (Reed 1986).

5.3.2 History of Imperial Valley

Permanent American settlement of the Imperial Valley came in the late 1890s and early 1900s when, in 1896, Charles Robison Rockwood formed the *California Development Company*. By 1901, the Imperial Canal was constructed to deliver water from the Colorado River to the valley for agricultural development. To bring water to the Imperial Valley, developers cut an opening in the west bank of the Colorado River, across from Yuma, Arizona, and installed gates to irrigate the much lower Imperial Valley. On May 14, 1901, the first diversion was made from the Colorado River to the new intake canal

and the first delivery of water occurred in June 1901 (Dowd 1956:20). These cuts caused the water to flow from the Colorado so slowly that the canal quickly became inundated with silt.

In March 1901, the *Imperial Land Company* was incorporated to develop towns and sell land (Chudleigh 2011). Between 1902 and 1904 the Southern Pacific Railroad built tracks into the valley, and the towns of Imperial, Holtville, Brawley, El Centro, Mexicali and Calexico were added to the California map. The rail lines were a direct result of the citizens of Imperial Valley who had petitioned the Southern Pacific Company to build a branch line south, connecting the valley to the main Southern Pacific Railroad. In 1903, the line from Niland to Imperial was completed. Farmers soon flocked in from everywhere, and although silt was a problem from the start and engineers struggled to keep the waterways open, crops initially flourished in the Imperial Valley.

In 1902, Imperial Valley was hit with unfavorable soils reports by the Bureau of Soils of the U.S. Agricultural Department when it published the results of a survey of the irrigable lands in the Colorado Desert. The report stated that lands were so impregnated with alkali that very few things could be successfully grown on them. The report said in part,

"One hundred and twenty-five thousand acres of land have already been taken up by prospective settlers, many of whom talk of planting crops which it will be absolutely impossible to grow. They must early find that it will be useless to attempt their growth ... No doubt the best thing to do is to raise such crops as sugar beet, sorghum and the date palm (if the climate will permit), that are suited to such alkali conditions, and abandon as worthless the lands which contain too much alkali to grow those crops."

The report was widely quoted and commented upon and was a deterrent to further settlement in the Valley. However, despite expert predictions about the soil, by the end of 1902 there were two thousand settlers in the Valley. It had reached a population of 7,000 by 1904, and just one year later the population ranged between 12,000 and 14,000. The number of irrigated acres during the same time grew from 1,500 in 1901 to 80,000 acres in 1905. By 1911, 220,000 acres of land were under cultivation (Dowd 1956:23).

As silt continued to block the waterways, in the late summer of 1904 it was clear that something drastic had to be done. Hundreds of farmers in the Imperial Valley had put in claims for damage caused by the lack of adequate water, and so the financially strapped Imperial Land Company decided to cut a new intake from the Colorado River at a point four miles south of the international border. This action would eliminate the clogged portion. However, the river was about to make one of its semi-millennial changes in course, and soon the company found itself waging a battle to try to return the river to its original channel and shore up the breaks. However, by 1905, all attempts to contain the breaks failed and the Colorado River was breached. Settlers and investors in the Imperial Valley watched as the flood waters washed away valuable farm land. By 1906, another flood widened the gap and sent a wall of water 10 miles wide into Imperial Valley, threatening the cities of Calexico and Mexicali and carrying away a part of the Inter-California Railroad, a branch line extending down into the Imperial Valley. When the rail's mainline from Los Angeles to Yuma and the East Coast was threatened, the Southern Pacific entered the fight. The Southern Pacific spent more than one million dollars trying to divert the river back to its

original course, but failed. They were soon forced to move the mainline tracks to higher ground, out of the flooded area of the Salton Sink.

It was clear that the Southern Pacific would need additional money, so the railroad company turned to the governor of California for assistance. The state had no funds to assist, but the governor contacted President Theodore Roosevelt to ask for federal intervention. Mr. E. H. Harriman, president of the Southern Pacific Railroad Company at the time, sent a telegram to the President on December 13, 1906. In the telegram Harriman stated that he had no doubt that the Colorado River could ultimately be controlled, but he did not feel that the Southern Pacific was responsible for the current disaster and should not be taking on the work alone.

It took a year and a half before the course of the river was restored to the Gulf of California, and in 1907 Imperial County was formed (County of Imperial 2006). That same year the breach was finally closed (Salton Sea Authority 2003; Chudleigh 2011). The flood water slowly went away, except for within the lowest elevation of the Salton Sink, where the Salton Sea was formed. Although Harriman and President Roosevelt had exchanged several telegrams, no funds were approved to pay back the Southern Pacific until 1923, when the federal government finally agreed to repay a portion of the costs that the Southern Pacific had incurred to bring the river under control. Federal creation of a dam to control the flow of the Colorado River was authorized in 1928 and the Hoover Dam was completed in 1935. In 1911, the Imperial Irrigation District (IID) was formed for the purpose of constructing a new irrigation system for the Imperial Valley. A new canal, known as the All American Canal, was constructed between 1934 and 1942 to deliver water from the Colorado River to the Imperial Valley; it is still in use today (Chudleigh 2011). Today, the IID is the largest in the United States and agriculture and livestock dominate industries in the Imperial Valley (Imperial County 2010).

5.3.3 All-American Canal

Detailed surveys for the construction of the All-American Canal route began in 1929 and were completed in 1930. Construction of the All-American Canal began in 1934, following construction of Hoover Dam. The first irrigation water through the All-American Canal was delivered to the Imperial Valley on October 12, 1940 and covered approximately 414,000 acres. By 1954, an additional 38,000 acres was brought into production. The benefit of the All-American Canal water supply to the Imperial Valley was its dependability, allowing farmers to produce intensive, high-risk crops having a higher per acre value. Unpredictable water flows, such as breaks in 1904 and 1905, prior to the completion to the All-American Canal, had resulted in devastating crop losses. Unparalleled growth in agricultural production followed the completion of the All-American Canal in Imperial Valley.

As the Valley continued to recover due to the improved irrigation system, so did the economy. An article by Elms and Franks dated 1918, that discusses Calipatria (approximately 12 miles south/southwest from the Project Area) and Niland stated the following:

“Since that time, two thriving towns have been built, Calipatria, with over half a million dollars' worth of buildings, and Niland with many good, substantial buildings, and having at the present time under construction the finest bank building, and seven concrete stores, in the Valley. The Salton Sea, later named Imperial Lake, is in this district, our lands bordering the sea. This somewhat tempers the extreme heat in the summer and also the colder winds

of the winter. ...As an indication of how the country has improved and the possibilities of improving this "Valley of the Nile," some of the wonderful crops grown here might be cited.

Calipatria is an unincorporated town, controlled by a business men's association, comprising forty three active business men as members. We have three churches, a Catholic, a Congregational and a Seventh Day Adventist. We have a \$35,000 schoolhouse and the trustees are now securing plans for an addition to it, as we have 193 scholars enrolled and our buildings are not large enough to accommodate them. We are also at the present time putting out petitions for a union high school.

Niland is located at the junction of the Imperial Valley branch and the main line of the Southern Pacific, and is destined to be a good town in the no distant future; and Calipatria, situated in the center of this enormous agricultural district, is destined to be one of the largest towns in Imperial County within the next five years.

Our water system of the district is probably one of the most perfect in the United States, as for every delivery ditch, or lateral, there has been built a corresponding drainage ditch, which forever prevents this land from becoming water logged, or raising the water level to a danger point..."

5.3.4 Camp Dunlap

During World War II (1939-1945) the Project Area was part of Camp Dunlap, a U.S. Marine Corps base activated on October 15, 1942 as a training base for the 10th, 12th and 13th Marines, the artillery regiment of the 3rd Marine Division. The camp was named after Brigadier General Robert H. Dunlap, who is referred to as the "Father of Marine Corps Artillery." The Marines, under the command of Colonel John B. Wilson, USMC, conducted extensive artillery training at Camp Dunlap before deploying in January 1943 to Auckland, New Zealand. The regiment participated in combat campaigns in Bougainville, North Solomons, Guam, and Iwo Jima. The base also provided training areas for Army troops under the late General Patton, a bombing range for planes from the nearby Marine Air Station, and a staging area for smaller Marine groups.

Camp Dunlap was 631 acres in size and consisted of 65 buildings, a water treatment system, distribution system, sewage collection and treatment system, over 8.2 miles of paved streets, recreational areas including a 76 ft by 165 ft swimming pool and a movie theater, and concrete fuel tanks. The main part of the camp was occupied on higher ground in the northeast quarter of Section 36 (California State Military Department 2015; Marin Corps Chevron 1946).

The base served 185,000 troops for three years before it was deactivated in 1945 (California State Military Department 2015; Marin Corps Chevron 1946). A skeleton crew remained to dismantle the buildings until 1949. Materials and equipment were loaded onto trucks and sent to Camp Pendleton or salvaged by a local company.



Figure 5: Circa 1940 photo of the entrance to Camp Dunlap (Source: <http://www.ghosttownaz.info/camp-dunlap.php>).



(Photo by Lt. Dick Hodgson)

DUNLAP CLOSES. Dismantling of the former Marine artillery range at Imperial Valley was announced this week by Corps officials. The 250,000-acre range, Camp Robert H. Dunlap, served for training of many Marine artillery units. In photo Corp. Wm. Barnes kicks down camp headquarters sign.

Corps Will Quit Camp Dunlap

CAMP PENDLETON — Marine officials announced here this week that Camp Robert H. Dunlap, located in the Imperial Valley near Niland Calif., would be closed as a Marine activity about March 1.

The 250,000-acre camp, which opened in October, 1942, played a large part in the training of Marines for combat during World War II. Mainly an artillery camp, Dunlap was training headquarters for the 10th, 12th and 13th Marine artillery regiments before they left the U. S. for combat zones.

Besides its role in training cannonners, the Niland camp provided training areas for Army troops under the late Gen. Patton; a bombing range for planes from the nearby Marine Air Station, and a staging area for smaller Marine groups.

DISMANTLING BEGINS

Dismantling the camp was begun Dec. 1, 1946, and is expected to be completed by March 1, 1948. Ninety men are working daily dismantling equipment and loading it on Pendleton-bound trucks. When their work is finished, all that will be left of the camp will be the hulls of some 65 buildings.

Plans for its future beyond March 1st will be in the hands of the Naval Real Estate Board, although indications are that the El Centro Air Station will continue to use its acreage for bomb practice.

Figure 6: Article that appears in the Marine Corps Chevron, January 12, 1946.

In 1946 two men, Ed Stockley and Pan Crochron, from Westmorland, were granted permission from the U.S. Government to dismantle and remove buildings from Camp Dunlap.

"The lumber was stripped of nails and hardware. The roofs, covered with roofing paper and several coats of tar, had no value and were left at the site. The lumber was hauled to Westmorland, where two motels were constructed...Lumber was also used locally. A church was built in Niland; three homes were built on 4th Street, barns, chicken houses and fences" (Anglin 1997:10-13).

Later, a Niland resident known as Good Sam, who was employed by a local salvage company given permission to salvage metal from the former Camp Dunlap facility, used heavy equipment to remove a gasoline tank from the service station on site, as well as cast iron pipes that ran between the main base camp area and the water filter plant (Anglin 1997:13). By the time the CSLC acquired the 640-acres of land that contained Camp Dunlap in 1953, only the concrete slab foundations from the former buildings remained (Anglin 1997:14). A plaque located in the town of Niland commemorates Camp Dunlap.

5.3.5 Recent History

In the mid-1960s, people who had little means to support themselves, or those who just wanted to live off the grid for the winter or year-round, began moving in and established permanent residences on the cement foundations that remained from Camp Dunlap; and more and more people trickled in throughout the '70s and '80. Homes consisted of make-shift buildings constructed of plywood, discarded lumber, tar paper, and other trash that remained from the dismantling of Camp Dunlap, as well as mobile homes and recreational vehicles (RVs). Soon a community was formed that became known as Slab City, or "the slabs." Magazine reporters from Los Angeles, San Diego and Palm Springs began to report on the lifestyle of the Slab City "snow birds" and the settlement became known as "the last free place in America." Slab City continues to attract settlers and visitors from all over the United States and Canada, as well as professional and self-purported journalists. One of the greatest attractions is Salvation Mountain, a large piece of colorful folk art built into a hillside using concrete, adobe, and acrylic paint, and includes interior spaces, large panels of biblical verses, and a cross.

Salvation Mountain was built by Leonard Knight who visited Slab City in the early 1980s and never left. Leonard Knight was born November 1, 1931 in Vermont and was one of six children. In 1951 he joined the military and served in the Korean War, fixing jeeps and other equipment. After the war, he returned to Vermont and worked as a car mechanic. In 1967, he found God and made it his mission to spread the love of Jesus by building a hot air balloon, an endeavor that eventually led to the building of Salvation Mountain. In the early 1980s, over a decade after he started building his balloon, Leonard finally gave up. He realized his project had failed during his last attempt to launch the hot air balloon, in Niland, California. It was there that Leonard came up with the idea to build an eight foot cement balloon near Slab City, where he was staying. That too failed. In 1984, Leonard began working on Salvation Mountain (Bremner 2015), a 50' foot tall monument made using cement mixed with sand and old junk covered and painted with a patchwork of colors and a big white panel with the words "God Is Love" (Figure 7). His large painted structure had an interior room and was topped with a cross. However, because his mixture contained too much sand, the structure collapsed in 1990. Leonard spent the next thirty years rebuilding Salvation Mountain, this time using adobe mixed with straw and water that he collected from a nearly irrigation canal. The new structure evolved into a well-known piece of folk art that today is a point of interest and draws visitors and tourists from all over the United States. Leonard Knight passed away on February 10, 2014. Salvation Mountain is now being maintained by a non-profit group, Salvation Mountain Inc., and there is a caretaker who oversees and protects the folk art site from vandals.



Figure 7: First Salvation Mountain before it collapsed in 1990 (www.salvationmountain.us, 2004).

A history of Slab City and Salvation Mountain, as told by one of Slab City's pioneering settlers, Nadine Anglin, is provided in, *As I Remember Old Beach, Imperial Junction, Hobgood, Niland, Camp Dunlap-Slab City, Salvation Mountain* (Anglin 1997).



Figure 8: Current view of Salvation Mountain and Slab City (Brook 2013).

East Jesus is an art installation located, less than a mile north of Salvation Mountain. It was started by the late Charles Stephen Russell, an artist and Slab City inhabitant who worked alongside Leonard Knight

at Salvation Mountain. Charles moved to Slab City permanently in 2007 and established East Jesus, a complex that initially consisted of sculptures and art cars, and later grew to include dozens of art installations made from discarded material and a private compound housing a few permanent residents. East Jesus is well-known throughout the folk art community, and includes and art installations and paintings from artists of note, such as Royce Carlson, Mirabelle Jones, Joe Holliday, Angelina Christina, Ben Wolf, The Hive Collective, Christian Hernandez, and Shing Yin Kho (www.eastjesus.org). When Charles passed away in 2011, a Board of Directors was formed with a mission to guide the curation and expansion of East Jesus and honor Charles's vision of a sustainable, habitable, ever-changing art installation. The Board of Directors was formalized with the creation of the Chasterus Foundation, non-profit group named after the late Charles Stephen Russell... 'Chas ste rus'.

6.0 METHODS

6.1 RECORD SEARCH

As part of the cultural resource evaluation, Evans & De Shazo, LLC ordered a literature review for the entire 640-acre parcel by staff at the South Coastal Information Center (SCIC) of the California Historical Resources Information System (CHRIS), located at San Diego State University (File No. #14-1844). The record search is attached as Attachment A. The purpose of the record search was to obtain and review previous cultural resource studies and documents for recorded archaeological sites located within a half-mile radius of the 640-acre parcel. Maps and other documents on file at the Imperial Valley Desert Museum and Information Center in Ocotillo, California were also reviewed by Evans & De Shazo. The Pioneers Park Museum located in Imperial, California that maintains an historic archive, including an extensive photograph collection is closed until September 8, 2015, so their records were not available for review prior to completion of this report.

6.2 NATIVE AMERICAN CONSULTATION

On August 6, 25, 28, and 31, 2015, Evans & De Shazo contacted the Native American Heritage Commission (NAHC) to request a Sacred Land Inventory to determine the presence of Sacred Sites located within or near to the 640-acre parcel. The NAHC works to identify, catalogue, and protect places of special religious or social significance, graves, and cemeteries of Native Americans per the authority given in Public Resources Code §5097.9. The NAHC also provided a list of appropriate Native American individual/organization to contact regarding Sacred Lands and other important Native American resources located near the Project Area. Notification was sent to each Native American individual/organization listed by the NAHC to determine if they have further information about Native American Sacred Sites, traditional gathering areas or other important Native American cultural resources located within or near to the Project Areas.

6.3 FIELD SURVEY

From August 18 to 20, 2015, Evans & De Shazo cultural resource specialists conducted a reconnaissance level field survey of the proposed 30-acre and 160-acre parcels. Archaeologists Sally Evans, M.A., RPA and Stacey De Shazo, M.A. surveyed the 30-acre area on August 18, 2015 and, under the direction of Project Manager Carole Denardo, M.A., RPA, archaeologists Robert Peterson, Ph.D. and Jason Collins,

B.A. surveyed the 160-acre area on August 18, 19, and 20, 2015. Both areas were systematically surveyed utilizing 10-meter transects. Linear, zigzag and meandering transects were employed in order to avoid occupied areas and sculptures and other artwork located in the survey corridor.

A "tailgate" meeting was held at the beginning of each survey day to review health and safety related concerns. An unexploded ordinance (UXO) technician from ERRG, Inc. inspected the area in front of the survey crew to look for unexploded ordinance in the survey corridors. The archaeological survey crew was accompanied by three biologists/botanists from Blackhawk Environmental.

The surveyors inspected the 30 and 160-acre areas for the presence of potentially significant cultural resources. A GeoXH 2008 model Trimble GPS was used to collect locational information for potentially significant cultural resources, isolated artifacts and paleontological resources observed during the field survey.

Department of Parks and Recreation (DPR) 523 forms were completed for potentially significant prehistoric or historic-era objects, features, sites or isolated artifacts that were identified during the field survey. The archaeologists photographed the survey areas, as well as cultural and paleontological resources that were observed.

7.0 REPORT OF FINDINGS

7.1 RECORD SEARCH

Evans & De Shazo completed a record search at the SCIC and the Imperial Valley Desert Museum and Information Center for the 640-acre parcel. The CSLC also supplied a report pertaining to a previous cultural resource evaluation of the 640-acre parcel, and other information related to the Project Areas. In addition to these resources, Evans & De Shazo also reviewed the following inventories:

- National Register of Historic Places
- California Register of Historical Resources
- California Inventory of Historic Resources
- California Historical Landmarks
- California Points of Historical Interest

The results of the record search are summarized below.

7.1.1 Previous Cultural Resource Studies and Sites within the Project Areas

The records search identified three previous cultural resource studies that encompass portions of the 30 and 160-acre Project Areas (see Table 1).

Table 1: Previous Cultural Resource Studies within the Project Areas.

Report #	Date	Title	Reference
IMP-343	1985	Archaeological Survey of Big Foot, East Mesa, Imperial County.	Von Werlhof 1985
IMP-674	1994	Southern Arizona Transmission Project Preliminary Draft Environmental Impact Statement, Draft Environmental Impact Report, Draft Plan Amendment, DEIS/DEIR/DPA.	BLM 1994
IMP-1510	2011	Draft Environmental Impact Statement and California Desert Conservation Area Plan Amendment for the West Chocolate Mountains Renewable Energy Evaluation Area.	BLM 2011

IMP-343 is a 1985 cultural resource evaluation of the entire 640-acres that was conducted for a proposed recreational vehicle and mobile home park proposed by Big Foot Enterprises (von Werlhof 1985). The study included a record search and field survey.

IMP-674 reports the results of a transmission line project that extended from the Palo Verde Nuclear Generating Station Switchyard, near Phoenix, Arizona, to the Devers Substation near Palm Springs, California. A portion of the transmission line traversed the southwest corner of the Salvation Mountain Project Area (BLM 1994). No cultural resources were reported in that portion.

IMP-1510 is an Environmental Impact Statement (EIS) and California Desert Conservation Area (CDCA) Plan Amendment prepared by the Bureau of Land Management (BLM) to evaluate the potential environmental impacts of allocating federal mineral estate for geothermal energy leasing, testing, and development of geothermal power generation facilities on public lands located down slope from the West Chocolate Mountains near Niland, California, and for testing and development of solar and wind power generation facilities through right-of-way authorizations. The West Chocolate Mountains Renewable Energy Evaluation Area (REEA) is 59,095 acres in size and includes 31,551 acres of private lands, 3,200 acres of CSLC property (including the entire 640-acre parcel), 1,782 acres of spilt estate land, and 2,862 acres of BLM land. No field survey was conducted, but potential impacts to cultural resource located within the REEA resulting from renewable energy development were reported (BLM 2011).

A total of two cultural resources have been previously recorded within the Salvation Mountain Project Area, including P-13-003181 and P-13-003182. The sites also have corresponding Trinomial numbers (e.g. CA-IMP-3181). No cultural resources have been previously recorded within the East Jesus Project Area. Table 2 lists previously recorded cultural resources within the Project Area.

Table 2: Cultural Resources Recorded within the Project Area.

Primary #	Type	Description	Reference	Location
P-13-003181	Historic (WWII)	Remains of an airplane repair shop associated with Camp Dunlap	Miller 1977	Salvation Mountain
P-13-003182	Historic (WWII)	Reinforced concrete building, the main gate guard post associated with Camp Dunlap	Miller 1977	Salvation Mountain

P-13-003181 consists of the remains of a camouflaged airplane repair shop associated with the former Camp Dunlap (Figure 9). The building, originally recorded by Rudolph Miller in 1977, is located at the northwest corner of the 160-acre Salvation Mountain parcel.

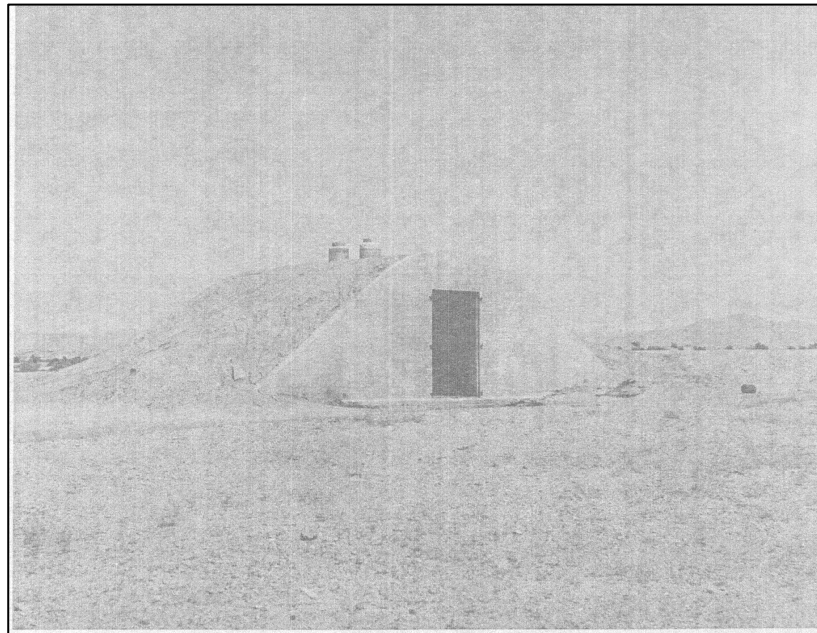


Figure 9: 1977 photograph of ca. WWII Camp Dunlap airplane

P-13-003182 is a small concrete building that was the former Camp Dunlap Guard Station (Figure 10). This building was also recorded by Rudolph Miller in 1977. It is located along the east side of Beal Road within the northern part of the Salvation Mountain parcel.

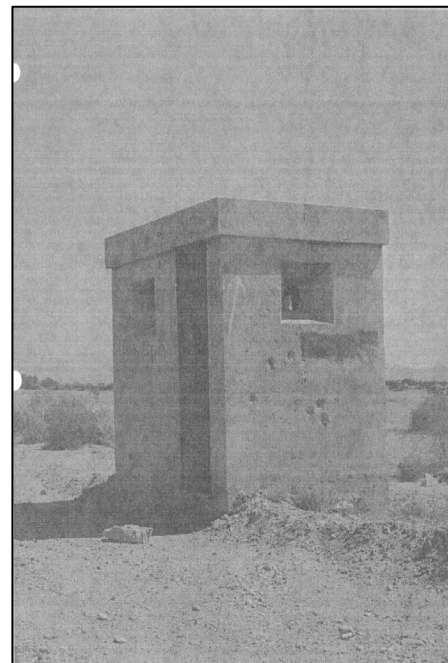


Figure 10: Camp Dunlap Main Guard Post (Miller 1977).

7.1.2 Cultural Resource Studies and Sites within 1/2-mile of the Project Area

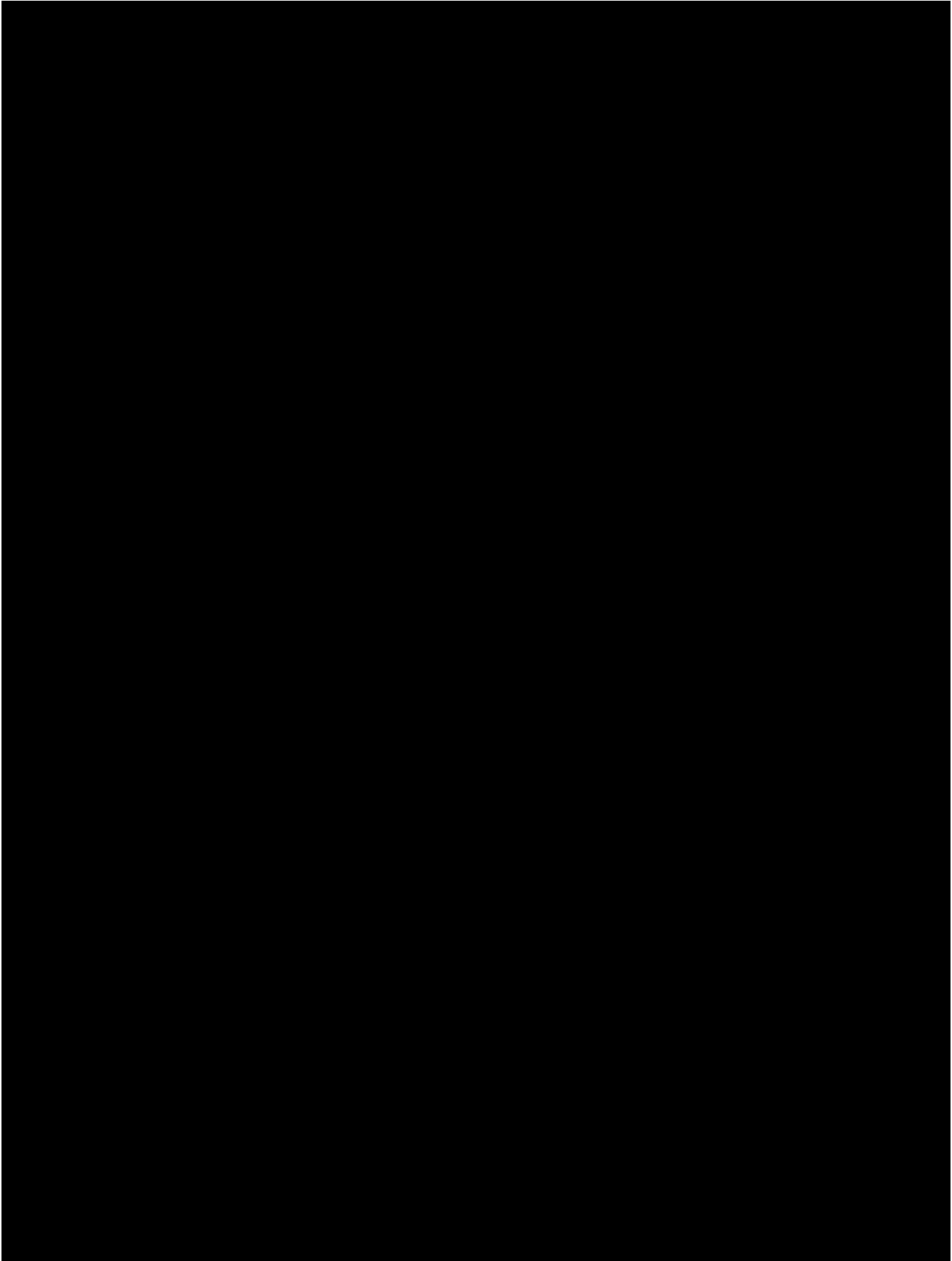
Ten additional cultural resource studies have been conducted on lands located within a 1/2-mile radius of the 30 and 160-acre Project Areas. These are listed in Table 3. IMP-651 included a portion of the greater 640-acre parcel.

Table 3: Cultural Resource Studies within 1/2-mile of Project Areas.

Report #	Date	Title	Reference
IMP-187 & IMP-189	1979	Cultural Resource Inventory of Areas Affected by Reject Stream Replaced Projects	William Eckhardt
IMP-433	1989	Archaeological Survey Report of the Niland Material Site, Imperial County, California.	Martin D. Rosen
IMP-511	1994	Niland Urban Area Plan	Imperial County Planning Department
IMP-651	1994	Cultural Resource Overview - Coachella Canal Lining Project.	Green and Middleton 1994
IMP-733	1990	Mining and Reclamation Plan for the Niland Material Site (Imperial County)	Caltrans
IMP-734	1989	East Salton Sea Material Sites Quartz, Chuckwalla, Niland, Standard, and Miter - Biological Survey Report	Karen L. Dunham
IMP-969	2003	A Class III Cultural Resource Inventory and Evaluation for the Coachella Canal Lining Project: Prehistoric and Historic Sites Along the Northeastern Shore of Ancient Lake Cahuilla, Imperial and Riverside Counties, California.	Jerry Schaefer, Sinead Ni Ghabhláin, Mark Becker
IMP-1284	1999	Draft Historic and Archaeological Resources Protection (HARP) Plan for the Chocolate Mountain Aerial Gunnery Range, Imperial County, California.	Rebecca McCorkle Apple, James H. Cleland
IMP-1354	2009	Archaeological Survey of Access Roads in the Chocolate Mountain Aerial Gunnery Range (CMAGR), Imperial County, California	Jerry Schaefer, Arleen Garcia-Herbst, Sherri Andrews

IMP-651 included part of the 640-acre parcel. This study reports the results of a Class I overview conducted for the Coachella Environmental Impact Statement and included the portion of the old Coachella canal that traverses the northeast corner of the 640-acre parcel. The old Coachella Canal is a recorded historic resource (P-13-007858).





[REDACTED]

P-13-007858 is the old Coachella Canal and part of the All-American Canal irrigation system. A 0.2-mile long section of the canal traverses the northeast corner of the 450-acre Slab City parcel. The old Coachella Canal is a 123-mile long water conveyance system that was built between 1938 and 1948 (construction ceased between 1941 and 1944 due to WWII) to deliver water from the All-American Canal to the Coachella Valley for irrigation purposes. The canal was decommissioned in 1980 due to the construction of a newer, concrete-lined canal, called Coachella Canal. The old Coachella Canal has no concrete structure; it consists of a sand trench 16.5 feet deep, 131.1 feet wide at the maximum height, and 42.3 feet wide at the base (O'Neill and Schaefer 1997). In addition to the main canal, there are a number of associated water diversion levees or berms made of rock and soil that functioned to divert water runoff from the Chocolate Mountains through siphons in the canal and to prevent damage to the canal structure. It is reported that 37 miles of diversion dikes and 36 miles of detention dikes were built to protect the old Coachella Canal from floodwaters. A few of these associated berms are recorded, including Berm #22, located on the north side of the old canal, which measures 2,537 feet long, 50 to 60 feet wide and averages 9.1 feet high. The berm was constructed from locally available soil and rock (Brann and Broockmann 2014).

The old Coachella Canal traverses two counties, and therefore has been recorded under two separate trinomials: CA-RIV-05705 and CA-IMP-07658. The canal, and portions of it have been recorded on several different occasions (Avina 1999; Brann and Broockmann 2014; Schaefer and Ghabhlain 2003; O'Neill and Schaefer 1997). There are conflicting recommendations for eligibility of the old Coachella Canal for listing on the NRHP. Some evaluators have recommended that the site is not eligible (ASM 1983 in Brann and Broockmann 2014), while others have recommended that the site is eligible (O'Neill and Schaefer 1997; Schaefer and Ghabhlain 2003). Schaefer and Ghabhlain (2003) prepared a historic context for the canal itself, which concludes that it is significant under Criteria A and C of the NRHP. However, since no evaluation of the site's integrity has taken place, no formal NRHP eligibility recommendation has been made.

P-13-011464 is the old Niland-Blythe transportation route that is a 13.8-mile long trail that runs roughly from southwest to northeast. William D. Bradshaw, the pioneer, minor, and trader after which the Bradshaw Mountains in Arizona and the Bradshaw Trail in Riverside County, California are named, established the Niland-Blythe Road in the 1860s. The recorded portion of the road terminates at the old Coachella Canal, 450 feet north from the northeast corner of the 640-acre parcel. According to Blackburn's Map of Imperial County from 1943, the Niland-Blythe route crossed the old Coachella Canal and traversed Section 35 and 36 in the general vicinity of Beal Road on its route to Niland (see Figure 11).



Figure 10: Blackburn's Map of Imperial County (1943) showing Niland - Blythe transportation route as it traverses the Project Area. Map on file at the Imperial Valley Desert Museum, Ocotillo, CA.

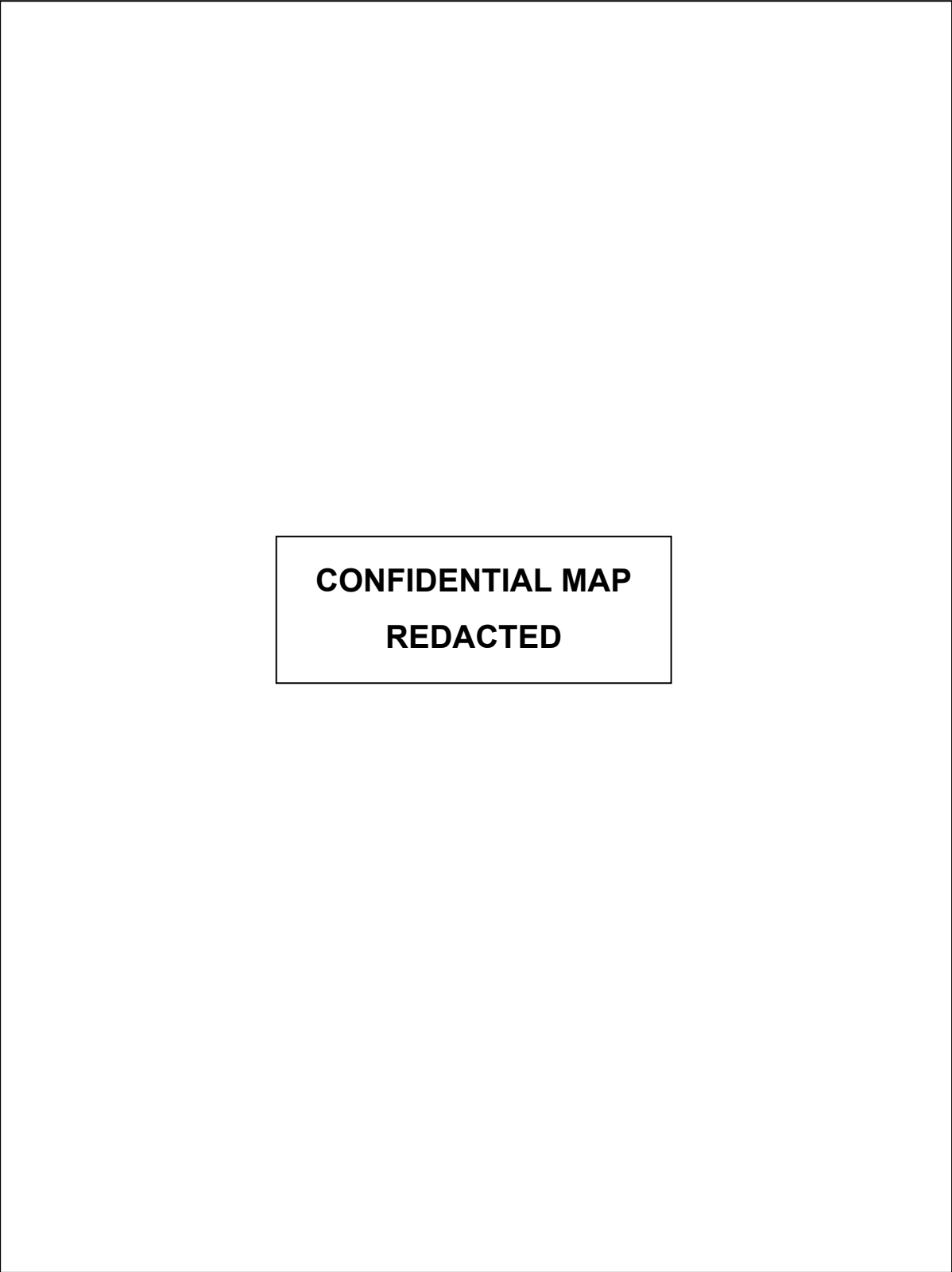


Figure 11: Map showing locations of cultural resources that have been recorded within a 1/2-mile of the Project Areas [REDACTED].

7.2 RESULTS OF NATIVE AMERICAN SACRED LANDS INVENTORY

On August 6, 25, 28, and 31, 2015 the Native American Heritage Commission (NAHC) was contacted with a request to conduct a Sacred Land inventory to determine if there are any Native American Sacred Sites located within or near to the Project Area. A response was received on September 1, 2015 with negative results. The NAHC notes that the absence of specific site information in the Sacred Lands File does not indicate the absence of Native American cultural resources in the Project Area, and they provided a list of 20 organizations and individuals to contact for further information. On September 1, 2015, the author sent letters via email or USPS to each individual/organization listed by the NAHC to solicit further information about Native American resources within, or near to, the Project Area. The organizations/individuals contacted and the method of contact are listed in Table 5.

Table 5: Native American Individuals and Organizations Contacted.

Name	Position	Organization	Contact Method
Robert Pinto Sr.	Chairperson	Ewiiapaayp Tribal Office	Email
Will Micklin	Executive Director	Ewiiapaayp Tribal Office	Email
Gwendolyn Parada	Chairperson	La Posta Band of Mission Indians	Email
Javaughn Miller	-	La Posta Band of Mission Indians	USPS
Angela Elliot Santos	Chairperson	Manzanita Band of Kumeyaay Nation	Email
Keith Adkins	EPA Director	Manzanita Band of Mission Indians	USPS
Nick Elliot	Cultural Resource Coordinator	Manzanita Band of the Kumeyaay Nation	Email
Bernice Paipa	Vice Spokesperson	Kumeyaay Cultural Repatriation Committee	Email
Doug Welmas	Chairperson	Cabazon Band of Mission Indians	USPS
Judy Stapp	Director of Cultural Affairs	Cabazon Band of Mission Indians	Email
Ralph Goff	Chairperson	Campo Band of Mission Indians	Email
Mary Resvaloso	Chairperson	Torres-Martinez Desert Cahuilla Indians	USPS
Matthew Krystal	Cultural Resource Manager	Torres-Martinez Desert Cahuilla Indians	USPS
Gary Resvaloso	-	Torres-Martinez Desert Cahuilla Indians	USPS
Carmen Lucas	-	Kwaaymii Laguna Band of Mission Indians	USPS
Mary Ann Green	Chairperson	Augustine Band of Cahuilla Mission Indians	USPS
Karen Kupcha	-	Augustine Band of Cahuilla Mission Indians	USPS
Arlene Kingery	THPO	Quechan Indian Nation	USPS
Luther Salgado	Chairperson	Cahuilla Band of Indians	Email
Frank Brown	Coordinator	Inter-Tribal Cultural Resource Protection Council	USPS

On September 3, 2015 a letter was received from Judy Stapp, Director of Cultural Affairs for the Cabazon Band of Mission Indians. She states,

"The project is located outside of the Tribe's current reservation boundaries but within an area that may be considered a traditional use area. The Tribe, however, has no specific

archival information on the site indicating that it may be a sacred/religious site or other site of Native American traditional cultural value."

A response was received from Mary L. Resvaloso, Interim Tribal Administrator for the Torres Martinez Desert Cahuilla Indians (TMDCI) on October 6, 2015 stating:

"The Tribe's main concern is the potential for inadvertent discovery of human remains within the project area. As such, TMDCI make the following recommendation:

1) We would like to request and evaluate any cultural records, assessment or documentation in regards to cultural sites, sacred sites, traditional cultural property or gathering site of Copies of any cultural resource documentation including reports and site records are sent to the TMDCI the Desert Cahuilla Indians.

2) After review by Most Likely Descendant we will request a meeting to begin with the Tribal Consultant.

3) Any subsequent archaeological field survey of the project area by a qualified archaeologist must be accompanied by cultural resource monitor(s) at all times.

As of this date no other response has been received. All Native American-related correspondence is included as Attachment B.

7.3 RESULTS OF FIELD SURVEY

A field survey was conducted of the proposed 30-acre East Jesus and 160-acre Salvation Mountain parcels between August 18 and 20, 2015. The purpose of the field survey was to re-identify previously recorded cultural resources within the proposed parcels (P-13-003181 and P-13-003182) and to look for additional cultural resources that may be present. A total of 11 cultural resources were observed during the field survey, including the previously recorded Guard Post building P-13-008182 and 10 newly identified cultural resources: EDS-01, EDS-02, EDS-03, EDS-04, EDS-05, EDS-06, EDS-07, EDS-08, EDS-10 and EDS-11. The airplane repair building (P-13-003182) was not relocated, and is thought to have been demolished or otherwise removed. A few bunker type buildings associated with the former Camp Dunlap were observed west of and adjacent to, but outside of, the southwest corner of the Salvation Mountain parcel.

DPR 523 forms were prepared for the 10 newly identified cultural resources (EDS-01, EDS-02, EDS-03, EDS-04, EDS-05, EDS-06, EDS-07, EDS-08, EDS-10 and EDS-11), and were updated for P-13-003182 (EDS-13). All cultural resources identified within the Project Areas are listed in Table 5 and their locations are shown in Figure 26.

Six locations were identified with fossil shell. These paleontological finds are discussed in the paleontological report prepared for this project (see Steinkamp 2015). Asiatic clam (*C. fluminea*) shell was also observed within the drainage that traverses the East Jesus parcel. This shell is not paleontological in nature or associated with ancient Lake Cahuilla, but is modern shell that has washed downstream from the old Coachella Canal located few hundred feet to the northeast.

7.3.1 Field Conditions and Restraints

Field conditions were clear and hot, with temperatures ranging from 99° to 112°. Surface visibility was very good, approximately 90% ground visibility. In some locations surface visibility was obscured by small trees and desert scrub, as well as carpeted paths that were present within in the East Jesus area. The landscape consisted of desert terrain with a few drainages, hills and ridges. The survey was limited by the presence of occupied recreational vehicles and "camp sites" with warning signs to keep out. These areas were avoided during the field survey to avoid any possible confrontation with locals occupying the Project Areas.

The folk art sites known as East Jesus (Figure 12) and Salvation Mountain (Figure 13) were re-visited and photographed. These cultural resources are points of interest, but do not meet the age criteria to be recorded as potentially significant cultural resources under CRHR criteria.



Figure 12: Looking west at the entrance to East Jesus art installation.



Figure 14: Looking northeast at Salvation Mountain art installation.

At the East Jesus site were several art installations that incorporated historic and modern cans, modern bottles and a plethora of other items. The older items that were part of these installations were not inventoried. Although, some them may be over 45 years of age and been gathered from within the Project Area or nearby locations, their origin is unknown. Historic artifacts incorporated into these art installations have lost integrity, so for the purpose of this study, they were not considered potentially significant cultural resources.

Several large chunks of obsidian were also observed incorporated into an art installation at East Jesus created to commemorate the late Charles Russell. While obsidian was a choice material used by Native Americans to manufacture lithic tools, these unmodified pieces were likely brought onto the site and are not considered artifacts.



Figure 13: Art installation that incorporates old cans located at the entrance to East Jesus.

7.3.2 Cultural Resources within the 30-Acre East Jesus Project Area

Two historic-era cultural resources were observed, photographed and recorded in the 30-acre survey area; no prehistoric resources were identified. The historic-era resources include EDS-01 and EDS-02. EDS-02 and bisects the 160-acre Salvation Mountain survey area as well.

- **EDS-01: Levee.** The levee is a linear feature that is 2,850 feet long and oriented northeast-southwest (at 60-240 degrees). It measures 45 feet at the base and 30 feet at the top, and is approximately 4 feet high. The levee appears to be constructed of native soils built up from each side with a compacted and level top surface. There are vehicle tracks along the top of the levee that Google maps indicate is Chadwick Drive. The north side is lined with old tires set upright. Where the levee leaves the East Jesus property at the northeast end, it widens and becomes flush with the ground level on the south side, while the north side retains a 2 foot tall slope. The levee was likely constructed to help divert water and prevent flooding. The levee is indicated on the USGS 1956 Iris Wash quadrangle map, and therefore, is at least 59 years of age.



Figure 15: Looking northwest at levee (EDS-01) within the East Jesus parcel.

- **EDS-02 (P-13-011464): Beal Road Extension of former Niland-Blythe Transportation Route.** This linear resource is a 1.18 mile long section of Beal Road that appears to be part of the approximate 14-mile long Niland-Blythe transportation route that runs roughly southwest to northeast between Blythe and Niland, California. The previously recorded section of the road terminates at the northeast side of the old Coachella Canal, 900 feet northwest of the northeast corner of Section 36, and there are several historic features and artifacts associated with that section. William D. Bradshaw, a pioneer, miner, and trader after which the Bradshaw Mountains in Arizona and the Bradshaw Trail in Riverside County, California are named, established the

Niland-Blythe Road in the 1860s. According to Blackburn's Map of Imperial County from 1936, the Niland-Blythe route crossed the old Coachella Canal and headed southwest through Section 36 to Niland following the route of the current Beal Road. The 1.18-mile long section recorded during the field survey is approximately 20 feet wide and has an improved, paved surface that was likely completed when Camp Dunlap was constructed.

7.3.3 Cultural Resources within the 160-Acre Salvation Mountain Project Area

A total of ten historic-era resources were observed, photographed and recorded in the 160-acre survey area; no prehistoric resources were identified. The historic-era resources include EDS-02, EDS-03, EDS-04, EDS-05, EDS-06, EDS-07, EDS-08, EDS-10, EDS-11 and EDS-13. EDS-13 is the previously recorded Guard Post building (P-13-003182). EDS-02, is the 1.18 mile long section of Beal Road that appears to be part of the approximate 14-mile long Niland-Blythe transportation route. A 0.5-mile long section of the resource traverses the Salvation Mountain survey area.

- **EDS-03: Levee.** The levee runs along the south side of where two drainages converge and was likely constructed to help divert water towards the East Highline Canal, and to prevent flooding. The levee is indicated on the USGS 7.5' 1956 Iris Wash quadrangle map and, therefore, is at least 59 years of age. The levee is mostly located within the parcel to the west, but extends east 340 feet into the Salvation Mountain parcel.

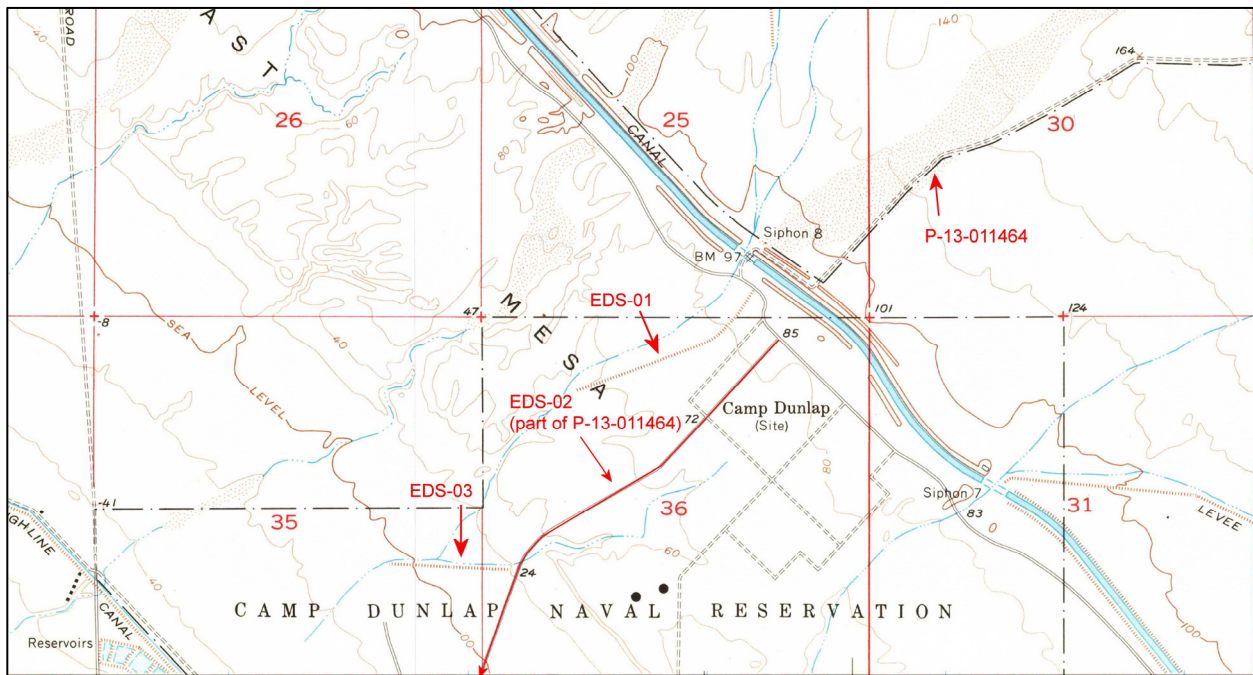


Figure 16: USGS 7.5' Iris Wash quadrangle map from 1956 showing levees EDS-01 and EDS-03 and route of the Niland-Blythe route (EDS-02/P-13-011464).

- **EDS-04: Historic Isolate.** [REDACTED]

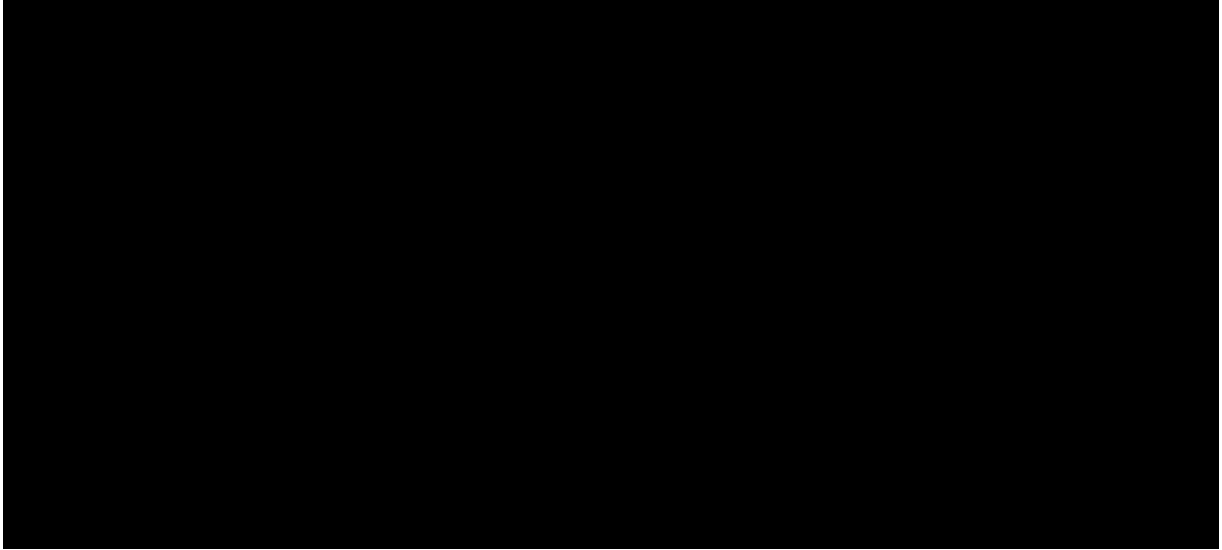


Figure 18: EDS-04

- **EDS-05: Camp Dunlap Wastewater Treatment Facility - Water Retention Basin.** The resource consists of a series of rectangular shaped retention basins formed by berming up soil from four sides. The outer berms and a central berm are approximately 3.2 feet high, 10 feet wide at the top and 20 feet wide at the base. Overall, the entire feature is approximately 1,590 feet long by 985 feet wide, and is oriented in a northeast/southwest direction. The feature is divided into 36 cells, each measuring approximately 470 feet by 80 feet. Brown ceramic sewer pipes, measuring 12 inches in diameter, are embedded within some of the berms. This feature was likely a part of the water treatment facility for Camp Dunlap, and therefore dates to WWII. A 1953 aerial photograph shows the facilities to be abandoned and partly filled in with sand. This retention basin is located 550 feet southwest of EDS-06, which also consist of features associated with the wastewater treatment facility. The feature is located at the south end of the Salvation Mountain parcel and is mostly located within the parcel to the south.



Figure 17: EDS-05



Figure 20: EDS-05, 12" diameter sewer pipes exposed by erosion.

- **EDS-06: Camp Dunlap Wastewater Treatment Facility Features.** This site includes seven features that are part of the wastewater treatment facility for Camp Dunlap, which dates to WWII. The site is located in the southeast corner of the Salvation Mountain parcel.
 - **Feature 1** is a large concrete water tank approximately 40 feet in diameter and about 15 feet in height. There is an access door on the east side. It still has a roof and is currently being used as a residence or shelter. It features two large, and particularly beautiful paintings by artist Angelina Cristina featuring in monochrome a woman's face along the side.



Figure 18: EDS-06, Feature 1 from top of Feature 3 showing artwork by Angelina Christina on located south side of tank (F1).

- **Feature 2** appears to be a settling or aeration basin. It consists of a circular concrete wall approximately 5 feet high and 75 feet in diameter. It is open to the sky and the floor is divided by eighteen low concrete dividers oriented northwest-southeast. The floor is also covered with fist-sized cobbles. The interior and exterior walls are covered with modern graffiti.
- **Feature 3** is a circular concrete tank, approximately 6 feet high on the outside and 8 feet on the inside. It is 45 feet in diameter and has a travel trailer attached to its northwest side. A stairway has been added to the west side of the exterior, probably to allow viewing of the art piece painted on the inside walls of the feature. The art piece is a painting titled *Kinetoscope* by Angelina Christina and Ease One; it consists of a series of women's faces and other designs in blue monochrome.

- **Feature 4** is another circular concrete feature measuring 40 feet in diameter and about 5 feet deep. Its rim is nearly flush with the ground surface on the north side, but sits above the surface on the other sides. It is also covered with modern graffiti.
- **Feature 5** is a concrete pad that measures approximately 12 by 30 feet. Its function is unknown.
- **Feature 6** is a foundation approximately 40 feet long and 12 feet wide, and pointed on the southeast end. It is divided lengthwise in two by a wall. Its function is unknown but it appears to have held water at one time.
- **Feature 7** is a large, roughly rectangular area that appears to have been graded or modified in the past, and contains a series of three X-shaped concrete features. The concrete features are about 3 feet in height and triangular in vertical cross section with four legs forming a cross. The function is unknown, but they may have served as bases for some equipment.

There are also scattered small concrete pads and boxes and a considerable amount of trash. Two modern art sculpture installations of repurposed materials were also noted in the vicinity of the facility.



Figure 19: Sketch of EDS-06 showing associated features.

- **EDS-7: Can Scatter.** The site consists of a sparse scatter of older can fragments. The artifacts observed include 1 top fragment of a condensed milk can with a solder dot, 1 heavily corroded sardine can bottom, 1 heavily corroded jar top, 2 sanitary can lids measuring 4 inches in

diameter, one of which has a triangle punched hole in the top, and glass fragments. An expended 40mm cartridge casing was also found near the scatter.

- **EDS-8: Concrete Barrier Posts Leading from the Guard Building (EDS-13).** The barricade posts are the remnants of a Camp Dunlap military base fence line located within the Salvation Mountain parcel. They head in alignment on a straight southeast trajectory past Salvation Mountain towards two large water basins (EDS-10) located on the west side of Tank Road. As the posts pass the basins, they take an immediate turn east towards Tank Road where they end. At their base, the barricades are a rough concrete mix buried into the ground with metal poles in the center that are approximately 2 inches in circumference. Most of the metal poles are cut off near the base, or are eroded. The barricade posts appear in a line approximately 8 to 9 feet from each other and probably once supported a fence that extended eastward from the guard building, recorded as P-13-003182 (EDS-13), line up with the guard building. The condition of the posts vary depending on the terrain. In the drainage or wash areas, many of the posts are broken up and fragmented, but in other areas, they are very intact.
- **EDS-09: Shell deposit (see Steinkamp 2015)**
- **EDS-10: Water Basin/Tanks and Concrete Foundations.** The site consists of two large concrete water tanks and several smaller features. The tanks are each approximately 110 feet in diameter and 15 feet high. Inside each are 21 concrete posts that formerly supported a roof, which is no longer present. The tanks are covered with modern graffiti, both inside and out. There are some repeated themes to the graffiti—one of the tanks expresses many modern corporate logos on it.
 - **Feature 1** includes the east tank.



Figure 20: EDS-10, Feature 1.

- **Feature 2** includes the west tank.

- **Feature 3** is a concrete base for a small cylindrical tank. It is approximately 10 feet long and 6 feet wide and consists of two sloping end walls with circular cutouts at the top for the tank connected by a central low wall. It is located south of the west side of Feature 1.
- **Feature 4** is a rectangular concrete foundation, just barely exposed above the sand, located about 130 feet south west of Feature 1. It is approximately 40 feet long and 18 feet wide and consists of walls approximately 1 foot in width. The depth was not determined. There are bolts sticking up around the top of the wall at about 4 foot intervals, but they have all been bent over, probably for safety. The northern side is presently covered by sand. Its function is unknown.
- **Feature 5** is located on the flat 350 feet SSE of Feature 1, and 85 feet west of the dirt road. It consists of a T-shaped concrete slab about 1 foot high. It is oriented with the stem of the T running north. It measures 15 feet east/west and 10 feet north/south.

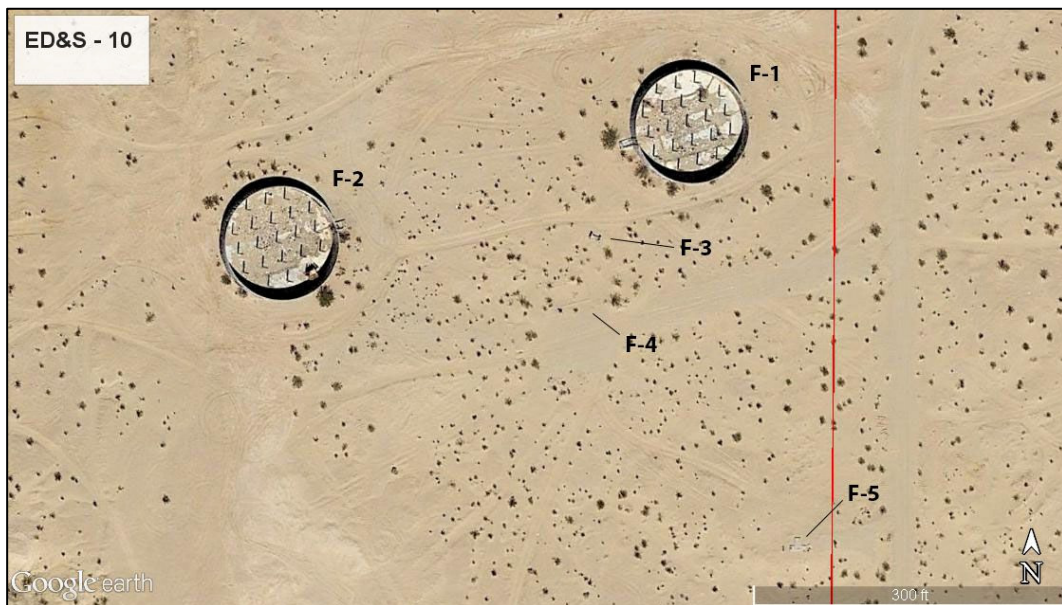


Figure 21: Sketch map of EDS-10 showing Feature locations.

- **EDS-12: Shell deposit (see Skeinkamp 2015).**
- **EDS-13 (P-13-003182): Camp Dunlap Main Entrance Guard Post Building.** This guard post building, also known as a sentry box, is located at the entrance to the WWII-era Camp Dunlap. It is a square-shaped, reinforced concrete building that measures approximately 9 feet by 8 feet. The front (northwest side) faces Beal Road. There is a single-entry doorway at the west end of the northwest side and a small square window opening next to the doorway on the east side.

There are similarly-shaped window openings in the upper center of both the east and west facades. The building remains structurally intact. It has been weathered a bit since it was last recorded in 1977 and possibly has some shifting and cracking at its base. The local population has painted the building, which provides some weather proofing, and has been using it for various purposes such as a kiosk and possibly most recently as a urinal. It currently serves as a welcoming post to Slab City. The building is located on the east side of Beal Road at the north end of the proposed Salvation Mountain parcel.



Figure 22: EDS-13. Former Camp Dunlap main gate guard post building, P-13-003182.

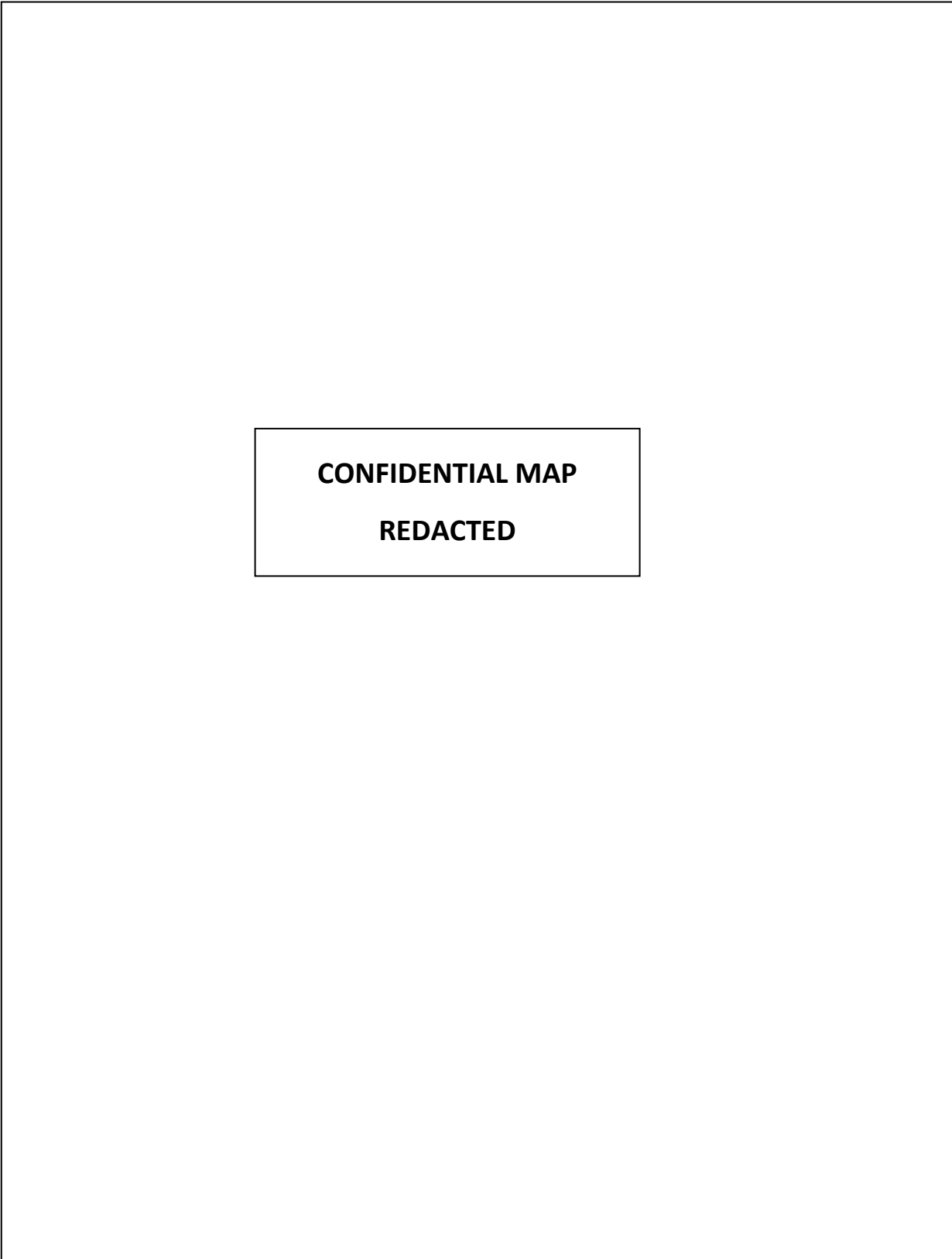


Figure 23: Map showing locations of cultural resources observed and recorded [REDACTED].

8.0 CONCLUSIONS

The record search identified the presence of two previously recorded historic-era resources within the Salvation Mountain Project Area (P-13-003181 and P-13-003182) associated with the former military base, Camp Dunlap, that have not been evaluated for eligibility for the CRHR. [REDACTED]

[REDACTED] The historic site P-13-007858, the old Coachella Canal, was also recommended as eligible for the NRHP under Criterion A (1 of the CRHR) for its association with past agricultural activities (O'Neill and Schaefer 1997; Schaefer and Ghabhláin 2003). [REDACTED]

The field survey of the 30 and 160-acre Project Area resulted in the identification of 10 additional historic resources (EDS-01, EDS-02, EDS-03, EDS-04, EDS-05, EDS-06, EDS-07, EDS-08, EDS-10 and EDS-11), and confirmed the location of P-13-03182. P-13-003181, the airplane repair building, was not relocated and may no longer be present. DPR 523 forms were prepared for the newly identified cultural resources (EDS-01, EDS-02, EDS-03, EDS-04, EDS-05, EDS-06, EDS-07, EDS-08, EDS-10 and EDS-11), and were updated for P-13-003182 (EDS-13). All cultural Resources identified within the Project Area are listed in Table 6 and their locations are shown in Figure 26.

Table 6: Cultural Resources Located within the 30 and 160-Acre Project Areas.

Number	Description	Age	Association/Theme	Location
P-13-003182 (EDS-13)	Guard Post Building	1942	WWII Camp Dunlap/Military	Salvation Mountain
EDS-01	Levee	>50 years	Unknown without further research. Associated with irrigation or Camp Dunlap	East Jesus
EDS-02 (part of P-13-0011464)	Niland-Blythe Road	1860s	Transportation	East Jesus, Salvation Mountain
EDS-03	Levee	>50 years	Unknown without further research. Associated with irrigation or Camp Dunlap	Salvation Mountain
EDS-04	Historic Isolate	1942	WWII Camp Dunlap/Military	Salvation Mountain
EDS-05	Water Retention Basin	1942	WWII Camp Dunlap/Military	Salvation Mountain
EDS-06	Wastewater Treatment Facility	1942	WWII Camp Dunlap/Military	Salvation Mountain
EDS-07	Can Scatter	1942	WWII Camp Dunlap/Military	Salvation Mountain
EDS-08	Fence Remnants	1942	WWII Camp Dunlap/Military	Salvation Mountain

EDS-10	Water Tanks/basin	1942	WWII Camp Dunlap/Military	Salvation Mountain
EDS-11	Historic Isolate	1942	WWII Camp Dunlap/Military	Salvation Mountain

8.1 INTERPRETATION OF CULTURAL RESOURCES RECORDED DURING THE FIELD SURVEY

P-13-003182 (EDS-13), EDS-04, EDS-05, EDS-06, EDS-07, EDS-08, EDS-10 and EDS-11 are associated with the former Camp Dunlap, a U.S. Marine Corps base activated in 1942 as a training base during WWII. Camp Dunlap was 631 acres in size and consisted of 65 buildings, a water treatment system, distribution system, sewage collection and treatment system, over 8.2 miles of paved streets, recreational areas and concrete fuel tanks. The base served 185,000 troops for a three year period (California State Military Department 2015; Marin Corps Chevron 1946).

The levees (EDS-01 and EDS-03) may also be associated with improvements to Camp Dunlap, built as flood control levees; however, they may also be associated with the East Highline Canal, located 0.53-miles to the southwest of the 640-acre parcel. The East Highline Canal is recorded as P-13-008333 and was constructed in 1914 to provide irrigation for agricultural purposes. Similar to the old Coachella Canal, water diversion levees or berms were constructed near the canals that functioned to divert water runoff towards the canal. The levees are indicated on the 1956 USGS 7.5' Iris Wash quadrangle map and, therefore, are at least 59 years; however, the exact age and association remain unclear without conducting further research that is beyond the scope of this project.

EDS-02 is a section of Beal Road that bisects both Project Areas and appears to be an extension of P-13-011464, the circa 1860s transportation route that stretched between Niland-Blythe. As shown in Figure 11, the old road follows the path of the current Beal Road as it traverses the Project Areas.

9.0 MANAGEMENT CONSIDERATIONS

The following management considerations and recommendations are based on a cultural resource inventory conducted to identify the presence of cultural resources within the proposed 30 and 160-acre parcels that may meet the definition of a Historical Resource for the purposes of CEQA and that require further consideration. The inventory is based on information derived from research conducted for the entire 640-acre parcel, and a field survey of the proposed 30-acre East Jesus and 160-acre Salvation Mountain parcels.

9.1 30-ACRE EAST JESUS PARCEL

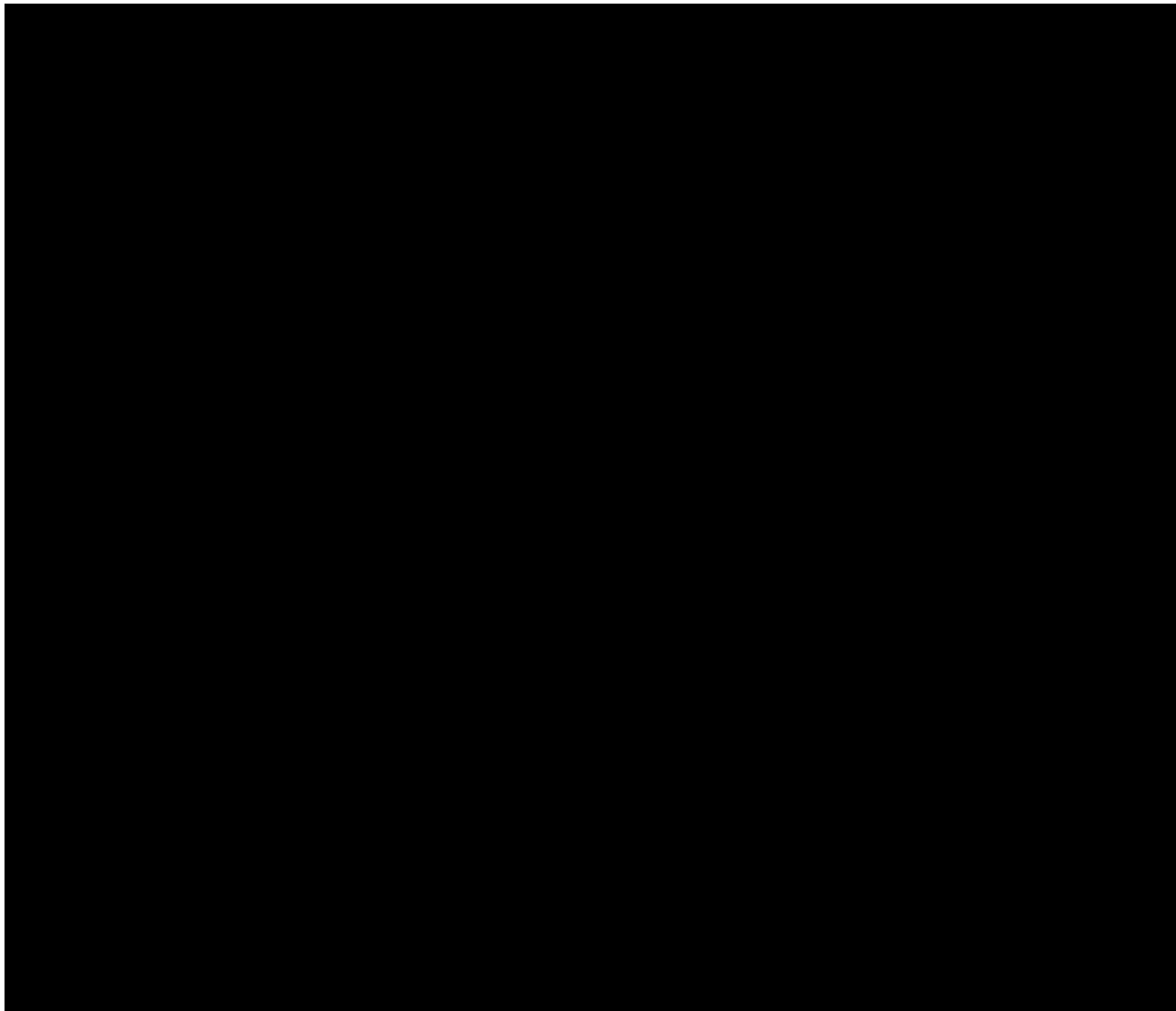
It does not appear that the potential sale of the proposed East Jesus parcel will not impact EDS-01, the levee, or EDS-02, a segment of Beal Road that may be part of the old Niland-Blythe Road (P-13-011464). Although these are both potentially significant cultural resources, the proposed project will not require any ground-disturbing or other activities that could cause adverse impacts. Therefore, no further recommendations are warranted for the proposed subdivision and sale of the East Jesus parcel.

Should any future project propose activities that could cause adverse effects to cultural resources identified as a result of this study, further evaluation is warranted to determine historic significance using the applicable state or federal criteria and guidelines.

9.2 160-ACRE SALVATION MOUNTAIN PARCEL

It does not appear that the potential sale of the proposed Salvation Mountain parcel will impact EDS-02, EDS-03 (levee) or the resources associated with the former Camp Dunlap (P-13-003182, EDS-04, EDS-05, EDS-06, EDS-07, EDS-08, EDS-10, EDS-011). Although these are potential historical resources, the proposed project will not require any ground-disturbing or other activities that could cause adverse impacts to these resources. Therefore, no further recommendations are warranted for the proposed subdivision and sale of the Salvation Mountain parcel.

Should any future project propose activities that could cause adverse effects to cultural resources identified as a result of this study, further evaluation is warranted to determine historic significance using the applicable state or federal criteria and guidelines. If a significance evaluation occurs, it is recommended that the cultural resources associated with the former Camp Dunlap (P-13-003182, EDS-04, EDS-05, EDS-06, EDS-07, EDS-08, EDS-10, EDS-011) be evaluated as contributors to a potential historic district, and not evaluated as individual resources.





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EVANS & DE SHAZO, LLC
ARCHAEOLOGY HISTORIC PRESERVATION

Attachment A:

South Costal Information (SCIC)

Literature Search Results

[REDACTED TO EXCLUDE RESOURCE LOCATION MAP]



South Coastal Information Center
San Diego State University
5500 Campanile Drive
San Diego, CA 92182-5320
Office: (619) 594-5682
www.scic.org
nick@scic.org

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM RECORDS SEARCH

Company: Evans & De Shazo, LLC
Company Representative: Sally Evans
Date Processed: 8/14/2015
Project Identification: East Jesus, Salvation Mountain, Slab City Cultural Resource Evaluation #J-2015-06-A1-0020
Search Radius: 1/2 mile

Historical Resources: YES
Trinomial and Primary site maps have been reviewed. All sites within the project boundaries and the specified radius of the project area have been plotted. Copies of the site record forms have been included for all recorded sites.

Previous Survey Report Boundaries: YES
Project boundary maps have been reviewed. National Archaeological Database (NADB) citations for reports within the project boundaries and within the specified radius of the project area have been included.

Historic Addresses: YES
A map and database of historic properties (formerly Geofinder) has been included.

Historic Maps: YES
The historic maps on file at the South Coastal Information Center have been reviewed, and copies have been included.

Summary of SHRC Approved CHRIS IC Records Search Elements

RSID:	1079
RUSH:	no
Hours:	1
Spatial Features:	37
Address-Mapped Shapes:	no
Digital Database Records:	0
Quads:	2
Aerial Photos:	0
PDFs:	Yes
PDF Pages:	248

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
IM-00187	NADB-R - 1100187; Voided - ECKHAW03	1979	ECKHARDT, WILLIAM T.	CULTURAL RESOURCE INVENTORY OF AREAS AFFECTED BY REJECT STREAM REPLACEMENT PROJECTS	WESTEC SERVICES, INC.	
IM-00189	NADB-R - 1100189; Voided - ECKHAW04	1979	ECKHARDT, WILLIAM	CULTURAL RESOURCE INVENTORY OF AREAS AFFECTED BY REJECT STREAM REPLACEMENT PROJECTS	WESTEC SERVICES, INC.	
IM-00343	NADB-R - 1100343; Voided - NHPC01	1985	NEW HORIZONS PLANNING CONSULTANTS, INC.	DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE PROPOSED SLAB CITY RECREATIONAL VEHICLE VILLAGE	NEW HORIZONS PLANNING CONSULTANTS, INC.	
IM-00433	NADB-R - 1100433; Voided - ROSENM12	1989	ROSEN, MARTIN D.	ARCHAEOLOGICAL SURVEY REPORT OF THE NILAND MATERIAL SITE, IMPERIAL COUNTY, CALIFORNIA	CALTRANS	13-006181, 13-006182, 13-006183, 13-006184
IM-00511	NADB-R - 1100511; Voided - ICPD09	1994	IMPERIAL COUNTY PLANNING DEPARTMENT	NILAND URBAN AREA PLAN	IMPERIAL COUNTY PLANNING DEPARTMENT	
IM-00651	NADB-R - 1100651; Voided - GREENE03	1994	GREEN, EILEEN and JOAN MIDDLETON	CULTURAL RESOURCE OVERVIEW - COACHELLA CANAL LINING PROJECT	BUREAU OF RECLAMATION	
IM-00674	NADB-R - 1100674; Voided - BLM23	1994	BUREAU OF LAND MANAGEMENT	SOUTHERN ARIZONA TRANSMISSION PROJECT PRELIMINARY DRAFT ENVIRONMENTAL IMPACT STATEMENT, DRAFT ENVIRONMENTAL IMPACT REPORT, DRAFT PLAN AMENDMENT, DEIS/DEIR/DPA	BUREAU OF LAND MANAGEMENT	
IM-00733	NADB-R - 1100733; Voided - CALTRA10	1990	CALTRANS	MINING AND RECLAMATION PLAN FOR THE NILAND MATERIAL SITE (IMPERIAL COUNTY)	DEPARTMENT OF TRANSPORTATION	
IM-00734	NADB-R - 1100734; Voided - DUNHAK01	1989	DUNHAM, KAREN L.	EAST SALTON SEA MATERIAL SITES QUARTZ, CHUCKWALLA, NILAND, STANDARD, AND MITER - BIOLOGICAL SURVEY REPORT	CALTRANS	
IM-00969	NADB-R - 1100969; Voided - SCHAEJ50	2003	SCHAEFER, JERRY, SINEAD NI GHABHLAIN, and MARK BECKER	A CLASS III CULTURAL RESOURCE INVENTORY AND EVALUATION FOR THE COACHELLA CANAL LINING PROJECT: PREHISTORIC AND HISTORIC SITES ALONG THE NORTHEASTERN SHORE OF ANCIENT LAKE CAHUILLA, IMPERIAL AND RIVERSIDE COUNTIES, CALIFORNIA	ASM AFFILIATES	

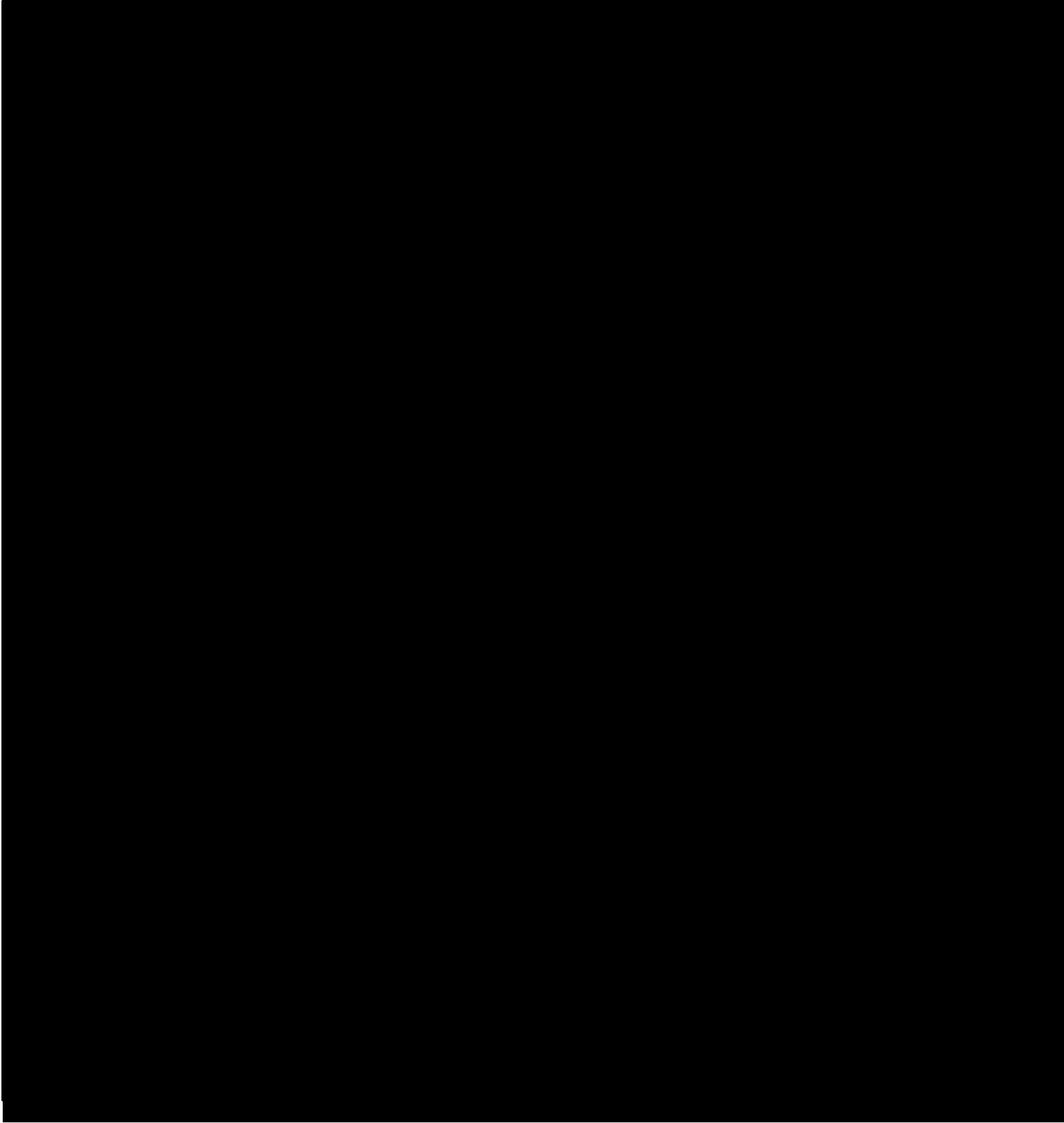
Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
IM-01284	NADB-R - 1101284; Voided - MCCORR10	1999	MCCORKLE APPLE, REBECCA and JAMES H. CLELAND	DRAFT HISTORIC AND ARCHAEOLOGICAL RESOURCES PROTECTION (HARP) PLAN FOR THE CHOCOLATE MOUNTAIN AERIAL GUNNERY RANGE, IMPERAIL COUNTY, CALIFORNIA	KEA ENVIRONMENTAL, INC.	
IM-01354	NADB-R - 1101354; Voided - SCHAEJ72	2009	SCHAEFER, JERRY, ARLEEN GARCIA- HERBST, and SHERRI ANDREWS	ARCHAEOLOGICAL SURVEY OF ACCESS ROADS IN THE CHOCOLATE MOUNTAIN AERIAL GUNNERY RANGE (CMAGR), IMPERIAL COUNTY, CALIFORNIA	ASM AFFILIATES	
IM-01510	NADB-R - 1101510; Voided - BLM69	2011	BUREAU OF LAND MANAGEMENT	DRAFT ENVIRONMENTAL IMPACT STATEMENT AND CALIFORNIA DESERT CONSERVATION AREA PLAN AMENDMENT FOR THE WEST CHOCOLATE MOUNTAINS RENEWABLE ENERGY EVALUATION AREA	BUREAU OF LAND MANAGEMENT	



South Coastal Information Center
San Diego State University
5500 Campanile Drive
San Diego, CA 92182-5320
(619) 594-5682
nick@scic.org

CONFIDENTIAL. This document is confidential under California Government Code 6254.10 and the National Historic Preservation Act, Section 304, and other applicable federal, state, and local laws and regulations prohibiting public and unauthorized disclosure of records related to cultural resources.



1:17,500

Reports

0 100 200 400
Meters

Nick Doose, Aug 14, 2015

Aerial © ESRI 2014



Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-13-000068	CA-IMP-000068	Other - 4-IMP-68				(Peck)	
P-13-003181	CA-IMP-003181	Other - 4-IMP-3181-H				2009 (Rudolph Miller)	
P-13-003182	CA-IMP-003182	Other - 4-IMP-3182-H				2009 (Rudolph Miller)	
P-13-005246	CA-IMP-005246	Other - 4-IMP-5246				2009 (IVCBM)	
P-13-006646	CA-IMP-006646	Other - 4-IMP-6646				2009 (UC Redlands)	
P-13-006652	CA-IMP-006652	Other - 4-IMP-6652				2009 (IVC Museum)	
P-13-006653	CA-IMP-006653	Other - 4-IMP-6653				2009 (IVC Museum)	
P-13-006654	CA-IMP-006654	Other - 4-IMP-6654				2009 (IVC Museum)	
P-13-006655	CA-IMP-006655	Other - 4-IMP-6655				2009 (IVC Museum)	
P-13-006656	CA-IMP-006656	Other - 4-IMP-6656				2009 (IVC Museum)	
P-13-006658	CA-IMP-006658	Other - 4-IMP-6658				2009 (IVC Museum)	
P-13-006662	CA-IMP-006662	Other - 4-IMP-6662				2009 (IVC Museum)	
P-13-006663	CA-IMP-006663	Other - 4-IMP-6663				2009 (IVC Museum)	
P-13-006676	CA-IMP-006676	Other - 4-IMP-6676				2009 (IVC Museum)	
P-13-006854	CA-IMP-006854	Other - 4-IMP-6854				2009 (IVC Field Class)	
P-13-006856	CA-IMP-006856	Other - 4-IMP-6856				2009 (IVC Field Class)	
P-13-006857	CA-IMP-006857	Other - 4-IMP-6857				2009 (IVC Field Class)	
P-13-006858	CA-IMP-006858	Other - 4-IMP-6858				2009 (IVC Field Class)	
P-13-006859	CA-IMP-006859	Other - 4-IMP-6859				2009 (IVC Field Class)	
P-13-006982	CA-IMP-006982	Other - 4-IMP-6982-I				2009 (IVC Museum)	
P-13-006983	CA-IMP-006983	Other - 4-IMP-6983-I				2009 (IVC Museum)	
P-13-007858	CA-IMP-007658	Other - Coachella Canal; Other - Old Coachella Canal; Other - All American Canal; Other - C-Iris-A-2; Other - Coachella Canal (BOR Berm 22)	Structure	Historic	HP20 (Canal/aqueduct)	1997 (Collin O'Neill, J. Schaefer, ASM Affiliates); 1999 (M. Avina, Jones & Stokes Associates); 2003 (Sinéad Ní Ghabhláin, ASM Affiliates); 2014 (Steven Brann, Dan Broockman, Cardno TEC)	IM-01532
P-13-011464	CA-IMP-010383	Other - ASM-R2S9				2010 (ASM Affiliates)	



Attachment B:

Native American Heritage Commission (NAHC):

- Sacred Lands Inventory Request
- Results of Sacred Lands Inventory
- Native American Notification Letters and Responses/Comments



August 6, 2015

Native American Heritage Commission
915 Capitol Mall, Room 364
Sacramento, CA 95814

RE: Sacred Lands Inventory Request

Project Location:

Project: Imperial County Environmental, Cultural and Other Clearance Survey Project

County Imperial County

USGS Quadrangle

Name USGS 7.5' Iris and Iris Wash quadrangles

Township 11S Range 15E Section(s) 36

Company/Firm/Agency:

Evans & De Shazo, LLC

Contact Person: Sally Evans M.A., RPA

Street Address: 118 W. Hills Circle

City: Sebastopol, CA Zip: 95472

Phone: 707-484-9628

Email: sally@evans-deshazo.com

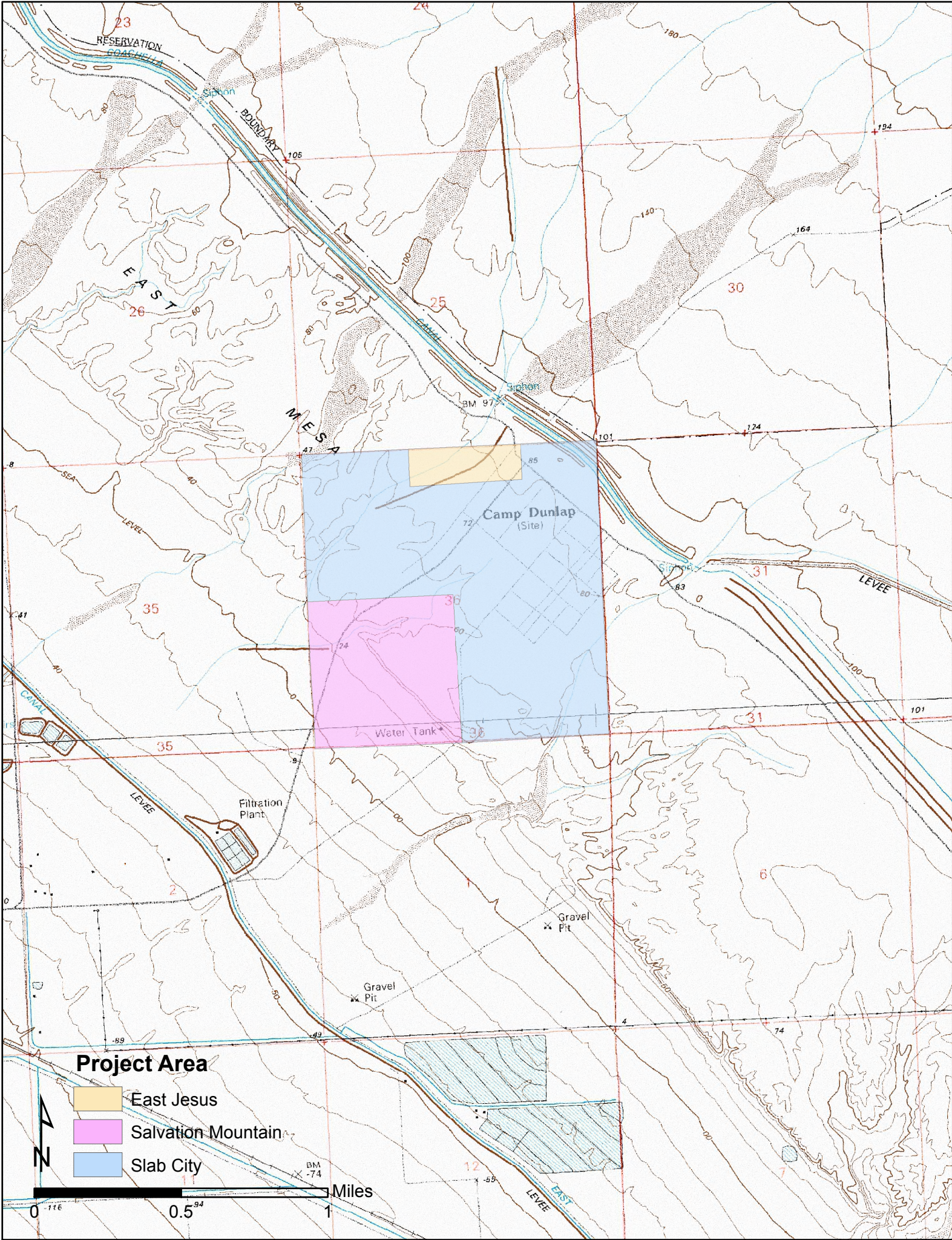
Project Description:

Evans & De Shazo, LLC was retained by the California State Lands Commission (CSLC) to conduct an environmental, cultural and other clearance surveys for 630 acres of land located in Niland, Imperial County, California. Prior to the potential sale of the three parcels (30, 160 and 440 acres) that comprise the 630 area project area the CSLC must first determine if there are any historical resources located within the project area. As part of the Cultural Resource Survey, Evans & De Shazo is asking that the Native American Heritage Commission conduct a Sacred Lands Inventory to determine the presence or absence of Native American Sacred Sites within or near to the project area and to provide a list of the Native American individual/organizations that should be contacted for further information. A project location map is attached.

Please e-mail the results to sally@evans-deshazo.com. Thank you.

Sincerely,

Sally Evans, M.A., RPA
Owner / Principal Archaeologist
(707) 484-9628 / sally@evans-deshazo.com



Project Area

- East Jesus
- Salvation Mountain
- Slab City

Miles

NATIVE AMERICAN HERITAGE COMMISSION

1550 Harbor Blvd., ROOM 100
West SACRAMENTO, CA 95691
(916) 373-3710
Fax (916) 373-5471



September 1, 2015

Sally Evans, MA., RPA
Evans & De Shazo, LLC
118 W. Hills Circle
Sebastopol, CA 95472

Sent by Email: sally@evans-deshazo.com
Number of Pages: 3

RE: Imperial County Environmental, Cultural and Other Clearance Survey Project, Niland, Imperial County

Dear Ms. Evans:

A record search of the Native American Heritage Commission (NAHC) *Sacred Lands File* was completed for your project area with negative results, based on the USGS quadrangle information you provided. Please note that the absence of specific site information in the *Sacred Lands File* does not indicate the absence of Native American cultural resources in any APE. Other sources of cultural resources information should be contacted regarding known and recorded sites. A Native American tribe or individual may in fact

Please contact all of the people on the attached list. The list should provide a starting place to locate areas of potential adverse impact within the APE. I suggest you contact all of those listed, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those on the list, your organization will be better able to respond to claims of failure to consult. If a response has not been received within two weeks of notification, the NAHC requests that you follow-up with a telephone call to ensure that the project information has been received

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at my email address: rw_nahc@pacbell.net.

Sincerely,

A handwritten signature in black ink that reads "Rob Wood".

Rob Wood
Associate Governmental Program Analyst

**Native American Contact List
Imperial County
September 1, 2015**

Ewilaapaayp Tribal Office
Robert Pinto Sr., Chairperson
4054 Willows Road
Alpine , CA 91901

Diegueno/Kumeyaay

Torres-Martinez Desert Cahuilla Indians
Mary Resvaloso, Chairperson
P.O. Box 1160
Thermal , CA 92274

Cahuilla

(619) 445-9126 Fax

(760) 397-8146 Fax

La Posta Band of Mission Indians
Gwendolyn Parada, Chairperson

Diegueno/Kumeyaay

Kwaaymii Laguna Band of Mission Indians
Carmen Lucas

P.O. Box 775
Pine Valley , CA 91962

Diegueno-Kwaaymii
Kumeyaay

Boulevard , CA 91905

Manzanita Band of Kumeyaay Nation
Angela Elliott Santos, Chairperson

Diegueno/Kumeyaay

Augustine Band of Cahuilla Mission Indians
Mary Ann Green, Chairperson

P.O. Box 846
Coachella , CA 92236

Cahuilla

P.O. Box 1302
Boulevard , CA 91905

(760) 369-7161 Fax

(619) 766-4957 Fax

Cabazon Band of Mission Indians
Doug Welmas, Chairperson

Cahuilla

La Posta Band of Mission Indians
Javaughn Miller

Boulevard , CA 91905
jmiller@Lapostatribes.net

Diegueno

Indio , CA 92203

(760) 347-7880 Fax

(619) 478-2125- Fax

Campo Band of Mission Indians
Ralph Goff, Chairperson

Diegueno/Kumeyaay

Torres-Martinez Desert Cahuilla Indians
Matthew Krystal, Cultural Resources Manager

P.O. Box 1160
Thermal , CA 92274

Cahuilla

Campo , CA 91906
rgoff@campo-nsn.gov

(760) 397-8146 Fax

(619) 478-5818 Fax

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed

Imperial County Environmental, Cultural, and Other Clearance Survey Project, Niland, Imperial County

**Native American Contact List
Imperial County
September 1, 2015**

Cabazon Band of Mission Indians
Judy Stapp, Director of Cultural Affairs
[REDACTED] Cahuilla
Indio, CA 92203
jstapp@cabazonindians-nsn.gov
[REDACTED]

(760) 347-7880 Fax

Ewiiapaayp Tribal Office
Will Micklin, Executive Director
[REDACTED] Diegueno/Kumeyaay
Alpine, CA 91901
wmicklin@leaningrock.net
[REDACTED]

(619) 445-9126 Fax

Manzanita Band of Mission Indians
ATTN: Keith Adkins, EPA Director
P.O. Box 1302 Kumeyaay
Boulevard, CA 91905
[REDACTED]

(619) 766-4957 Fax

Augustine Band of Cahuilla Mission Indians
Karen Kupcha
P.O. Box 849 Cahuilla
Coachella, CA 92236
[REDACTED]

Manzanita Band of the Kumeyaay Nation
Nick Elliott, Cultural Resources Coordinator
P.O. Box 1302 Kumeyaay
Boulevard, CA 91905
[REDACTED]

(919) 766-4957 Fax

Quechan Indian Nation
Arlene Kingery, THPO
P.O. Box 1899 Quechan
Yuma, AZ 85366
historicpreservation@quechantribe.
[REDACTED]

(760) 572-0515 Fax

Cahuilla Band of Indians
Luther Salgado, Chairperson
P.O. Box 391760 Cahuilla
Anza, CA 92539
Chairman@cahuilla.net
[REDACTED]

Inter-Tribal Cultural Resource Protection Council
Frank Brown, Coordinator
[REDACTED] Diegueno/Kumeyaay
Alpine, CA 91901
frbrown@viejas-nsn.gov
[REDACTED]

Kumeyaay Cultural Repatriation Committee
Bernice Paipa, Vice Spokesperson
P.O. Box 937 Diegueno/Kumeyaay
Boulevard, CA 91905
[REDACTED]

Torres-Martinez Desert Cahuilla Indians
Gary Resvaloso
P.O. Box 1160 Cahuilla
Thermal, CA 92274
[REDACTED]

(760) 397-8146 Fax

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed

Imperial County Environmental, Cultural, and Other Clearance Survey Project, Niland, Imperial County



September 1, 2015

**FORM LETTER TO NATIVE AMERICAN
INDIVIDUALS/ORGANIZATIONS**

«Title» «First_Name» «Last_Name»
«Company_Name»
«Address_Line_1»
«City», «State» «ZIP_Code»

Re: **J-2015-06-A1-020**; *Cultural Resource Inventory for the Imperial County Environmental, Cultural and Other Clearance Survey Project, Imperial County, California.*

Dear «Title» «Last_Name»:

Evans & De Shazo, LLC was contracted by the California State Lands Commission (CSLC) to conduct a cultural resource study for the *Imperial County Environmental, Cultural and Other Clearance Survey Project*. The Project includes the subdivision of a 640-acre parcel into three parcels (30, 160 and 450-acres in size) that the CSCL proposes to sell. The parcel is located two miles east-northeast of Niland, Imperial County, California and encompasses all of Section 36 of Township 10 South, Range 14 East. The Project Area includes the 30-acre parcel referred to as "East Jesus" and the proposed 160-acre parcel referred to as "Salvation Mountain. A record search was conducted for the entire 640-acre parcel, but only the proposed 30 and 160-acre parcels were subject to a field survey. A subsequent field survey is planned in October 2015 for the remaining 450-acre parcel referred to as "Slab City." A project location map is attached.

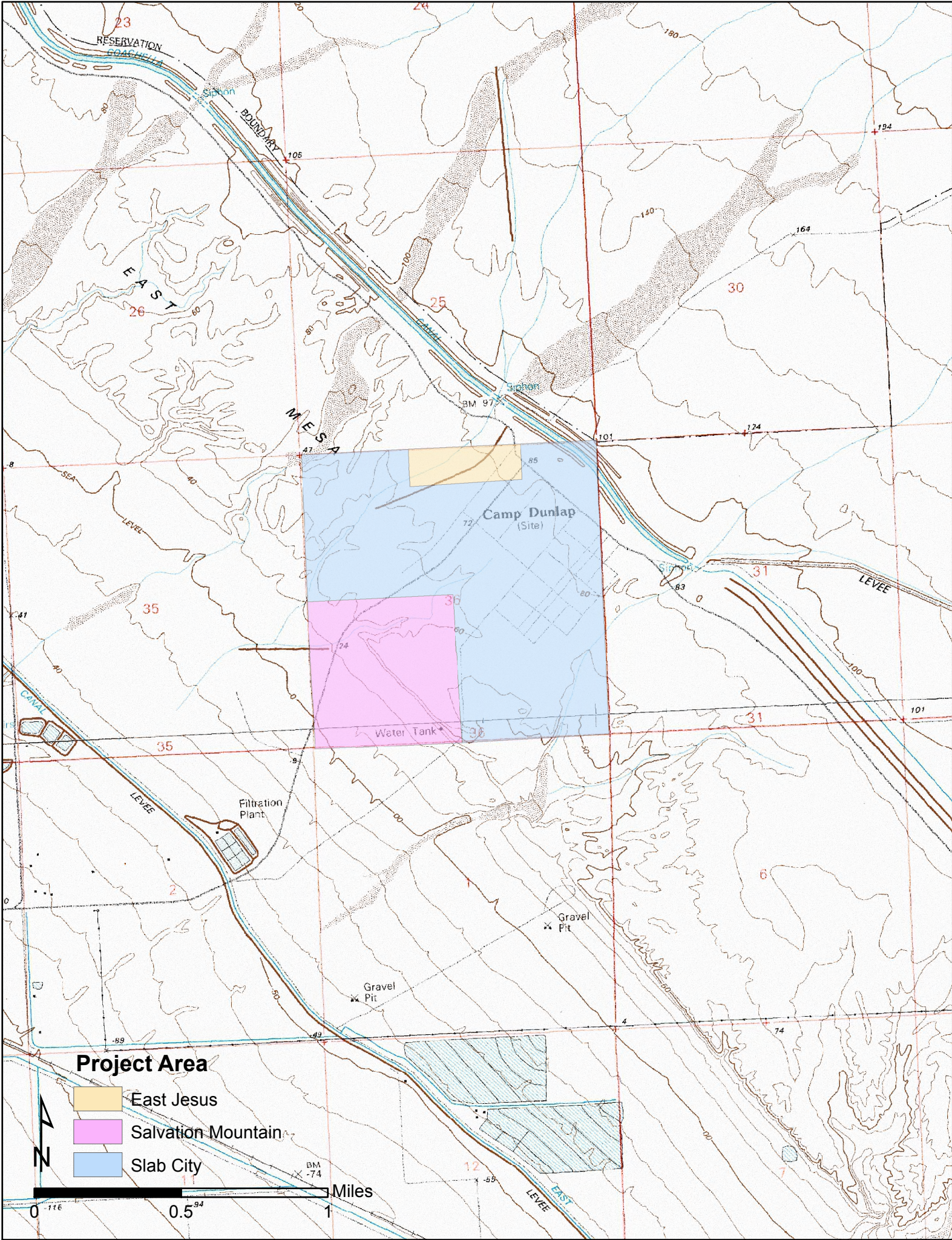
As part of the cultural resource study, Evans & De Shazo requested the Native American Heritage Commission to conduct a Sacred Lands Inventory to determine the presence or absence of Native American Sacred Sites within or near to the Project Area. The results were negative, but they recommended contacting you for further information about the presence of Sacred Sites, or other Native American resources or traditional gathering areas within the project area. Please contact us if you have any information that should be considered in this evaluation. Our address, phone number and e-mail are listed below.

Evans & De Shazo, LLC
118 W. Hills Circle, Sebastopol, CA 95472
(707) 484-9628
sally@evans-deshazo.com

Please refer to "*The Imperial County Environmental, Cultural and Other Clearance Survey Project*" in your communication. Thank you.

Sincerely,

Sally Evans, M.A., RPA
Principal Archaeologist



Project Area

- East Jesus
- Salvation Mountain
- Slab City

Miles



September 3, 2015

Sally Evans, M.A., RPA
Principal Archaeologist
Evans & De Shazo, LLC
118 W. Hills Circle
Sebastopol, CA 95472

Re.: The Imperial County Environmental, Cultural and Other Clearance Survey Project

Dear Ms. Evans:

Thank you for contacting the Cabazon Band of Mission Indians concerning cultural resource information relative to the above referenced project.

The project is located outside of the Tribe's current reservation boundaries but within an area that may be considered a traditional use area. The Tribe, however, has no specific archival information on the site indicating that it may be a sacred/religious site or other site of Native American traditional cultural value.

We look forward to continued collaboration in the preservation of cultural resources or areas of traditional cultural importance.

Best regards,

Judy Stapp
Director of Cultural Affairs



THE TORRES MARTINEZ DESERT CAHUILLA INDIANS

P.O. Box 1160

Thermal, CA 92274

(760) 397-0300 – FAX (760) 397-8146

September 25, 2015

Sally Evans, M.A., RPA
Principal Archeologist

Re: J-2015-06-A1-020 Cultural Resource Inventory for the Imperial County Environmental, Cultural and Other Clearance Survey Project Report, Imperial County, California

Dear Ms. Evans:

On behalf of the Torres Martinez Desert Cahuilla Indians (TMDCI) I appreciate your efforts to include the Tribe on Cultural Resources matters. The proposed project is a subdivision of 640 acres Section 36, TIOS, R14E, 30 acres "East Jesus; 160 acres "Salvation Mountain"; 450 Acres "Slab City". A records search indicates there is cultural sensitivity the area. The Tribe's main concern is the potential for inadvertent discovery of human remains within the project area. As such, TMDCI make the following recommendation:

1. We would like to requests and evaluate any cultural resources records, assessment or documentation in regards to cultural sites, sacred sites, traditional cultural property or gathering site of Copies of any cultural resource documentation including reports and site records are sent to the TMDCIthe Desert Cahuilla Indians.
2. After review by Most Likely Descendant we will request a meeting to begin with the Tribal Consultant
3. Any subsequent archaeological field survey of the project area by a qualified archaeologist must be accompanied by cultural resource monitor(s) at all times.

Should you have any questions regarding this matter please feel free to call me at (760) 397-0300 me at extension 1205.

Sincerely,

Mary L Resvaloso
Mary L. Resvaloso, Interim Tribal Administrator

cc: Alesia Reed, Tribal Council Rep.
cc: Gary Resvaloso, MLD



Attachment C:

Department of Parks and Recreation (DPR) 523 Forms:

- EDS-01: Levee
- EDS-02: P-13-011464 Continuation
- EDS-03: Levee
- EDS-04: Historic Isolate [REDACTED]
- EDS-05: Camp Dunlap Water Treatment features
- EDS-06: Camp Dunlap Wastewater Treatment facility
- EDS-07: Historic Artifact Scatter [REDACTED]
- EDS-08: Camp Dunlap Fence line
- EDS-10: Camp Dunlap Water Storage Facility
- EDS-11: Historic Isolate [REDACTED]
- EDS-13: P-13-003182 Update

Other Listings
Review Code

Reviewer

Date

Page 1 of 2

*Resource Name or #: EDS-01

P1. Other Identifier: East Jesus parcel levee

*P2. Location: Not for Publication Unrestricted

*a. County Imperial

*b. USGS 7.5' Quad Iris Wash, Calif. Date 1993 T10N; R14E; NE and NW¼ of Sec 36; San Bernardino B.M.

c. Address East Jesus and Slab City parcels

City Slab City

Zip

d. UTM: Zone 11; NAD 83: East End:643103mE / 36816664mN; West End:642358mE / 3681260mN

e. Other Locational Data: The levee extends northeast-southwest and extends from Coachella Canal Road southwest through the East Jesus proposed parcel and into the Slab City proposed parcel. It parallels an existing drainage on the southeast side.

*P3a. Description: The levee is a linear feature that is 2,850 feet long and oriented northeast-southwest (at 60-240 degrees). It measures 45 feet at the base and 30 feet at the top, and is approximately 4 feet high. The levee appears to be constructed of native soils built up from each side with a compacted and flatten top. There are vehicle tracks along the top of the levee that Google maps indicate as Chadwick Drive. The north side is lined with old tires set upright. Where the levee leaves the East Jesus property at the northeast end, it widens and becomes flush with the ground level on the south side, while the north end retains a 2 foot tall slope.

The levee was likely constructed to help divert water and prevent flooding. The levee is indicated on the USGS 1956 Iris Wash quadrangle map, and is at least 59 years of age.

*P3b. Resource Attributes: HP20. Canal/aqueduct

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photograph:



5b. Description of Photo:

Overview, facing east (Photo EDS DSN0041)

*P6. Date Constructed/Age and Sources:

Historic (WWII) Prehistoric Both

*P7. Owner and Address:

California State Lands Commission
100 Howe Avenue, Suite 100 South
Sacramento, California 95825

*P8. Recorded by: Sally Evans and Stacey De Shazo
Evans & De Shazo

118 W. Hills Circle

Sebastopol, CA 95472

*P9. Date Recorded: 18 August 2015

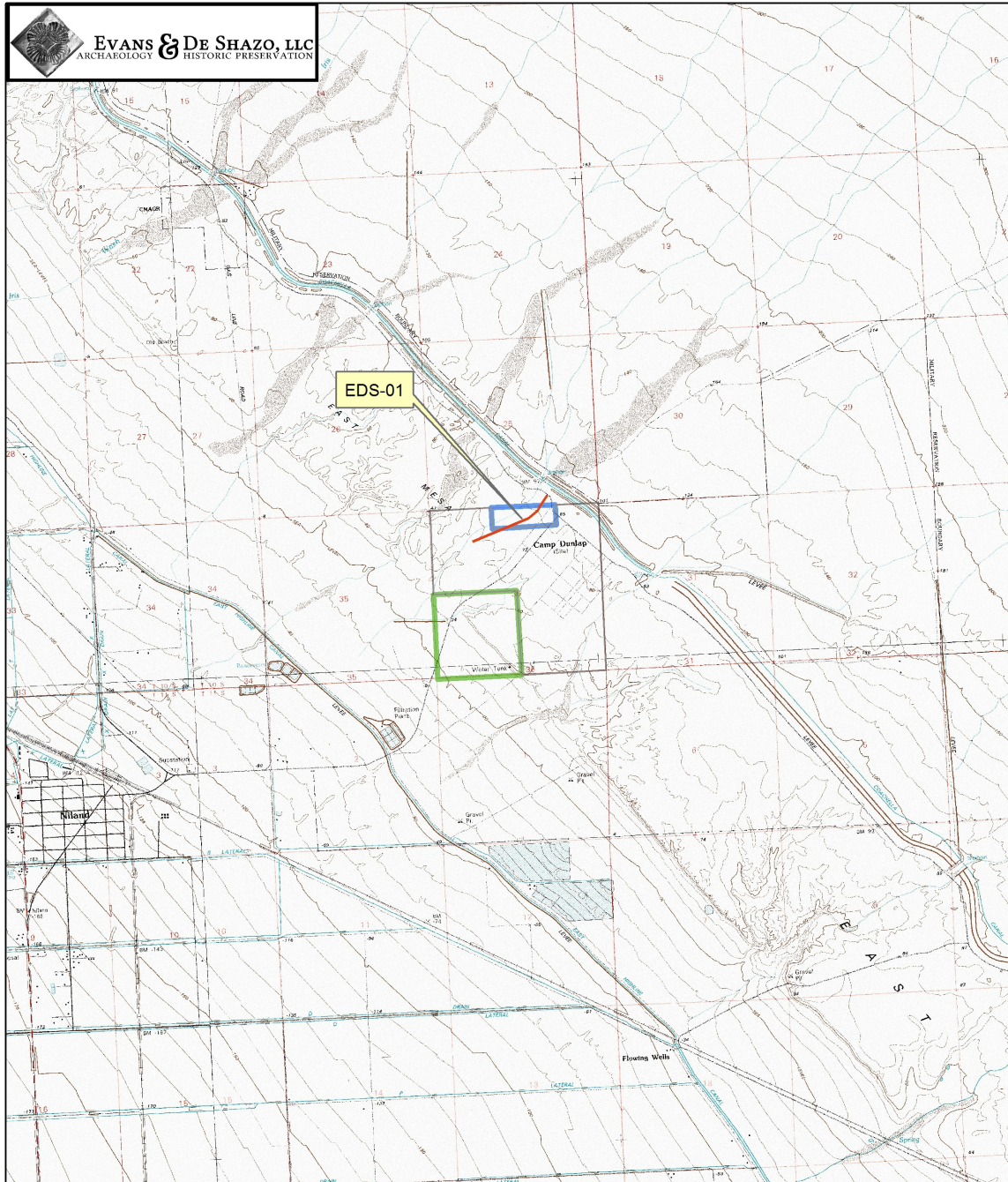
*P10. Survey Type: Reconnaissance

*P11. Report Citation:

Evans, Sally

2015 *A Cultural Resources Inventory for the Imperial County Environmental, Cultural, and Other Clearance Survey Project, Slab City, California.* Report prepared for the California State Lands Commission, Sacramento, California by Evans & De Shazo, Sebastopol, California.

*Attachments: NONE Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record Artifact Record Photograph Record Other (list)



**California State Lands Commission
 Imperial County Environmental, Cultural
 and Other, Clearance Survey Project**

Project Areas: USGS 7.5' Iris & Iris Wash (1993) quadrangles

- Salvation Mountain
- East Jesus
- Slab City
- EDS-01

0 1 2 Miles

N

Other Listings
Review Code

Reviewer

Date

Page 1 of 3

*Resource Name or #: EDS-02

P1. Other Identifier: Section of Niland-Blythe Transportation Route (Beal Road)

***P2. Location:** Not for Publication Unrestricted

***a. County** Imperial

***b. USGS 7.5' Quad** Iris Wash, Calif. **Date** 1993 **T10N; R14E; Sec** 36; San Bernardino **B.M.**

c. Address East Jesus and Slab City parcels, Beal Road

City Slab City

Zip

d. UTM: Zone 11; *NAD 83: Northeast End:*643196mE / 3681456mN; *Southwest End:*641994mE / 3680072mN

e. Other Locational Data: This section of the Niland-Blythe road extends from the Coachella Canal Road in a southwest direction through Section 36 (Project Area).

***P3a. Description:** This is a 1.18 mile long section of Beal Road that appears to be part of the approximate 14-mile long Niland-Blythe trail, a transportation route that runs roughly southwest to northeast between Blythe and Niland, California, recorded as P-13-011464. The previously recorded section terminates at the northeast side of the old Coachella Canal, 900 feet northwest of the northeast corner of Section 36, and there are several historic features and artifacts associated with that section. William D. Bradshaw, a pioneer, miner, and trader after which the Bradshaw Mountains in Arizona and the Bradshaw Trail in Riverside County, California are named, established the Niland-Blythe Road in the 1860s. According to Blackburn's Map of Imperial County from 1936, the Niland-Blythe route crossed the old Coachella Canal and headed southwest through Section 36 to Niland following the route of the current Beal Road. This 1.18-mile long section is located just west of the canal, and heads southwest through Section 36. This section is approximately 20' wide and has an improved, paved surface that was likely done when Camp Dunlap was constructed.

***P3b. Resource Attributes:** HP37. Highway/Trail

***P4. Resources Present:** Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photograph:



5b. Description of Photo:

Overview, looking SW
(Photo EDS DSN0046)

***P6. Date Constructed/Age and**

Sources: Historic (WWII)
 Prehistoric Both

***P7. Owner and Address:**

California State Lands Commission
100 Howe Avenue, Suite 100 South
Sacramento, California 95825

***P8. Recorded by:** S. Evans

Evans & De Shazo
118 W. Hills Circle
Sebastopol, CA 95472

***P9. Date Recorded:** 18 August 2015

***P10. Survey Type:** Reconnaissance

***P11. Report Citation:**

Evans, Sally

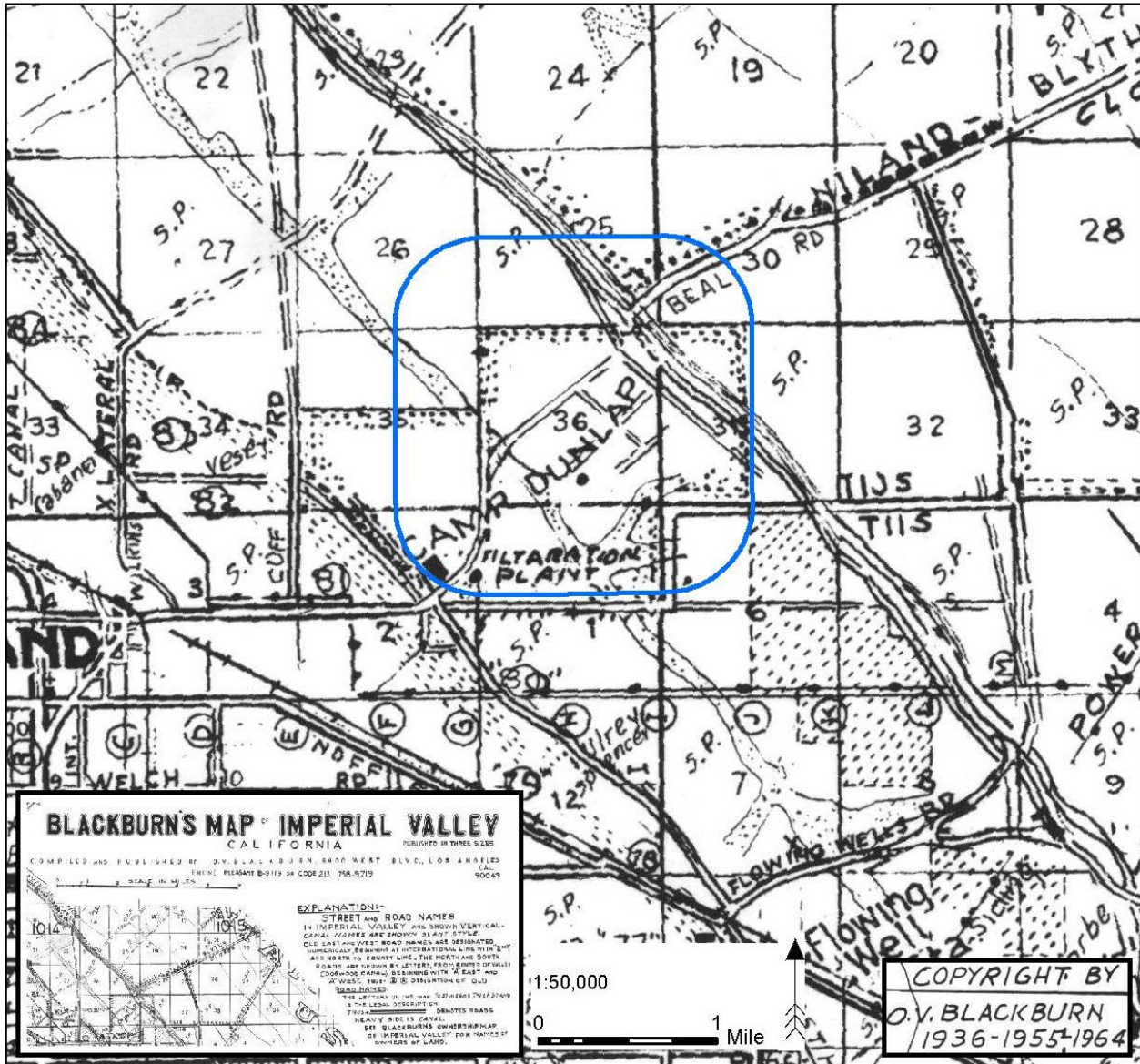
2015 *A Cultural Resources Inventory for the Imperial County Environmental, Cultural, and Other Clearance Survey Project, Slab City, California.* Report prepared for the California State Lands Commission, Sacramento, California by Evans & De Shazo, Sebastopol, California.

***Attachments:** NONE Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
Artifact Record Photograph Record Other (list)

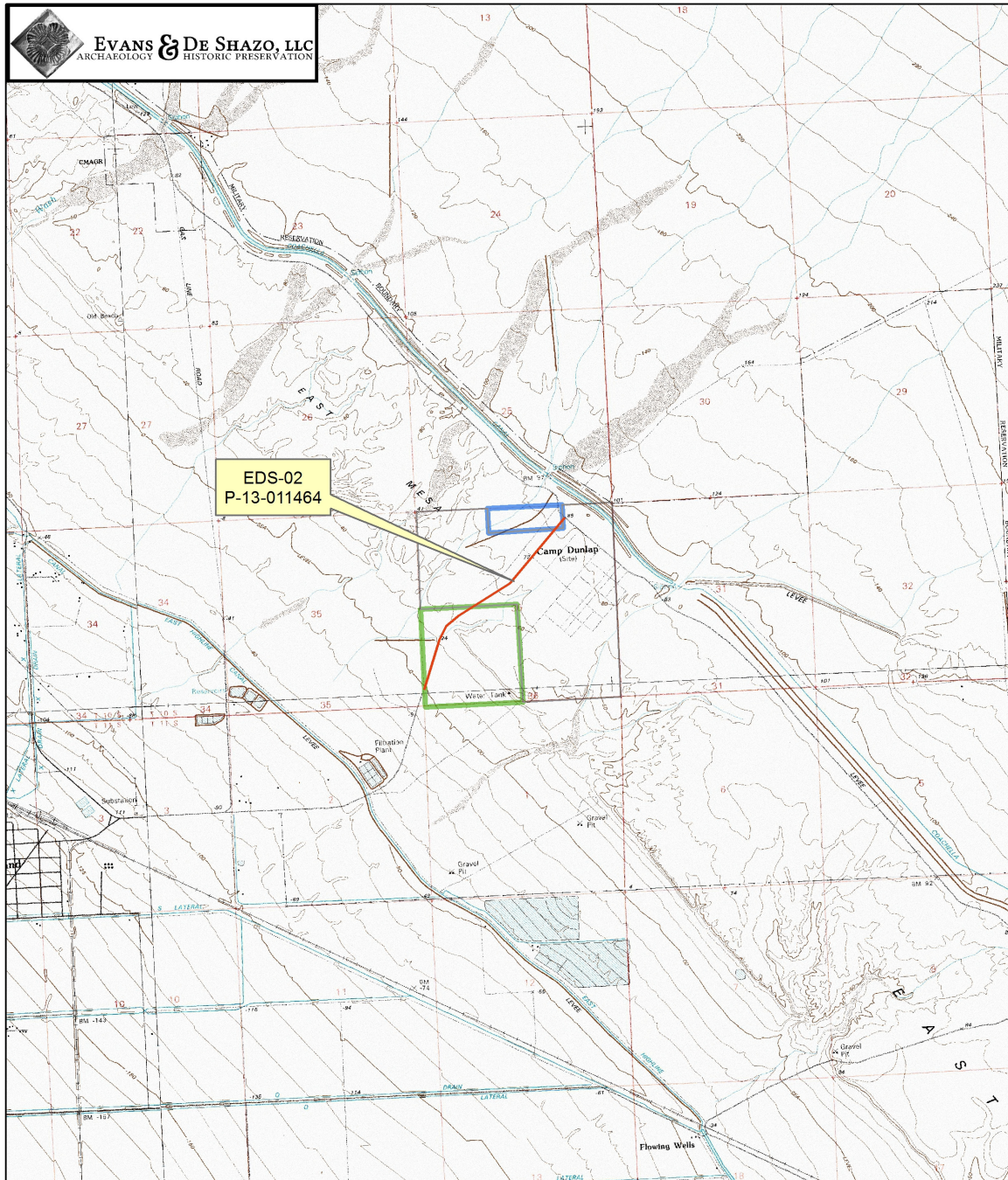
CONTINUATION SHEET

Property Name: EDS-02

Page 2 of 3



Blackburn's Map of Imperial Valley, CA (1936, 1955, 1964). Project Area includes Section 36. Blue outline is literature search study area.



**California State Lands Commission
 Imperial County Environmental, Cultural
 and Other, Clearance Survey Project**

Project Areas: USGS 7.5' Iris & Iris Wash (1993) quadrangles

- Salvation Mountain
- East Jesus
- Slab City
- EDS-02

0 1 2 Miles

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial:
NRHP Status Code

Other Listings
Review Code

Reviewer

Date

Page 1 of 2

*Resource Name or #: EDS-03

P1. Other Identifier: Salvation Mountain parcel levee

***P2. Location:** Not for Publication Unrestricted

***a. County** Imperial

***b. USGS 7.5' Quad** Iris Wash, Calif. **Date** 1993 T10N; R14E; NE¼ of Sec 36; San Bernardino **B.M.**

c. Address Salvation Mountain parcel

City Slab City

Zip

d. UTM: Zone 11; *NAD 83: East End:641792.17mE / 3680487.84mN; West End:642104.19mE / 3680473.21mN*

e. Other Locational Data: The levee extends east/west and is located on the west side of Beal Road and the Salvation Mountain folk art site.

***P3a. Description:** William D. Bradshaw, a pioneer, miner and trader after which the Bradshaw Mountains in Arizona and the Bradshaw Trail in Riverside County, California are named, established the Niland-Blythe Road in the 1860s.

The levee runs along the south side of where two drainages converge and was likely constructed to help divert water towards the East Highland Canal and to prevent flooding. The levee is indicated on the USGS 1956 Iris Wash quadrangle map, so it is at least 59 years of age.

***P3b. Resource Attributes:** HP37. Highway/Trail

***P4. Resources Present:** Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photograph:



5b. Description of Photo:

Overview, facing west.
(Photo EDS-003-484)

***P6. Date Constructed/Age and Sources:** Historic (WWII)
 Prehistoric Both

***P7. Owner and Address:**
California State Lands Commission
100 Howe Avenue, Suite 100 South
Sacramento, California 95825

***P8. Recorded by:** S. Evans
Evans & De Shazo
118 W. Hills Circle
Sebastopol, CA 95472

***P9. Date Recorded:** 18 August 2015

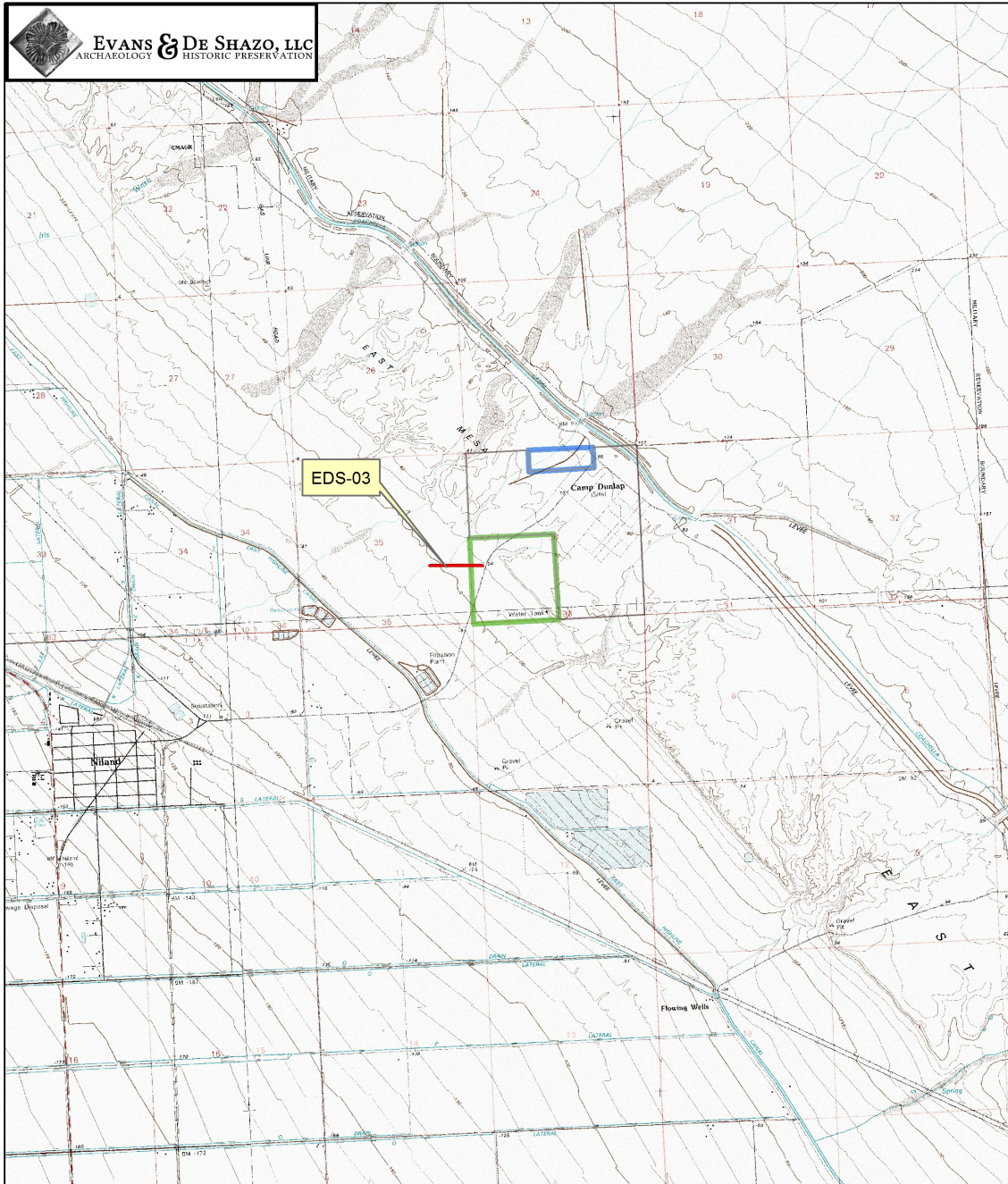
***P10. Survey Type:** Reconnaissance

***P11. Report Citation:**

Evans, Sally

2015 *A Cultural Resources Inventory for the Imperial County Environmental, Cultural, and Other Clearance Survey Project, Slab City, California.* Report prepared for the California State Lands Commission, Sacramento, California by Evans & De Shazo, Sebastopol, California.

***Attachments:** NONE Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record Artifact Record Photograph Record Other (list)



**California State Lands Commission
 Imperial County Environmental, Cultural
 and Other, Clearance Survey Project**

Project Areas: USGS 7.5' Iris Wash (1993) quadrangle

- Salvation Mountain
- East Jesus
- Slab City
- EDS-03: Levee

0 1 2 Miles

N

**DPR 523 Forms for EDS-04
REDACTED**

Other Listings
Review Code

Reviewer

Date

Page 1 of 3

*Resource Name or #: EDS-05

P1. Other Identifier: Camp Dunlap Water Treatment Plant

***P2. Location:** Not for Publication Unrestricted

*a. County Imperial

*b. USGS 7.5' Quad Iris, Calif. Date 1993 T10N; R14E; NE¼ of Sec 36; San Bernardino B.M.

c. Address Salvation Mountain parcel

City Slab City

Zip

d. UTM: Zone 11; NAD 83: NW Basin: 642333.02mE / 13680097.1mN SE Basin: 642184.85mE / 13679940.79mN

e. Other Locational Data: The basins are located on the southeastern facing slopes of an alluvial fan below the East Mesa bluff. Located on the east side of Beal Road, 0.45 miles northeast of the East Highland Canal and 2.0 miles east of Niland, California.

***P3a. Description:** The resource consists of a series of rectangular shaped retention basins formed by creating a berm type structure using local soil. The outer berms and a central berm are approximately 3.2 feet high, 10 feet wide at the top, and 20 feet wide at the base. Overall, the entire feature is approximately 1,590 feet long by 985 feet wide, and is oriented in a northeast/southwest direction. The feature is divided into 36 cells, each measuring approximately 470 x 80 feet. Brown ceramic sewer pipe, measuring 12 inches in diameter, are embedded within some of the berms. This feature was likely a part of the water treatment facility for Camp Dunlap, and therefore dates to WWII. A 1953 aerial photograph shows the facilities to be abandoned and partly filled in with sand. The retention basins are related to the water treatment facilities located immediately to the northeast (EDS-06).

***P3b. Resource Attributes:** HP11. Engineering Structure

***P4. Resources Present:** Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photograph:



5b. Description of Photo:

Site overview, facing northeast.
(Photo # EDS-005-1485)

***P6. Date Constructed/Age and Sources:** Historic (WWII)
 Prehistoric Both

***P7. Owner and Address:**
California State Lands Commission
100 Howe Avenue, Suite 100 South
Sacramento, California 95825

***P8. Recorded by:** B. Peterson, Jason Collins
Evans & De Shazo
118 W. Hills Circle
Sebastopol, CA 95472

***P9. Date Recorded:** 18 August 2015

***P10. Survey Type:** Reconnaissance

***P11. Report Citation:**

Evans, Sally

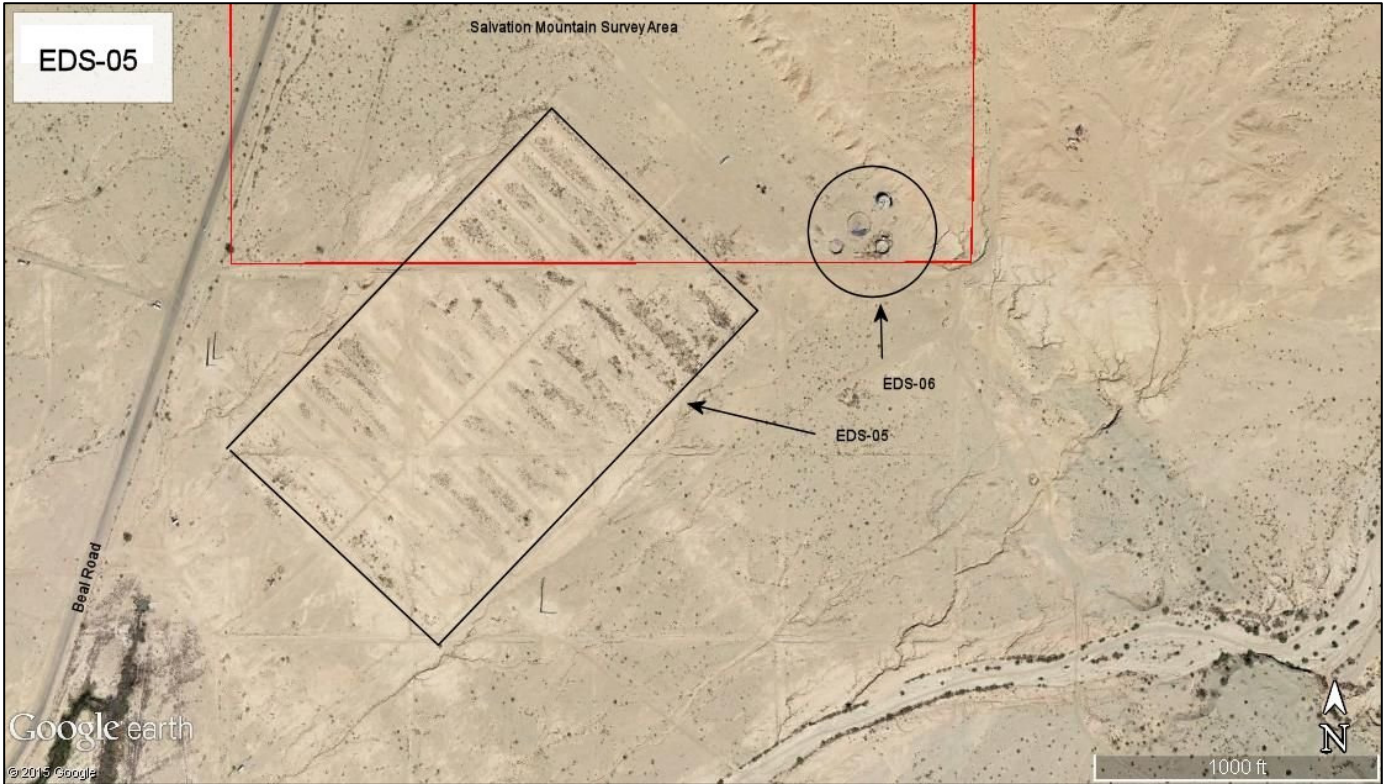
2015 *A Cultural Resources Inventory for the Imperial County Environmental, Cultural, and Other Clearance Survey Project, Slab City, California.* Report prepared for the California State Lands Commission, Sacramento, California by Evans & De Shazo, Sebastopol, California.

***Attachments:** NONE Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record Artifact Record Photograph Record Other (list)

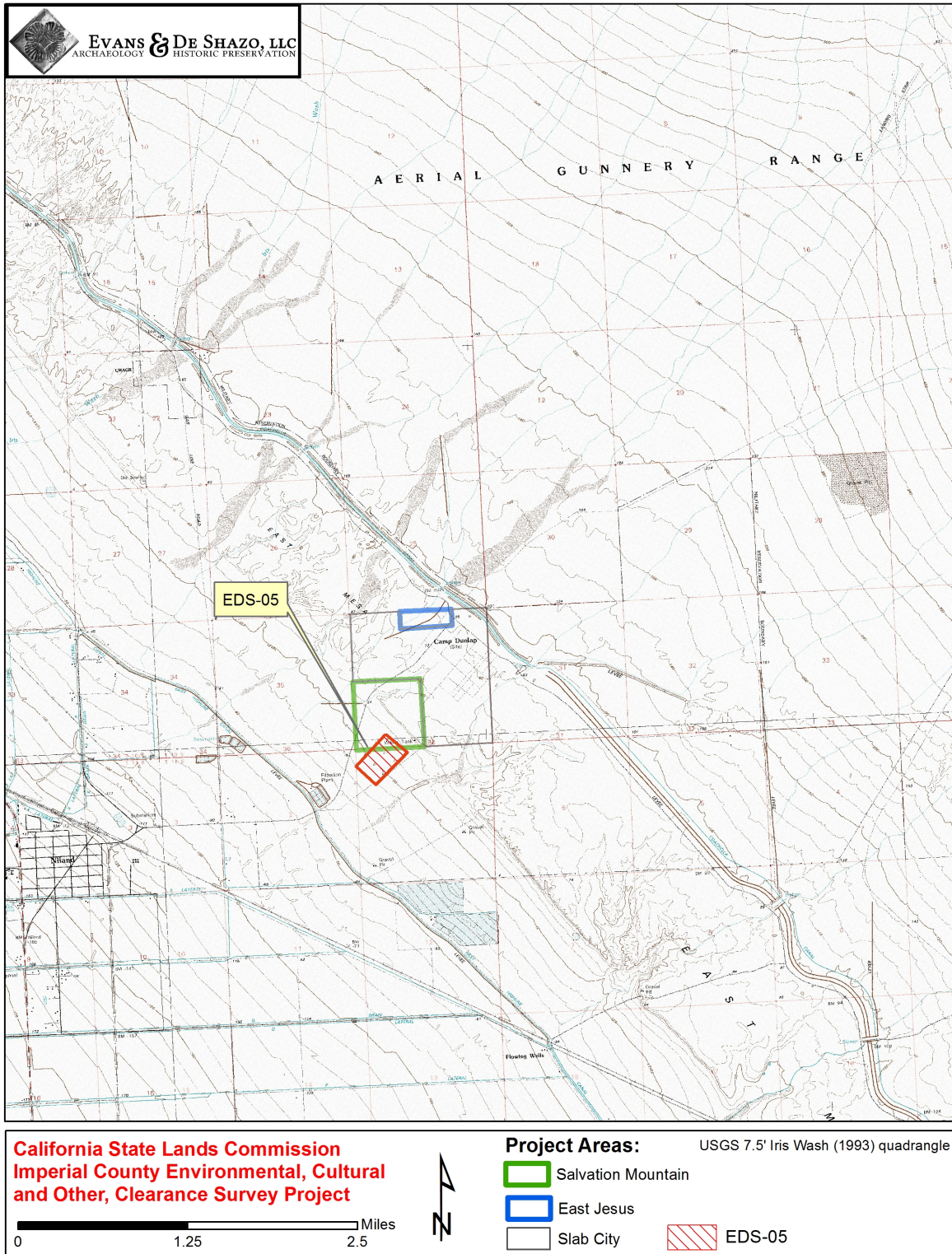
CONTINUATION SHEET

Property Name: _____ EDS-05

Page 2 of 3



1953 aerial photo.



Other Listings
Review Code

Reviewer

Date

Page 1 of 6

*Resource Name or #: EDS-06

P1. Other Identifier: Camp Dunlap Wastewater Treatment Facility

***P2. Location:** Not for Publication Unrestricted

*a. County Imperial

*b. USGS 7.5' Quad Iris, Calif. Date 1993 T10N; R14E; SE¼ of SW¼ Sec 36; San Bernardino B.M.

c. Address Salvation Mountain parcel

City Slab City

Zip

d. UTM: Zone 11; NAD 83: (see Continuation Form)

e. Other Locational Data: The site is located on an alluvial terrace on the toe slope of East Mesa.

***P3a. Description:** This site includes seven features that are part of the wastewater treatment facility for Camp Dunlap, which dates to WWII. The features include a concrete water tank (F-1), a large concrete settling basin (F-2), and two other probable concrete settling basins (F-3 and F-4), and other unidentified concrete foundations (F5 to F7). The features are heavily covered with modern graffiti and there are trailers and other modern structures appended to some of the features. It appears that the water tank, which has an access door on the east side, has been used as a habitation space by residents of Slab City.

***P3b. Resource Attributes:** HP11. Engineering Structure

***P4. Resources Present:** Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photograph:



5b. Description of Photo:

View of water tank with modern graffiti, facing east. (Photo EDS-1493)

***P6. Date Constructed/Age and**

Sources: Historic
 Prehistoric Both

***P7. Owner and Address:**

California State Lands Commission
100 Howe Avenue, Suite 100 South
Sacramento, California 95825

***P8. Recorded by:** B. Peterson, Jason Collins
Evans & De Shazo
118 W. Hills Circle
Sebastopol, CA 95472

***P9. Date Recorded:** 19 August 2015

***P10. Survey Type:** Reconnaissance

***P11. Report Citation:**

Evans, Sally

2015 *A Cultural Resources Inventory for the Imperial County Environmental, Cultural, and Other Clearance Survey Project, Slab City, California.* Report prepared for the California State Lands Commission, Sacramento, California by Evans & De Shazo, Sebastopol, California.

***Attachments:** NONE Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
Artifact Record Photograph Record Other (list)

CONTINUATION SHEET

Page 2 of 6

Former Camp Dunlap Wastewater Treatment Facility

P2d. EDS-06 boundary UTM's:

NW	642590 mE	3680061 mN
NE	642710 mE	3680017 mN
SE	642701 mE	3679948 mN
SW	642639 mE	3679957 mN

P3a. Feature 1 is a large concrete water tank approximately 40 feet in diameter and about 15 feet in height. It still has a roof and appears to be used as a residence. It features two large, and particularly beautiful paintings by artist Angelina Cristina of monochrome woman's faces along the side.

Feature 2 appears to be a settling or aeration basin. It consists of a circular concrete wall approximately 5 feet high and 75 feet in diameter. It is open to the sky and the floor is divided by eighteen low concrete dividers oriented northwest-southeast. The floor is also covered with fist-sized cobbles. The interior and exterior walls are covered with modern graffiti.

Feature 3 is a circular concrete tank, approximately 6 feet high on the outside and 8 feet on the inside. It is 45 feet in diameter and has a travel trailer attached to its northwest side. A stairway has been added to the west side of the exterior, probably to allow viewing of the art piece painted on the inside walls of the feature. The art piece is a painting titled *Kinetoscope* by Angelina Christina and Ease One, and consists of a series of women's faces and other designs in blue monochrome.

Feature 4 is another circular concrete feature measuring 40 feet in diameter and about 5 feet deep. Its rim is nearly flush with the ground surface on the north side, but sits above the surface on the other sides. It is also covered with modern graffiti.

Feature 5 is a concrete pad that measures approximately 12 by 30 feet. Its function is unknown.

Feature 6 is a foundation approximately 40 feet long and 12 feet wide, and pointed on the southeast end. It is divided lengthwise in two by a wall. Its function is unknown but it appears to have held water at one time.

Feature 7 is a large, roughly rectangular area that appears to have been graded or modified in the past, and contains a series of three X-shaped concrete features. The concrete features are about 3 feet in height and triangular in vertical cross section, with four legs forming a cross. The function is unknown, but they may have served as bases for some equipment.

There are also scattered small concrete pads and boxes and a considerable amount of trash. Two modern art sculpture installations of repurposed materials were also noted in the vicinity of the facility.

CONTINUATION SHEET

Page 3 of 6



Feature 2



Feature 3



Feature 4

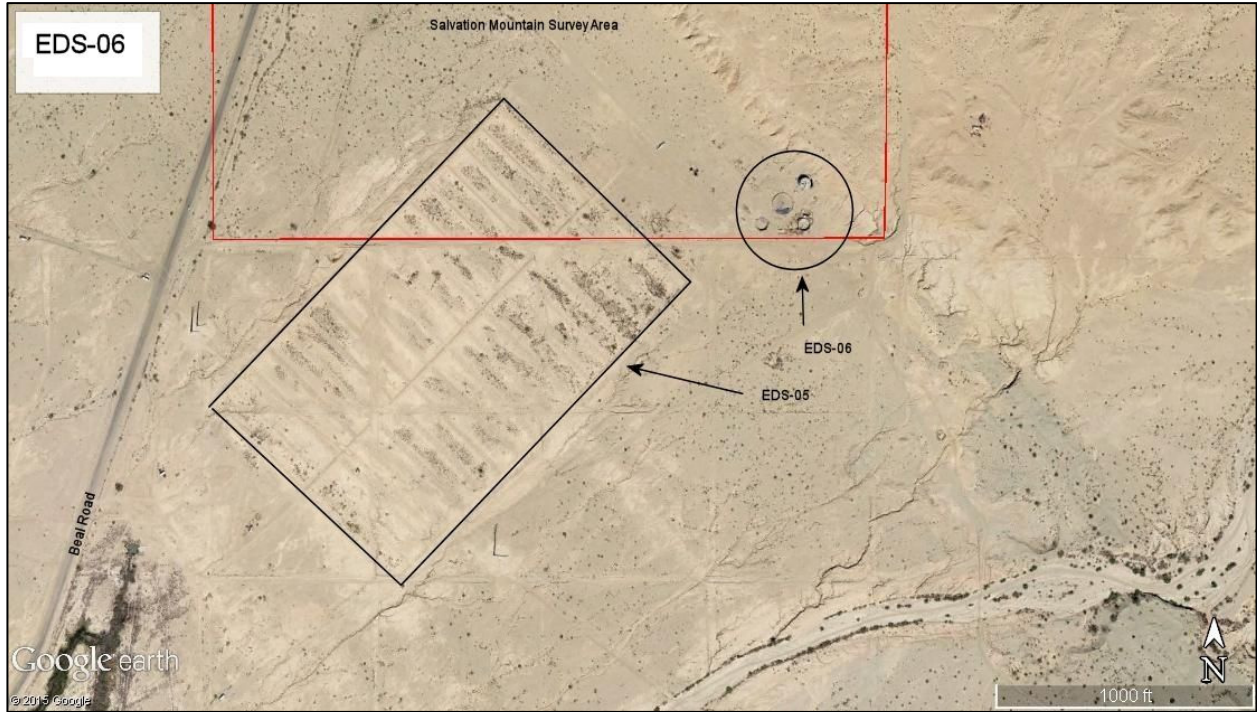


Feature 6

CONTINUATION SHEET

Property Name: _____ EDS-06

Page 4 of 6



1953 aerial photo.

SKETCH MAP

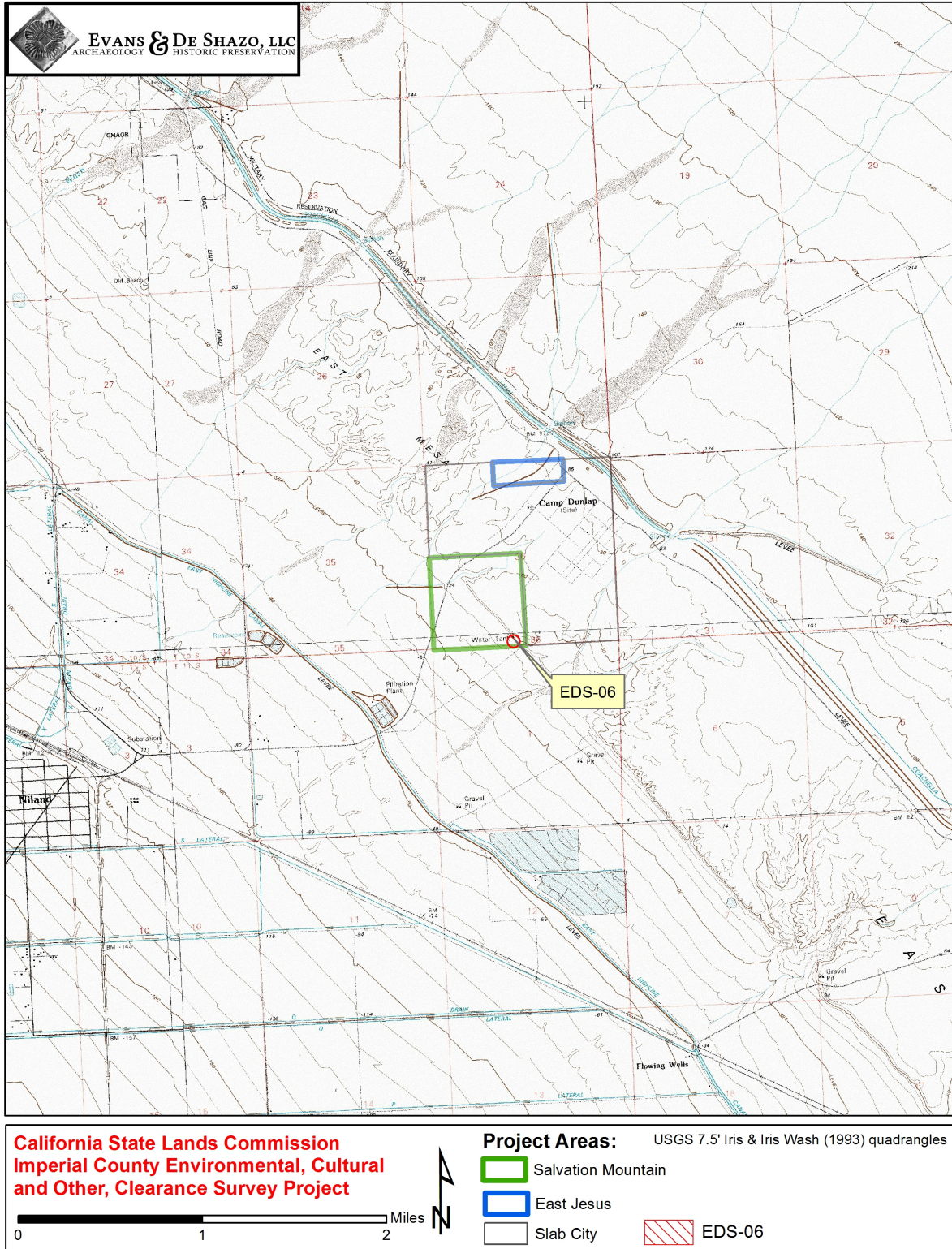
Page 5 of 6

*Resource Name or # (Assigned by recorder): **EDS-06**

*Drawn By: B. Peterson

*Date: 8/19/2015





**DPR 523 Forms for EDS-07
REDACTED**

Other Listings
Review Code

Reviewer

Date

Page 1 of 2

*Resource Name or #: EDS-08

P1. Other Identifier:

*P2. Location: Not for Publication Unrestricted

*a. County Imperial

*b. USGS 7.5' Quad Iris Wash, Calif. Date 1993 T10N; R14E; NW¼ of SW¼ Sec 36; San Bernardino B.M.

c. Address Salvation Mountain parcel

City Slab City

Zip

d. UTM: Zone 11; NAD 83: 642621.18mE / 3680335.62mN, 642676.9mE/3680241.05mN

e. Other Locational Data: These barricade posts line up with a guard shack directly adjacent to Beal Road on the east side. They head in alignment on a straight southeast trajectory past Salvation Mountain towards two large water basins (EDS-10) located on the west side of Tank Road. As the posts pass the basins, they take an immediate turn east towards Tank Road where they end.

*P3a. Description: The barricade posts are the remnants of a Camp Dunlap military base fence line. The barricades at their base are a rough concrete mix buried into the ground with metal poles in the center measuring approximately 2 inches in circumference. Most of the metal poles are cut off near the base or are eroded away. The barricade posts appear in a line approximately 8 to 9 feet from each other and appear to have supported a fence that extended southeastward from the guard shack (recorded as P-13-003182/EDS-13). The condition of the posts vary depending on the terrain. In the drainage or wash areas, many of the posts are broken up and fragmented, but in other areas, they are very intact.

*P3b. Resource Attributes: HP46. Walls / gates / fences

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photograph:



5b. Description of Photo:

Example of concrete barricade posts
(Photo EDS-008-1537)

*P6. Date Constructed/Age and Sources: Historic (WWII)
 Prehistoric Both

*P7. Owner and Address:
California State Lands Commission
100 Howe Avenue, Suite 100 South
Sacramento, California 95825

*P8. Recorded by: B. Peterson, Jason Collins
Evans & De Shazo
118 W. Hills Circle
Sebastopol, CA 95472

*P9. Date Recorded: 19 August 2015

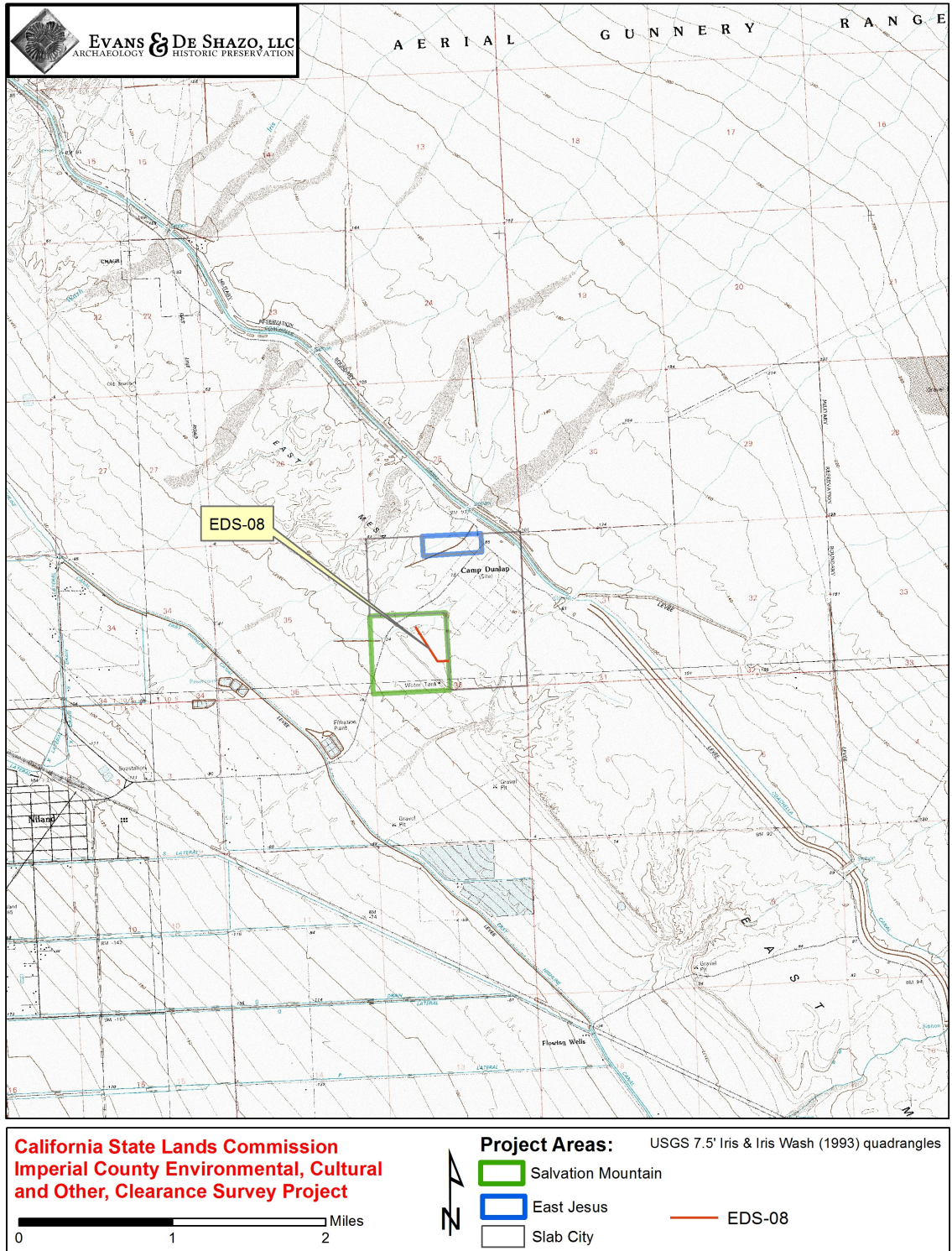
*P10. Survey Type: Reconnaissance

*P11. Report Citation:

Evans, Sally

2015 *A Cultural Resources Inventory for the Imperial County Environmental, Cultural, and Other Clearance Survey Project, Slab City, California.* Report prepared for the California State Lands Commission, Sacramento, California by Evans & De Shazo, Sebastopol, California.

*Attachments: NONE Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other (list)



Other Listings
Review Code

Reviewer

Date

Page 1 of 4

*Resource Name or #: EDS-10

P1. Other Identifier: Camp Dunlap Water Storage Facilities

***P2. Location:** Not for Publication Unrestricted

*a. County Imperial

*b. USGS 7.5' Quad Iris Wash, Calif. Date 1993 T10N; R14E; NE¼ of SW¼ Sec 36; San Bernardino B.M.

c. Address Salvation Mountain parcel

City Slab City

Zip

d. UTM: Zone 11; NAD 83: (see Continuation Form)

e. **Other Locational Data:** The site is located on a broad relatively flat terrace at the top of East Mesa within the Salvation Mountain proposed parcel.

***P3a. Description:** The site consists of two large concrete water tanks and several smaller features. There are five features total. The tanks (Features 1 and 2) are each approximately 110 feet in diameter and 15 feet high. Inside each are 21 concrete posts that formerly supported a roof, which is no longer present. The tanks are covered with modern graffiti, both inside and out. There are some repeated themes to the graffiti—one of the tanks expresses many modern corporate logos on it.

Feature 1 includes the east tank and Feature 2 includes the west tank. Feature 3 is a concrete base for a small cylindrical tank. It is approximately 10 feet long and 6 feet wide and consists of two sloping end walls with circular cutouts at the top for the tank connected by a central low wall. It is located south of the west side of Feature 1. (see Continuation sheet)

***P3b. Resource Attributes:** HP11. Engineering Structure

***P4. Resources Present:** Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photograph:



5b. Description of Photo:

Overview of Feature 1, facing northwest.
(Photo EDS-010-1506)

***P6. Date Constructed/Age and**

Sources: Historic (WWII)
 Prehistoric Both

***P7. Owner and Address:**

California State Lands Commission
100 Howe Avenue, Suite 100 South
Sacramento, California 95825

***P8. Recorded by:** B. Peterson, Jason Collins

Evans & De Shazo
118 W. Hills Circle
Sebastopol, CA 95472

***P9. Date Recorded:** 19 August 2015

***P10. Survey Type:** Reconnaissance

***P11. Report Citation:**

Evans, Sally

2015 *A Cultural Resources Inventory for the Imperial County Environmental, Cultural, and Other Clearance Survey Project, Slab City, California.* Report prepared for the California State Lands Commission, Sacramento, California by Evans & De Shazo, Sebastopol, California.

***Attachments:** NONE Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other (list)

CONTINUATION SHEET

Page 2 of 4

P2d. EDS-10 Feature UTM's:

F1: East Tank Center	642744 mE	3680413 mN
F2: West Tank Center	642625 mE	3680377 mN
F3: Small tank base	642717 mE	3680380 mN
F4: Foundation SE Ctr	642716 mE	3680361 mN
F5: "T" Pad Center	642778 mE	3680290 mN

P3a. Feature 4 is a rectangular concrete foundation, just barely exposed above the sand, located about 130 feet south west of Feature 1. It is approximately 40 feet long and 18 feet wide and consists of walls approximately 1 foot in width. The depth was not determined. There are bolts sticking up around the top of the wall at about 4 foot intervals but they have all been bent over, probably for safety. The northern side is presently covered by sand. Its function is unknown.

Feature 5 is located on the flat 350 feet SSE of Feature 1, and 85 feet west of the dirt road. It consists of a T-shaped concrete slab about 1 foot high. It is oriented with the stem of the T running north. It measures 15 feet east-west and 10 feet north-south.

Feature 2



Feature 3



Feature 4



Feature 5



SKETCH MAP

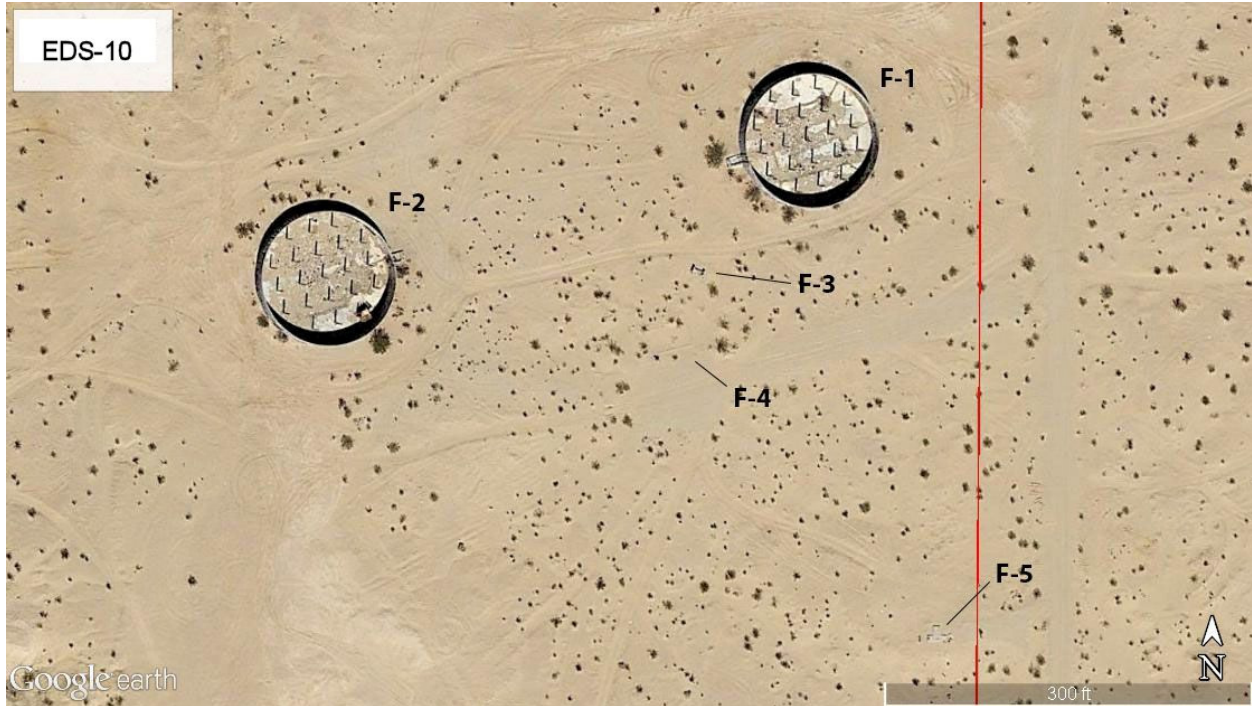
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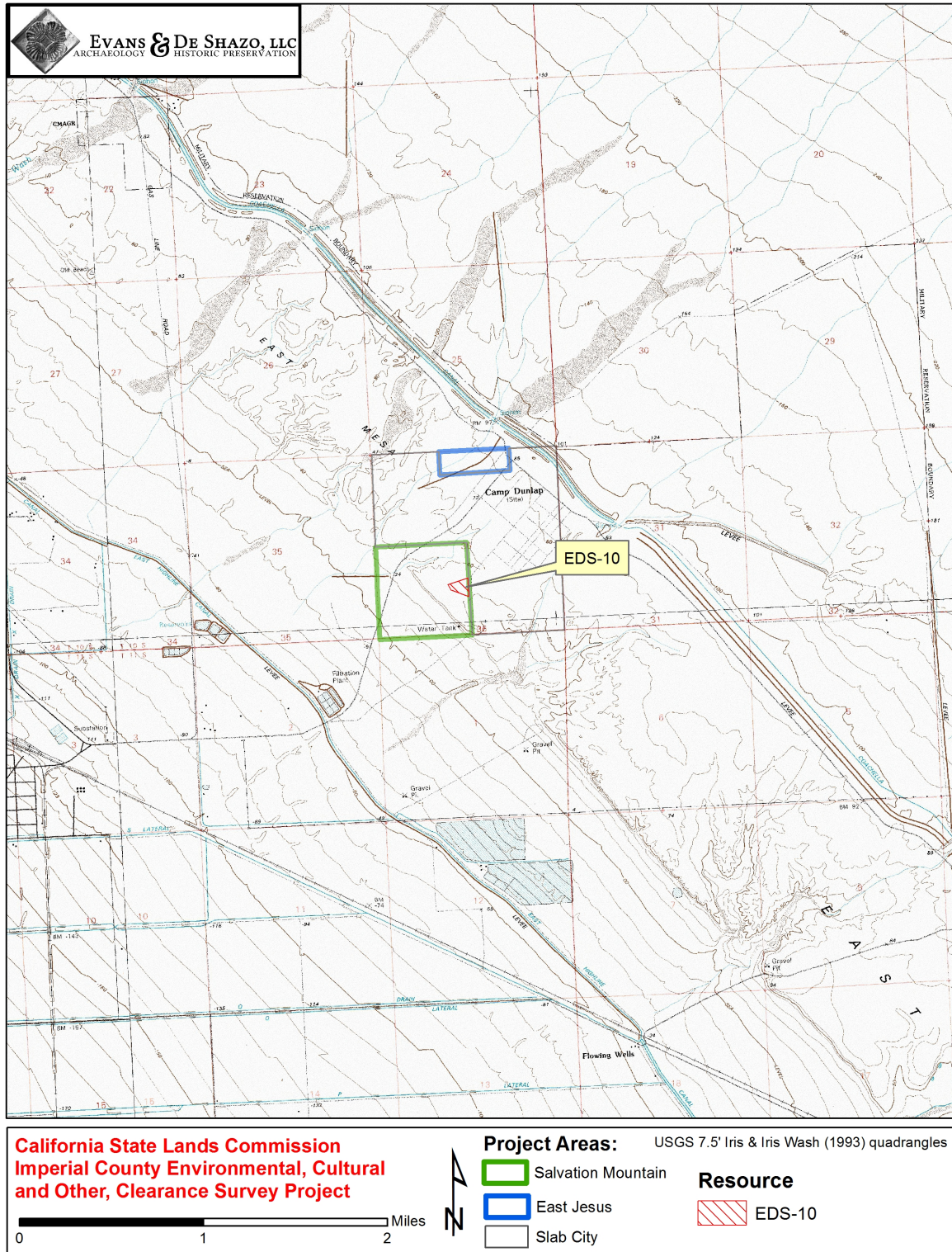
Page 3 of 4

*Resource Name or # (Assigned by recorder): EDS-10

*Drawn By: B. Peterson

*Date: 8/19/2015





**DPR 523 Forms for EDS-011
REDACTED**

Other Listings
Review Code

Reviewer

Date

Page 1 of 3

*Resource Name or #: EDS-13

P1. Other Identifier: Camp Dunlap Main Entrance Guard Post

***P2. Location:** Not for Publication Unrestricted

*a. County Imperial

*b. USGS 7.5' Quad Iris Wash, Calif. Date 1993 T10N; R14E; NE¼ of SE¼ Sec 36; San Bernardino B.M.

c. Address Salvation Mountain parcel

City Slab City

Zip

d. UTM: Zone 11; NAD 83: 642384mE / 36807194mN

e. **Other Locational Data:** The Guard Post building is located 2.7 miles northwest of Niland, CA on the east side of Beal Road.

***P3a. Description:** This guard post building, also known as a sentry box, is located at the entrance to the former Camp Dunlap U.S. Marine Corps base that operated between 1942 and 1945. It is a square shaped, reinforced concrete building that measures approximately 9 x 8 feet. The front (northwest side) faces Beal Road. There is a single-entry doorway at the west end of the northwest side and a small square window opening next to the doorway on the east side. There are similar shaped window openings in the upper center of both the east and west facades. The building remains structurally intact. It has been weathered a bit since it was last recorded in 1977 and possibly has some shifting and cracking at its base. The local population has painted the building, which provides some weather proofing, and has been using it for various purposes such as a kiosk and possibly, most recently, a urinal. It now serves as a welcoming post to Slab City, a campsite used by recreational vehicles and squatters occupying concrete slabs that remain from the former Camp Dunlap.

***P3b. Resource Attributes:** HP34. Military Property

***P4. Resources Present:** Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photograph:



5b. Description of Photo:

Northwest (front) and southwest side of building.

***P6. Date Constructed/Age and**

Sources: Historic (WWII)

Prehistoric Both

***P7. Owner and Address:**

California State Lands Commission
100 Howe Avenue, Suite 100 South
Sacramento, California 95825

***P8. Recorded by:** C. Denardo, S. Evans

Evans & De Shazo

118 W. Hills Circle

Sebastopol, CA 95472

***P9. Date Recorded:** 18 August 2015

***P10. Survey Type:** Reconnaissance

***P11. Report Citation:**

Evans, Sally

2015 *A Cultural Resources Inventory for the Imperial County Environmental, Cultural, and Other Clearance Survey Project, Slab City, California.* Report prepared for the California State Lands Commission, Sacramento, California by Evans & De Shazo, Sebastopol, California.

***Attachments:** NONE Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record Artifact Record Photograph Record Other (list)

CONTINUATION SHEET

Property Name: EDS-13 Camp Dunlap Guard Post Building

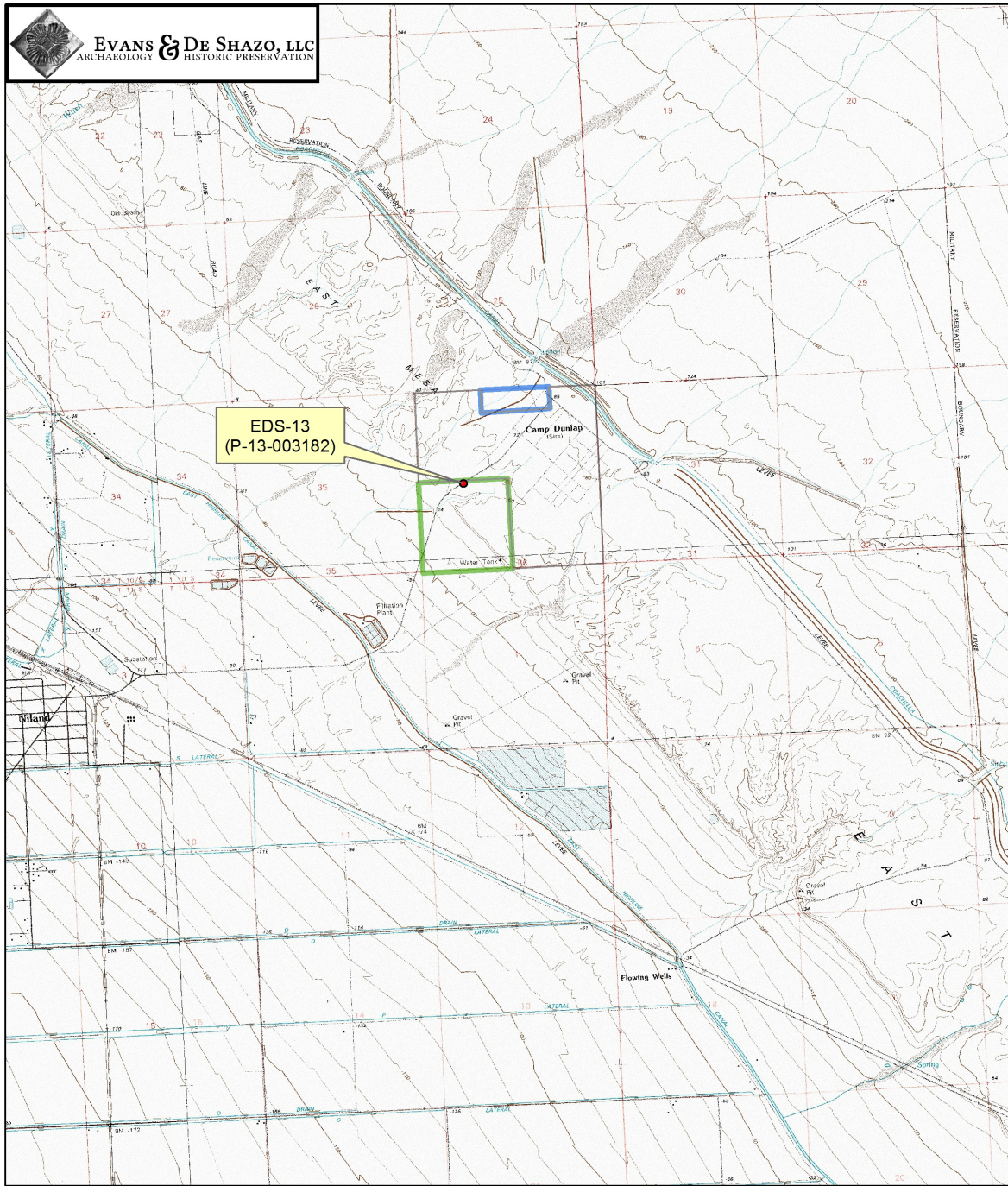
Page 2 of 3



Guard post building circa 1940. Electronic document, <http://www.ghosttownaz.info/camp-dunlap.php>. From California State Military Department. The California State Military Museum website (<http://www.militarymuseum.org/>)



View of north side of guard post building (8/18/2015)



California State Lands Commission
Imperial County Environmental, Cultural and Other, Clearance Survey Project

Project Areas: USGS 7.5' Iris & Iris Wash (1993) quadrangles

- Salvation Mountain
- East Jesus
- Slab City

Resource

- EDS-13

0 1 2 Miles



EVANS & DE SHAZO, LLC
ARCHAEOLOGY HISTORIC PRESERVATION

Attachment C

Evans & De Shazo, LLC Paleontological Report



EVANS & DE SHAZO, LLC
ARCHAEOLOGY HISTORIC PRESERVATION

**A PALEONTOLOGICAL STUDY CONDUCTED
FOR THE IMPERIAL COUNTY
ENVIRONMENTAL, CULTURAL AND OTHER
CLEARANCE SURVEY PROJECT, IMPERIAL
COUNTY, CALIFORNIA.**

PREPARED FOR:

**Christopher Huitt, M.S.
Senior Environmental Scientist
California State Lands Commission
Division of Environmental Planning and Management
100 Howe Avenue, Suite 100 South
Sacramento, CA 95825**

PREPARED BY:

**Matt Steincamp, M.S., RPA
Geoarchaeologist / Paleontologist
Evans & De Shazo, LLC**

August 31, 2015

Evans & De Shazo, LLC
118 W. Hills Circle
Sebastopol, CA 95472
707-484-9628
www.evans-deshazo.com



TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	REGULATORY SETTING	1
2.0	RECORD SEARCH.....	1
2.1	Record Search Results.....	2
3.0	FIELD SURVEY.....	3
4.0	RECOMMENDATIONS	6
5.0	REFERENCES CITED	7

LIST OF FIGURES

FIGURE 1: MAP OF SALVATION MOUNTAIN PARCEL, SHOWING SHELL LOCATIONS #1-6, RECORDED DURING THE RECONNAISSANCE SURVEY.....	4
FIGURE 2: SHELL (POSSIBLY <i>ANODONTA DEJECTA</i>) AT LOCATION MARKED #1 ON MAP.....	5
FIGURE 3: SHELL (POSSIBLY <i>ANODONTA DEJECTA</i>) AT LOCATION MARKED #2 IN FIGURE 1.	5
FIGURE 4: SHELL (POSSIBLY <i>ANODONTA GLOBOSA</i>) IN CEMENTED SAND AT LOCATION #5 IN FIGURE 1.....	6

1.0 INTRODUCTION

Evans & De Shazo, LLC was contracted by the California State Lands Commission (CSLC) to conduct environmental, cultural, and other clearance surveys for approximately 640 acres of land located in Niland, Imperial County, California. The CSLC manages these lands, granted by Congress, in support of California's public schools. The CSLC is proposing to subdivide the 640-acre parcel into three parcels, a 30-acre, a 160-acre, and a 450-acre parcel, and sell them individually. As trustee of the School Land Bank Trust, the Commission has authority to exchange or sell these lands with the proceeds deposited to the School Land Bank Fund in support of the California State Teachers' Retirement System.

Prior to subdividing and selling the parcels, the CSLC must first determine if there are any paleontological resources present that could be affected by the proposed subdivision and sale. According to the California Environmental Quality Act (CEQA), paleontological resources are aspects of the environment that require identification and assessment prior to implementation of any non-exempt project. Evans & De Shazo, LLC was retained to conduct a paleontological resource analysis to determine the potential for paleontological resources to be located within the proposed 30 and 160-acre parcels (Project Area). The methods used to determine the potential for paleontological resources include a record search of the entire 640-acre parcel and a reconnaissance field survey of the Project Area.

2.0 REGULATORY SETTING

Public Resources Code, Section 21000 et seq. requires that a determination be made as to whether a project "would directly or indirectly destroy a unique paleontological resource or site or a unique geological feature" (CEQA Guidelines, CCR Section 15063, Appendix G, Section V, Part c). If an impact is considered to be significant, the CEQA Guidelines require "feasible measures which could minimize significant adverse impacts" (CEQA Guidelines Section 15126.4) (Scott and Springer 2003; West 1991).

Paleontological remains are considered limited, nonrenewable, scientific, and educational resources. Consequently, they are afforded protection under California state environmental laws, most notably by CEQA (Scott and Springer 2003; West 1991). The proposed Project requires compliance with CEQA, which means it is subject to state environmental regulations. The Society of Vertebrate Paleontology (SVP) has established professional standards for the assessment and mitigation of adverse impacts on paleontological remains (SVP 1995, 1996). These professional standard guidelines represent a consensus of professional paleontologists in the United States and have been widely accepted by federal agencies (Federal Energy Regulatory Commission, United States Forest Service, Bureau of Land Management, National Park Service, etc.), and state (California Energy Commission, California Public Utilities Commission, California Department of Transportation, etc.), with responsibility to protect paleontological resources. The SVP guidelines are the standard against which all paleontological mitigation is oriented.

2.0 RECORD SEARCH

Evans & De Shazo, LLC conducted a paleontological records search, pursuant to CEQA for 640-acre parcel. The paleontological resources study was required to determine whether previously recorded

fossil localities, or fossiliferous geologic units known to contain fossils, are present in the Project Area. To develop a baseline paleontological resource inventory of the Project Area, and to establish the paleontological sensitivity of each geologic unit present within and adjacent to the Project Area, the following tasks were completed:

- Geologic maps and available published and unpublished geological and paleontological literature covering the bedrock and surficial geology and paleontology of the Project Area and surrounding area were reviewed to determine the exposed and subsurface rock units that are present, to assess the potential paleontological productivity of each rock unit, and to delineate their respective areal distribution in respect to the Project Area. This research identified the geologic units, previous paleontological studies, fossil localities (i.e., locations at which paleontological resources have been documented), and types of fossils in geologic units that may be within or adjacent to the Project Area.
- An online fossil locality search was conducted, utilizing the San Diego Natural History Museum (SDNHM) online fossil database.
- The records search was supplemented with an online fossil locality search, utilizing the University of California Museum of Paleontology (UCMP) Berkeley online fossil database.

After completing the previously described tasks, each geologic unit exposed within or near the Project Area was assigned a paleontological sensitivity based on the number of previously recorded fossil sites it contains and the scientific importance of the fossil remains recorded. These methods are consistent with SVP (1995) criteria and guidelines for assessment and mitigation of adverse impacts to paleontological resources in areas of potential environmental effect and areas of critical environmental concern.

2.1 RECORD SEARCH RESULTS

According to the Geologic map of California: Salton Sea Sheet (Jennings 1967), two geologic units are mapped within the Project Area. The units consist of Quaternary (Holocene) alluvium (Qal), inter-fingered with Quaternary (Holocene) lacustrine (lake) deposits (Ql). The Qal Holocene alluvium, described by Morton (1966), consists of unconsolidated clay, silt, sand, and gravel, occurring primarily as alluvial fan and stream wash deposits that are dominant above the 12-meter (40-foot) elevation within the Imperial Valley. The Ql Holocene lake deposits are described as tan and gray fossiliferous clay, silt, sand, and gravel sediments of ancient Lake Cahuilla, and associated beach and playa lake deposits that are dominant at and below the approximately 12-meter (40-foot) elevation level (Morton 1966; Kennedy 2006). The Qal and Ql deposits are inter-fingered (over-lapping) within the Project Area, and the Qal deposits extend below (southwest of) the 12-meter (40-foot) contour elevation in drainage channels.

The geologic maps show that the paleo-shoreline of Lake Cahuilla rests at approximately 12-meter (40-foot) elevation, and is present within the Salvation Mountain Project Area as a distinct escarpment. Lake Cahuilla sediments were deposited below this elevation during the early to late Holocene (Waters 1981; LSA 2011). At least four lake high-stands that correlated with flood inundation of the Imperial Valley by the levee-breached Colorado River waters, has been recorded in exploration corings, irrigation

trench exposures, and natural erosional exposures (Demere and EkDale 2011; Waters 1981;). The lacustrine sediments, considered fossiliferous, consist of fossilized plants, diatoms, freshwater clams and gastropods, ostracods, bony fish, as well as terrestrial lizards, snakes, birds, rabbit and rodents (Kennedy 2006). The fossils, typically exposed by natural processes, such as wind deflation or water erosion, are also exposed by human activities such as utility line trenching or geothermal exploration activities and irrigation or other anthropogenic disturbances (Waters 1981).

According to the SDNHM online records search, a total of fifteen (15) fossil localities are reported within Imperial County, all of which were found in Holocene Lake Cahuilla (QI) deposits (beds). The fossils consist of invertebrates and microfossils (12), and vertebrate (2 fish, 1 rodent). No fossils are recorded within or adjacent to the Project Area. According to the SDNHM (2011), the Lake Cahuilla (QI) sediments possess a High (Class 4) paleontological resource sensitivity (potential) for significant fossil remains. As such, the fossils are of scientific importance since they can provide important paleoclimatic, paleoecological, and paleontological data and information. Quaternary Holocene deposits (Qal) such as Holocene alluvial fan, slope wash, and alluvium are considered Low (Class 2) paleontological sensitivity (SDNHM 2011).

According to the UCMP online fossil database, there is a total of two-hundred thirty seven (237) fossil localities recorded by the UCMP for all of Imperial County. Although the Holocene Lake Cahuilla sediments (QI) previously discussed are considered fossiliferous, the UCMP records show a dominance of invertebrate fossils recorded in other geologic units, associated with Pliocene and Miocene age sediments that are not found within or adjacent to the Project Area. Only one (1) Pleistocene fossil (an unknown mammalian fossil), was recorded in the vicinity, although well north of the Project Area, near Coachella, California, and one (1) Holocene foraminifera fossil location was recorded southwest of the Project Area, near the mouth of the New River. The UCMP records search did not identify any vertebrate, invertebrate, plant or microfossil fossil localities within or close to the Project boundaries.

3.0 FIELD SURVEY

The Project Area was surveyed by archaeologists cross-trained in the identification of paleontological resources. A high level of surface disturbance, such as mechanical grading and levee construction, and other natural and human derived disturbances, was observed in the Salvation Mountain and East Jesus parcels. No paleontological resources were observed in the proposed 30-acre East Jesus parcel. An invasive shell species of Asiatic clam (*C. fluminea*) was observed within the drainage that traverses the East Jesus parcel, which is modern shell that has washed downstream from the old Coachella Canal located few hundred feet to the northeast.

During the reconnaissance survey of the Salvation Mountain (160-acre) parcel, scatters of fossil freshwater mussel shell (possibly *Anodonta dejecta*) and oyster shell were recorded (see Figure 1). The shell was recorded on the surface at the 0-60 foot elevation level (0-60 ft amsl). The disarticulated, weathered, and fragmented shell was observed in highly disturbed and secondary context, and appear to originate from disturbance of Holocene Lake Cahuilla sediments (QI). Due to the poor condition and *ex-situ* context of the shells, none were collected during the survey. The shell was recorded and photographed, and the locations recorded. Each occurrence of shell observed within the Salvation

Mountain Project Area, corresponding to numbers 1-6 on the map in Figure 1, is discussed below. No paleontological resources were observed in the 30-acre East Jesus Project Area.

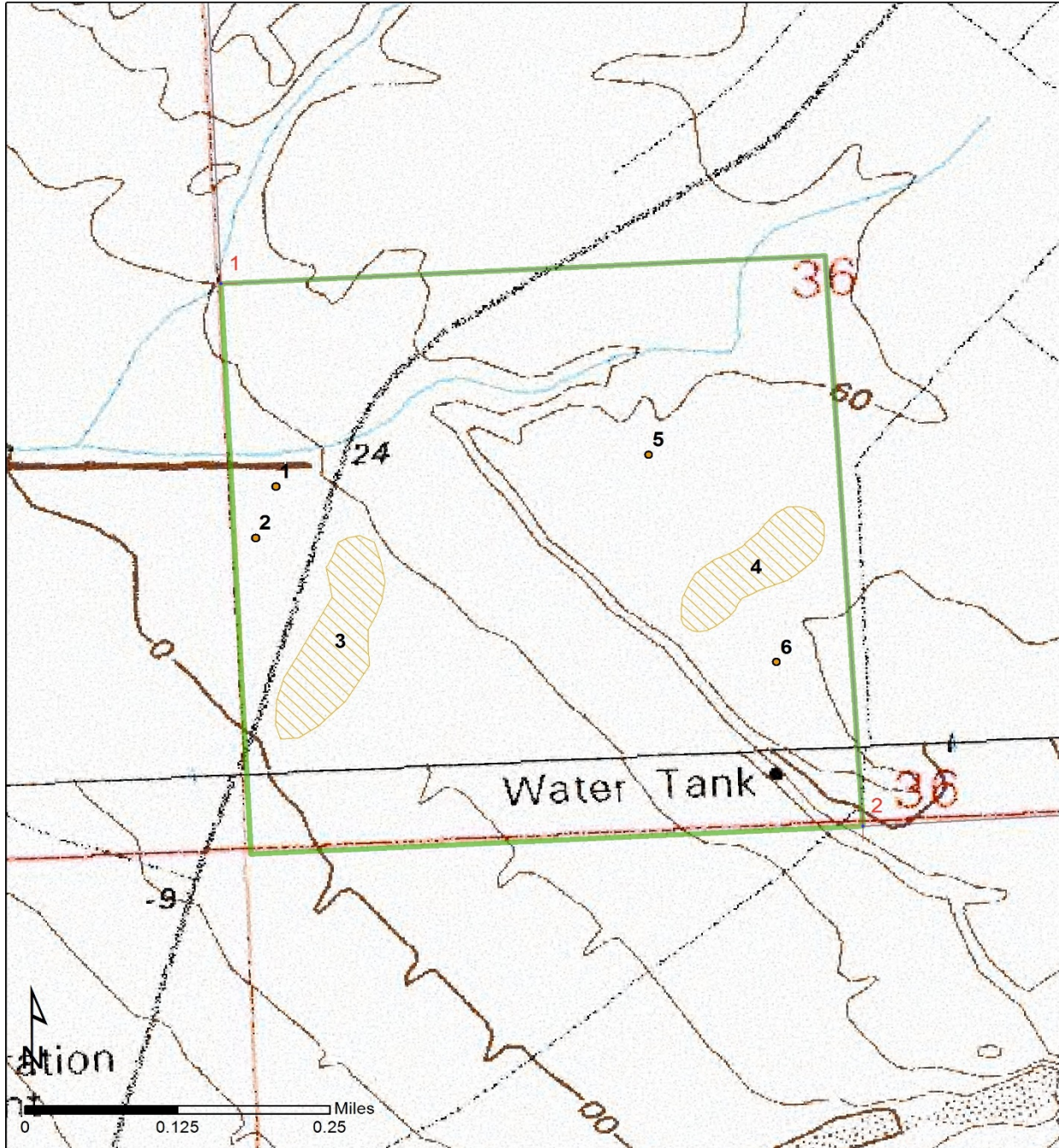


Figure 1: Map of Salvation Mountain parcel, showing shell locations #1-6, recorded during the reconnaissance survey.

Two single shell fragments, noted as EDS-03 , and marked in Figure 1 as #1 (Figure 2) and #2 (Figure 3), are both disarticulated (single valve) fossil shells found on the west side of Beal Road, south of the levee.



Figure 2: Shell (possibly *Anodonta dejecta*) at location marked #1 on Map.



Figure 3: Shell (possibly *Anodonta dejecta*) at location marked #2 in Figure 1.

A sparse scatter of fossil shell, marked as #3 in Figure 1, was also identified within 10 feet of Beal Road on the east side, just south of Salvation Mountain. The shells do not appear to be *in-situ* and it is possible that they were deposited through water runoff from the road.

A sparse scatter of freshwater fossil mussel shells (possibly *Anodonta dejecta*), recorded as EDS-10, were observed in the area southeast of Salvation Mountain, at the top of a plateau that is bisected by Tank Road and the location of two large water tanks and various concrete platforms. This area is marked as #4 in Figure 1. Sediments appeared highly disturbed in this location, and consist of a mix of light brown, loose sandy silt, and broken cobble size blocks of cemented tawny sand, that appear to overlie intact sandy silt. A variety of fossil shells were located in this area.

One possible *Anodonta globosa* valve identified and photographed in the location marked #6 in Figure 1, is located south of the scatter of fossil shell marked #4. The disarticulated single valve is complete, although weathered and bleached, and measures about 2.5 centimeters (Figure 4).

A concretion containing freshwater fossilized shells (Figure 5) was located in tawny cemented sand at the base of a barricade post, at the location marked #6 in Figure 1. The cemented block appears to be in a secondary context.



Figure 4: Shell (possibly *Anodonta globosa*) in cemented sand at location #5 in Figure 1.

4.0 RECOMMENDATIONS

As discussed above, the Lake Cahuilla (Ql) sediments, which cover a high percentage of the Project Area, possess a High (Class 4) paleontological resource sensitivity (potential) for fossil remains that are significant and unique because the fossils and sediments can provide important paleoclimatic, paleoecological, and paleontological data and information. The Quaternary Holocene alluvial deposits (Qal) such as Holocene alluvial fan, slope wash, and alluvium, are considered Low (Class 2) paleontological sensitivity.

The results of the records search and reconnaissance field survey indicate that although the Project Area, particularly the proposed Salvation Mountain and Slab City parcels are dominated by High (Class 4)

paleontologically sensitive Lake Cahuilla sediments, the high level of surface ground disturbance has obscured the presence of intact sediments and *in-situ* fossils. The dominance of disarticulated and weathered shells recorded on the surface of the parcels indicate that the shells are not *in-situ*, and have been displaced by disturbance created by water movement and mechanized impacts. Regardless, it is possible that intact fossiliferous Lake Cahuilla deposits may be encountered at an unknown depth within the Project Area, depending on the level of natural (erosion and/or deposition) processes or human land modification (disturbance).

Due to the high paleontological sensitivity of the Lake Cahuilla (QI) sediments mapped within the Project Area, and unknown depth of intact Lake Cahuilla sediments, Evans & De Shazo, LLC recommends that under the supervision of a qualified paleontologist, a paleontological technician or paleontologically cross-trained archaeological monitor be present during any planned, future, subsurface ground disturbing activities. Any fossils and/or data recovered during monitoring should be prepared, identified, analyzed, and archived in a qualified curation facility, such as the SDNHM or UCMP.

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EVANS & DE SHAZO, LLC
ARCHAEOLOGY & HISTORIC PRESERVATION

Attachment D

Engineering/Remediation Resources Group

Completion Report

**Completion Report for East Jesus
and Salvation Mountain, Imperial County Environmental
Cultural and other Clearance Survey Project,
Imperial County, California
August 2015**

Contract No. 2015-05

Prepared for:



California State Lands Commission
100 Howe Avenue, Suite 100 South
Sacramento, California 95825

Under Subcontract To:
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Prepared by:



ERRG

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**Completion Report for East Jesus
and Salvation Mountain, Imperial County Environmental
Cultural and other Clearance Survey Project,
Imperial County, California**

*Submitted by:
Engineering/Remediation Resources Group, Inc.*



Signature

August 26, 2015

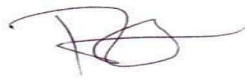
Date

Brad Hall, P.G.

Name

Program Manager

Title



Signature

August 25, 2016

Date

David Williams

Name

MEC Division Manager

Title

Completion Report

This Completion Report summarizes work performed by Engineering/Remediation Resources Group, Inc. in support of Evans & De Shazo, Contract No. 2015-05 at two sites in Imperial County, California in the vicinity of Niland, California under the Imperial County Environmental Cultural and other Clearance Survey Project. The overall objective of this project was to provide safe execution of unexploded ordnance (UXO) escort and avoidance support services during cultural resources and natural resources projects to be performed by Evans & De Shazo at East Jesus and Salvation Mountain. To achieve this objective, a UXO Technician III visually swept the surface areas ahead of cultural and natural resources survey personnel and provided UXO escort at the following sites:

- East Jesus, comprising 30 acres
- Salvation Mountain, comprising 160 acres

The fieldwork was performed during one mobilization. On August 17, 2015 the UXO Technician III mobilized to Imperial County and met with Evans & De Shazo personnel for the initial in briefs, Accident Prevention Plan (APP) and work plan review, and a visit to the two sites. Fieldwork began at East Jesus followed by Salvation Mountain on August 18, 2015. All field work activities were completed on August 20, 2015.

East Jesus

Visual search of the East Jesus area did not reveal any munitions and explosives of concern (MEC) but did reveal a few items of munitions debris (MD) and three inert munitions items that were reportedly donated by explosive ordnance disposal (EOD) personnel. The items observed were:

- One MK 76 Practice Bomb
- Two Inert Training Smoke Grenades
- Two MK 76 Practice Bomb Fins
- Numerous small arms brass

All items (see photos below) were left in place because they did not pose an explosive hazard and were incorporated into folk art displays.

Salvation Mountain

Visual search of the Salvation Mountain area did not reveal any hazardous munitions and explosives of concern (MEC). One .410 shotgun shell and one 32 caliber projectile (lead ball) were observed within the 160 acre area and left in place.



MK 76 Practice Bomb Fin and Inert Training Smoke Grenade



MK 76 Practice Bomb



Two MK 76 Tail Fins