APPENDIX G

Cultural Resources Technical Report

CULTURAL RESOURCES CLASS III REPORT FOR THE PROPOSED RIDGECREST SOLAR POWER PROJECT KERN COUNTY, CALIFORNIA

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USGS Quadrangle: Inyokern SE, Ridgecrest South 7.5”

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EXECUTIVE SUMMARY

Solar Millennium, LLC is proposing to construct a solar electric generating facility near Ridgecrest in Kern County, California. In accordance with applicable laws, ordinances, regulations, and standards (LORS), an archaeological resources survey and a built environment survey was conducted for the Ridgecrest Solar Power Project (RSPP or Project) and buffers as specified by the Bureau of Land Management (BLM) and in the California Energy Commission (CEC) Regulations. Because the Project is proposed on lands managed by the BLM, work was conducted under Cultural Use Permit CA-06-21 and Fieldwork Authorization dated April 3, 2009. This report addresses the inventory and significance of cultural resources identified within the RSPP.

Field work was conducted by EDAW, Inc. between May 4 and May 13, 2009 and between May 18 and May 22, 2009. Surveys were undertaken to determine what cultural resources are present in Area of Potential Effect (APE), comprised of the Project disturbance area and CEC-required archaeological buffer, and to determine if there would be any Project effects on these resources.

Prior to the field work, archival research was conducted, including a records search to determine if there were any previously recorded sites present within the APE and a surrounding one-mile radius. In addition, local historical societies, the Native American Heritage Commission, and local tribal representatives were contacted regarding information and concerns about cultural resources in the area.

The survey of the built environment identified 13 architectural resources, which are documented in Attachment 8 to this report. The archaeological survey identified 79 sites and 367 isolated finds. Based on reduction to the Project facility footprint that occurred subsequent to the survey, 16 of the archaeological sites and 77 of the isolates are no longer within the Project disturbance area. Additionally, four sites are located in the archaeological buffer and were not evaluated for inclusion to the California Register of Historical Resources (CRHR) or the National Register of Historic Places (NRHP) as they will not be affected by the Project. Of the 59 sites within the disturbance area that potentially could be affected, nine are prehistoric sites and 50 are historic sites. The historic period sites were primarily refuse scatters consisting of tin canisters or tin canisters combined with other historic glass, metal, and ceramic debris. Historic features included survey or claim markers, a historic campsite and historic road alignments. Prehistoric cultural materials included isolated lithics and lithic scatters. Cryptocrystalline silicate (CCS) and obsidian are the main sources of raw materials used in the manufacturing of these artifacts. Also present are rock features and groundstone objects made from locally available materials.

Assessments of the archaeological sites within the disturbance area based on surface materials and conditions indicate that nine of the 59 sites potentially impacted the RSPP are potentially eligible for the CRHR under Criterion 4 and unevaluated under NRHP Criterion D. Table ES-1 summarizes the identified resources and their status.

Table ES-1. Summary of Potentially Affected Archaeological Resources

	Total	Potentially Eligible/Unevaluated	Not Eligible
Prehistoric	9	9	0
Historic	50	0	50
Isolated Finds	290	0	290

CHAPTER 1
INTRODUCTION

PROJECT DESCRIPTION

Solar Millennium LLC (Solar Millennium) is proposing to construct, own and operate the Ridgecrest Solar Power Project (RSPP or Project). EDAW, Inc. (EDAW) has been retained to conduct cultural resources studies, including archaeological and architectural surveys in support of the Application for Certification (AFC) to be submitted to the California Energy Commission (CEC) and a Class III level survey and inventory report to be submitted to the Bureau of Land Management (BLM).

The Project is a solar electric generating facility to be located in northeastern Kern County, California (Attachment 1, Figure 1). The Project will be located on a 3,920 acre right-of-way (ROW) owned by the Federal government and leased by the Applicant from the BLM. The Project facilities will occupy at total of approximately 1,440 acres of the ROW (referred to as the facility footprint). The Project's electrical generation facilities (i.e., solar array and power block) will be located within the 1,440-acre facility footprint. The total surface area potentially disturbed by the Project, including offsite drainage modifications and linear facilities, is approximately 1,760 acres (referred to as the disturbance area).

The town of Ridgecrest is located approximately 5 miles to the northeast of the facility footprint. The RSPP plant site lies west of Highway 395 and is relatively flat, with elevations ranging from approximately 2,630 ft above mean sea level (amsl) in the north to 2,770 ft amsl in the south (Attachment 1, Figure 2). The plant site and its general environs are essentially undeveloped desert land managed by BLM and located entirely within the West Mojave Plan (WEMO) area. The Project disturbance area is located in areas designated under WEMO as BLM Multiple Use Class "Limited" or "Unclassified." Public lands designated as Multiple Use Class Limited are "managed to provide for generally lower-intensity, carefully controlled multiple use of resources, while ensuring that sensitive values are not significantly diminished." Historic and current uses of the site include grazing allotments, off-road vehicle use (both approved and unapproved), target practice, and trash dumping.

According to the guidelines set forth by the CEC, archaeological survey is to be conducted on the Project disturbance area and extend beyond the disturbance area at least 200 feet. For linear facilities, the ROW and at least 50 feet either side of the ROW is to be surveyed. Together, the disturbance area and CEC-required archaeological buffer constitute the Project's Area of Potential Effect (APE) for cultural resources. Field work was conducted by EDAW, Inc. between May 4 and May 13, 2009 and between May 18 and May 22, 2009. Intensive pedestrian surveys were undertaken to determine what cultural resources are present within the Project APE and to determine if there would be any Project effects on these resources. A proposed water line running within the Kern County ROW west of South China Lake Boulevard is still in the planning stage and has not been subject to cultural resources survey. Similarly, reduction of the facility footprint following completion of initial field investigations has resulted in changes to

the disturbance area and project buffer, and additional survey of some buffer areas will be required.

REGULATORY SETTING

Cultural resources were assessed for eligibility for inclusion in the California Register of Historical Resources (CRHR) and the National Register of Historical Places (NRHP). Cultural resources are defined as buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, and/or scientific importance. For listing in the CRHR a historical resource must be significant at the local, state or national level under one or more of the following four criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.

2. It is associated with the lives of persons important to local, California or national history.

3. It embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of a master or possesses high artistic values.

4. It has yielded or has the potential to yield information important to the prehistory or history of the local area, California or the nation.

For listing in the NRHP a historical resource must be significant at the local, state or national level under one or more of the following four criteria:

A. That are associated with events that have made a significant contribution to the broad patterns of our history;

B. That are associated with the lives of persons significant in our past;

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction;

D. That has yielded or may be likely to yield, information important in prehistory or history.

All resources nominated for listing must have integrity, which is the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. Resources, therefore, must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for

their significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association. It must also be judged with reference to the particular criteria under which a resource is proposed for nomination.

LAWS, ORDINANCES, REGULATIONS, AND STANDARDS

Numerous laws, ordinances, regulations, and standards (LORS), on Federal, state, and local levels, seek to protect and target the management of cultural resources. The RSPP will comply with applicable LORS throughout construction and operation. CEC siting regulations provide direction for project environmental compliance, and projects licensed by the CEC are reviewed for compliance with applicable laws. Applicable LORS are summarized in Table 1 and briefly discussed below.

Table 1. LORS Applicable to Cultural Resources

Laws	Applicability
Federal	
Antiquities Act of 1906, Title 16 United States Code, Sections 431–433	Federal legislation for protection of cultural resources on Federal land.
National Historic Preservation Act (NHPA), Title 16 United States Code Section 470 et seq.	Establishes national policy of historic preservation; requires that Federal agencies consider significant cultural resources prior to undertakings.
Archaeological Resources Protection Act of 1979, Title 16 United States Code Sections 470aa-470mm	Provides protection for archaeological resources on public lands and Indian lands.
Executive Order 11593 of May 13, 1971, 36 Federal Register (FR) 8921	Provides for protection and enhancement of the cultural environment.
Secretary of Interior's Standards for Archaeology and Historic Preservation 48 FR 44716-42	Establishes guidelines for technical reports and standards for evaluation for State Historic Preservation Officer
Federal Land Policy Management Act of 1976 Sections 1701 (a)(8) and 1740	Establishes that public lands be managed in a manner that will protect the quality of scientific, scenic, historical…and archeological values.
Native American Graves Protection and Repatriation Act, Title 25, United States Code Sections 3001-3013	This law provides for ownership of Native American graves and grave goods on Federal lands.
American Indian Religious Freedom Act, Title 42 United States Code Section 1996	Provides protection of Native American religious practices.
State	
California Environmental Quality Act (CEQA), Public Resources Code Section 21083.2	Requires public agencies to evaluate impacts to cultural resources; provides guidance for evaluating and mitigating impacts.

Laws	Applicability
CEQA Guidelines, California Code of Regulations Title 14 Sections 15064.5, 10564.7, 105126.4(b), Appendix G Section V	Addresses reburial options for Native American remains and provides for treatment of archaeological discoveries. Encourages agencies to develop thresholds of significance to determine the significance of environmental effects. Outlines mitigation measures related to impacts on historical resources. Environmental checklist for identifying potential disturbances to cultural resources
Public Resources Code Sections 5024.1, 5097.98, 5097.99, 5097.991, and 21084.1	Establishes the California Register of Historical Resources. Discusses the procedures that need to be followed upon the discovery of Native American human remains. Establishes that removal of Native American grave artifacts or remains is a felony. Establishes that it is the policy of the state to repatriate Native American grave artifacts Provides a definition of historical resources, and states that projects that cause a substantial adverse change in the significance of an historical resource are projects that may have a significant effect on the environment
Assembly Bill 2641	Modifies the process that private land owners follow after discovering Native American human remains (set forth in California Public Resources Code 5097.98).
Health and Safety Code Sections 7050.5, and 8010-8011	Establishes procedures for notification in the event of the discovery of human remains. Requires construction to be halted and the County Coroner to be contacted if human remains are encountered. Makes it a misdemeanor to disturb or remove human remains found outside a cemetery.
Local	
Kern County General Plan, Section 1.10.3, Policy 25	Provides that the County will promote the preservation of cultural and historic resources.
Kern County Code of Building Regulations Sections 17.48.060 and 17.48.370	Provides historic structure definition and provides direction on issuance of variances for the repair or rehabilitation of Historic Structures

Federal LORS

Antiquities Act of 1906, Title 16, United States Code, Sections 431- 433. This Act establishes criminal penalties for unauthorized destruction or appropriation of "any historic or prehistoric ruin or monument, or any object of antiquity" on Federal land.

National Historic Preservation Act, Title 16, United States Code Section 470 et seq. The National Historic Preservation Act (NHPA) sets in place a program for the preservation of historic properties. Section 106 of the NHPA requires Federal agencies to take in to account the effects of projects on historic properties (resources included in or eligible for the NRHP. It also gives the Advisory Council on Historic Preservation and State Historic Preservation Offices (SHPO) an opportunity to consult. Federal agencies issuing permits for the RSPP would be required to comply with NHPA requirements.

Archaeological Resources Protection Act of 1979, Title 16 United States Code Section 470aa-470mm. This Act provides protection of archaeological resources from vandalism and unauthorized collecting on Federal land.

Executive Order 11593 of May 13, 1971, 36 Federal Register 8921. This Executive Order focuses on the protection and enhancement of the cultural environment. It outlines responsibilities of the Federal agencies and Secretary of the Interior with regard to cultural resources.

Archeology and Historic Preservation: Secretary of Interior's Standards and Guidelines 48 FR 44716-42. This document establishes standards and guidelines regarding professional qualification requirements for archaeological and historic preservation professionals, technical report format and content, and standards for resource evaluation required by the State Historic Preservation Officer.

Federal Land Policy Management Act of 1976 43 United States Code Section 1701 et seq. The Federal Land Policy Management Act (FLPMA) declares that it is the policy of the United States that public lands be managed so as to protect historical and archaeological resources, and that the Secretary of Interior shall establish rules and regulations regarding resource protection on public lands.

Native American Graves Protection and Repatriation Act, Title 25, United States Code Sections 3001-3013. This law provides for ownership of Native American graves and grave goods on Federal lands.

American Indian Religious Freedom Act, Title 42 United States Code Section 1996. This measure establishes a national policy to protect the right of Native Americans and other indigenous groups to exercise their traditional religions. Federal agencies issuing permits for the RSPP will be required to comply with this Act if Native Americans identify issues regarding their right to exercise traditional religious practices.

State LORS

California Environmental Quality Act (CEQA), Public Resources Code Section 21083.2. Under CEQA, the lead agency is responsible for determining whether a project may have a significant effect on historical and archaeological resources. Section 21083.2 states that if the lead agency determines that the project may have a significant effect on "unique" archaeological resources, an environmental impact report shall address these resources. A unique archaeological resource is an 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 one of the following criteria: 1) Contains information needed to answer important 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 or best example of its type; or 3) Is directly associated with a scientifically-recognized important prehistoric or historic event or person.

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require that reasonable efforts be taken to preserve these resources in place or provide mitigation measures. CEC licensing is a CEQA-equivalent process.

CEQA Guidelines, California Code of Regulations (CCR) Title 14, Section 15064.5. State CEQA Guidelines define a "historical resource" to include:

- Resource(s) listed or eligible for listing in the CRHR (14 CCR Section 15064.5(a)(1))
- Resource(s) either listed in the NRHP or in a "local register of historical resources" unless "the preponderance of evidence demonstrates that it is not historically or culturally significant" (14 CCR Section 15064.5(a)(2))
- Resources identified as significant in a historical resource survey meeting the requirements of section 5024.1(g) of the Public Resources Code (14 CCR Section 150655(a)(2)). Subdivision (g) provides that:

  > [a] resource identified as significant in a historical survey may be listed in the CRHR if the survey meets all of the following criteria:
  >
  > 1) The survey has been or will be included in the State Historic Resources Inventory.
  >
  > 2) The survey and the survey documentation were prepared in accordance with…procedures and requirements [of the (California) Office of Historic Preservation].
  >
  > 3) The resource is evaluated and determined [by the Office of Historic Preservation] to have a significance rating of Category 1 to 5 [on the Department of Parks and Recreation Historic Resources Inventory Form].
  >
  > 4) If the survey is five years or more old at the time of its nomination for inclusion in the California Register, the survey is updated to identify historic resources which have become eligible or ineligible due to changed circumstances or further documentation and those which have been demolished or altered in a manner that substantially diminished the significance of the resource.
  >
  > Resources identified by such surveys are presumed to be historically or culturally significant unless the preponderance of evidence demonstrates otherwise.

- The final category of "historical resources" is discretionary with the lead agency:

  > 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, education, social, political, military, or cultural annals of California may be considered to be a

historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. (14 CCR Section 15064.5(a)(3))

When initial study identifies the existence of, or the probable likelihood of, Native American human remains within the project, a lead agency shall work with the appropriate Native Americans as identified by the Native American Heritage Commission (NAHC). The applicant may develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American burials with the appropriate Native Americans as identified by the NAHC. (14 CCR Section 15064.5(d)

CEQA Guidelines, CCR Title 14, Section 15064.7. This section encourages lead agencies to develop, publish, and implement thresholds of significance in order to standardize environmental assessments. Such thresholds must be adopted by ordinance, resolution, regulation or rule at the conclusion of a public review process.

CEQA Guidelines, CCR Title 14, Section 15124(b). This section states that where several measures are available to mitigate an impact, each should be discussed and the basis for selecting a particular measure should be identified. Formulation of mitigation measures should not be deferred until some future time. However, measures may specify performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way. This section also states that the preferred mitigation for historical resources is treatment in a manner consistent with Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings. The preferred mitigation for archaeological sites is preservation in place.

CEQA Appendix G Section V. This appendix is a checklist that identifies potential impacts to historical, cultural, or paleontological resources. The checklist includes four questions to determine if a potential project would:

a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

d) Disturb any human remains, including those interred outside of formal cemeteries?

Questions on the checklist are assessed to assess if a project's impacts would be potentially significant, less than significant with mitigation, less than significant, or have no impact. The final determination of project impacts is made by the lead agency on the project.

Public Resources Code Section 5024.1. This section establishes the CRHR. A resource may be listed as a historical resource in the CRHR if it meets NRHP or CRHR eligibility criteria (see "Regulatory Setting" above). The CRHR is an authoritative guide in California to be used by

State and local agencies, private groups, and citizens to identify the State's historical resources and to indicate what properties are to be protected from substantial adverse change.

Public Resources Code Section 5097.98. This section discusses the procedures that need to be followed upon the discovery of Native American human remains. The NAHC, upon notification of the discovery of human remains, is required to contact the County Coroner pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code and shall immediately notify those persons it believes to be most likely descended from the deceased Native American.

Assembly Bill 2641. This law provides procedures for private land owners to follow upon discovering Native American human remains. Land owners are encouraged to consider culturally appropriate measures if they discover Native American human remains as set forth in California Public Resources Code 5097.98. AB 2641 further clarifies how the land owner should protect the site both immediately after discovery and into the future.

Health and Safety Code Section 7050.5. This code establishes that any person, who knowingly mutilates, disinters, wantonly disturbs, or willfully removes any human remains in or from any location without authority of the law, is guilty of a misdemeanor. It further defines procedures for the discovery and treatment of Native American remains.

Health and Safety Code Sections 8010-8011. This code establishes a State repatriation policy consistent with the implementation of the Native American Graves and Repatriation Act. The code extends policy coverage to non-federally recognized tribes, as well as federally recognized groups.

Local LORS

Kern County General Plan, Section 1.10.3, Policy 25. This portion of the General Plan provides that the County of Kern will promote the preservation of cultural and historic resources that provide ties with the past and constitute a heritage value to residents and visitors. There are five implementing measures (K through O). Included in these is a measure that states that the County Planning Department will evaluate the necessity for the involvement of a qualified Native American monitor for grading and other construction activities on CEQA projects.

Kern County Code of Building Regulations Section 17.48.060. Item 45 of this Section provides a definition of a historic structure as any structure that is on the NRHP, or on a State inventory in a state with a historic preservation plan approved by the Secretary of Interior.

Kern County Code of Building Regulations Section 17.48.370. Subsection (B) provides that the County floodplain administrator is empowered to grant variances for the repair or rehabilitation of historic structures upon determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character of the structure.

AREA OF POTENTIAL EFFECTS

The BLM and CEC provide guidelines for the inventory and documentation of cultural resources within the area of potential effects (APE) of a proposed project. For the purposes of this report, this includes the identification and inventory of archaeological resources that are at least 50 years old.

According to the guidelines set forth by the CEC, archaeological survey is to be conducted on all proposed project sites and extend beyond project boundaries at least 200 feet. For linear facilities, the ROW and at least 50 feet either side of the ROW is to be surveyed.

Guidelines set forth by the BLM require that all cultural resources identified during a Class III survey be recorded. In the event that a project footprint changes and cultural resources identified during survey are located outside the revised project limits of disturbance and CEC archaeological buffer, those cultural resources are still recorded and included in the Class III report. However, evaluations for sites located outside of the revised APE and in the CEC archaeological buffer will not be included.

PROJECT PERSONNEL

Rebecca Apple M.A., R.P.A. served as the Principle Investigator for the Project. Stacey Jordan, Ph.D., R.P.A. directed the field work and is primary author of this report. Cheryl Bowden-Renna, Theodore Cooley, Nick Doose, Clair Fritz, Michael Hares, Andrew Lown, Julie Roy, Philip Sharp-Garcia, and Brian Spelts, participated in the field survey. M.K. Meiser, M.A. conducted the architectural research and survey and co-authored portions of this report. James Cleland, Ph.D., R.P.A. provided senior review for the Project and report. Resumes of key personnel are provided in Attachment 3.

REPORT ORGANIZATION

Chapter 1 of this report provides a description of the proposed Project, the regulatory setting of applicable LORS, the APE, and project personnel. Chapter 2 is a discussion of the physical and cultural setting of the Project. The physical setting includes climate, hydrology, geology, flora and fauna, while the cultural setting includes a discussion of the prehistoric and historic contexts relevant to the immediate area and surrounding Mojave Desert. Archival research, including records searches conducted at the Southern San Joaquin Valley Information Center (SSJVIC) at California State University, Bakersfield and the Native American Heritage Commission (NAHC), as well as research undertaken at the BLM field office in Ridgecrest and various historical societies and museums, and EDAW's contact program, including contacts with Native Americans identified by the NAHC and local historical societies, is documented in Chapter 3. Field methods, reporting methods, evaluating criteria for inclusion in to the NRHP and the CRHR, and the results of fieldwork are summarized in Chapter 4. Chapter 5 provides a summary of each site, its significance recommendation for inclusion to NRHP and the CRHR, and impact assessments for archaeological sites within the survey area. Chapter 6 provides a summary of the

survey results and management considerations for the RSPP. Attachment 1 includes report figures. Attachment 2 presents photographic plates of identified resources. Attachment 3 includes resumes of key personnel on the Project. Attachment 4 includes the results of the records search undertaken at the EIC. Attachment 5 is the results of the Native American contact program. Attachment 6 includes project results maps. Attachment 7 contains the California Department of Parks and Recreation (DPR) site forms for archaeological sites identified during the Class III survey. Attachment 8 is the Architectural Survey Report and Attachment 9 is the geoarchaeological study technical report. Once this Class III report has been finalized, a copy will be sent to the SSJVIC as a permanent record.

CHAPTER 2
PROJECT SETTING

NATURAL CONTEXT

Physiography and Geology

The APE is located in Kern County, at the northern edge of the El Paso Mountains, along the southeastern portion of Indian Wells Valley, in the western area of the Mojave Desert. The Mojave Desert is the southwestern-most extension of the physiographic Great Basin and forms part of the larger Basin and Range Province, which extends south to include the Sonoran and Chihuahuan Deserts of Arizona and Mexico. As such, it is characterized by isolated mountain ranges and internally-drained basins. A terrain of high peaks and low valleys and basins is typical in the Mojave Desert. The landscape within the APE consists mostly of a broad, gently sloping alluvial plain, dissected by several shallow, dry, wash channels with peaks of basalt bedrock along the southwestern edge, and knolls of plutonic and/or metamorphic rock outcrops along the eastern edge. Within the APE, the geological makeup at the surface consists, principally, of alluvial sediments, consisting of sand, silt, clay, gravels, and angular cobbles, most of which were deposited during Pleistocene times, but with some areas, in the southwest corner of the APE and along washes, containing more recent Holocene deposits. Situated within the lower Indian Wells Valley, these sediments likely derived mostly from the adjacent El Paso Mountains with lesser contribution from the Sierra Nevada. The biotic environment of the Mojave Desert is classified as warm-temperate desert land (Brown 1994). Elevations in the APE (2,630 to 2,770 feet) are high enough for some annual snowfall.

The Sierra Nevada Mountains to the west consist, principally, of Mesozoic age granitic rocks. Mesozoic age granitic rocks are also present in the Coso and Argus ranges to the north and east, but these ranges also contain older Paleozoic marine formations as well as Cenozoic age, extrusive volcanic rocks. These latter rocks are mostly Quaternary in age and are especially prevalent in the Coso Range, with extensive flows of basalt, rhyolite, and andesite along with pyroclastic deposits present. The rhyolite flows in the Coso Range are also are noted to contain extensive quantities of obsidian (Streitz and Stinson 1974; Duffield and Bacon 1981). The El Paso Mountains, immediately to the south and west, contain bedrock of pre-Tertiary, Tertiary, and Quaternary age. The older pre-Tertiary bedrock consists of a basement complex of metasedimentary rocks of the Garlock Series, of Paleozoic age, and granitic rocks of Mesozoic age. The Garlock Series contains tactite, marble, phyllite, schist, hornfels, chert, limestone and shale. These rocks outcrop along the southern and eastern edges of the APE. The Tertiary age outcrops consist of sedimentary rocks of the Goler Formation, containing arkosic sandstone, clay, shale, and conglomerate. The Quaternary rocks are the Pleistocene Black Mountain Basalt consisting of extrusive flows of vesicular to dense, olivine basalt. This latter formation is present within the APE along the southwestern project boundary (Jennings et al. 1962).

With the exception of a small knoll along its central western edge, which consists of an outcrop of Mesozoic granitic rocks, and the Quaternary basalt boulders along its southwestern edge, the APE contains exclusively Cenozoic age sedimentary formations at the surface. Wickstrom and

Donahue (2003) have described these sediments as consisting of three types: older alluvium, younger fan deposits, and younger alluvium. The older alluvium is attributed to be late Tertiary, to early and middle Pleistocene in age. This older alluvium consists of semi-indurated, silt, sand, gravel and boulders. The alluvial fan deposits are middle to late Pleistocene and Holocene in age and they consist of a heterogeneous mixture of unconsolidated, clay, silt, sand, gravel and boulders. The younger alluvium is middle to late Pleistocene and Holocene in age and consists of unconsolidated, clay, silt, sand, and gravel. In most other areas of Indian Wells Valley this younger alluvium originates from the Sierra Nevada, but within the APE, it is mostly derived from the El Paso Mountains adjacent to the southern portion of the APE (Wickstrom and Donahue 2003). The ground surface of the APE consists, principally, of older alluvium, also derived mostly from the El Paso Mountains to the south, with limited expanses of younger alluvium present in the southernmost area and along El Paso Wash. El Paso Wash is a large wash running generally north-south from the El Paso Mountains that bisects the APE. Smaller ephemeral drainages in the APE, flowing east-west, also contain younger sediments. In the central northern areas of the APE, where mostly older alluvium is present, the ground surface trends toward desert pavement, with alluvial sands overlain by numerous cobbles and pebbles.

Hydrology

During the Pleistocene, glacial melt and apparently greater annual precipitation levels resulted in pluvial lakes in the area of the current Mojave Desert (Mehringer 1986). The APE is situated at the southern end of Indian Wells Valley, which during Pleistocene times formed a portion of the Owens drainage system extending from Mono Basin south to the Owens and Indian Wells Valleys, then east to the Searles, Panamint and Death Valleys to the east (Hall 1992; Mehringer 1986). Each of these valleys contained a Pleistocene pluvial lake, including China Lake in the northeastern portion of Indian Wells Valley.

The groundwater hydrology of the region is dependent on subsurface flow from the Sierra Nevada Mountains to the west, and the Coso and Argus Ranges to the north and east. Recharge to the local aquifers is exclusively dependent on winter precipitation and comes from winter rains and spring snowmelt. Surface runoff from the mountains is minimal once the highland drainages reach the highly permeable alluvium of valley, and ground water recharge occurs as this runoff percolates into the valley fill.

CLIMATE

Temperature

Conditions within the Mojave Desert are among the hottest found in the United States. Average daily temperatures typically range from the low 30s in winter to low 100s in summer, although summer temperatures can reach into the 110s. A high of 119 degrees Fahrenheit has been recorded in Inyokern, California, located approximately eight miles west of Ridgecrest. This region also experiences rapid heat loss at night, resulting in a wide daily temperature variance of approximately 30 degrees.

Precipitation

Most of the moisture from Pacific winter storms moving south and east falls on the steep, west-facing slopes of the Peninsular Ranges, creating a "rain shadow" effect for the east-facing slopes and deserts. This area of the Mojave Desert receives summer rains, generally ranging from 3 to 10 in (80 to 250 mm) in geographically localized high intensity "monsoon"-type storms of short duration.

VEGETATION (MODERN/HOLOCENE)

The Mojave has a typical mountain-and-basin topography containing sparse vegetation with extant vegetative resources characterized by moderate species diversity. Dominant vegetation communities of the Mojave Desert at lower elevations include creosote bush scrub, shadscale scrub, and alkali sink scrub (Warren 1984). Vegetation in the APE consists of a low density growth of Mojave creosote bush scrub with creosote bush (*Larrea tridentata*) and white bursage (*Ambrosia dumosa*) the dominant species. Within the sandy flats and emerging desert pavement the vegetation is dominated by creosote bush, with saltbushes (*Atriplex* spp.) occurring where the soil becomes more alkaline. Along seasonal washes, the vegetation is denser, though with the same variety of species. Cholla (*Opuntia* spp.) and native grasses can be found at the lower elevations in the northern portion of the APE.

FAUNA (MODERN/HOLOCENE)

Because of the high diurnal temperatures of the Mojave Desert, most of the desert mammals have adapted by spending much of the day underground in burrows or aestivating. Large fauna species are rare in the Mojave Desert. Rodents, reptiles and birds are more common and are found along the desert floor. Rodent species include various pocket mice (*Perognathus* spp.), whitetail antelope squirrel (*Ammospermophilus leucurus*), and kangaroo rats (*Dipodomys* spp.). Reptile species present include the desert tortoise (*Gopherus agassizii*), desert iguana (*Dipsosaurus dorsalis*), common king snake (*Lampropeltis getulus*) and the Mojave rattlesnake (*Crotalus scutulatus*). More than 300 species of birds are found in the Mojave Desert. A few species more common to the open desert are the prairie falcon (*Falco mexicanus*), burrowing owl (*Athene cunicularia*), roadrunner (*Geococcyx californianus*) and the horned lark (*Eremophilia alpestris*). Other species found in the Mojave include the blacktail jackrabbit (*Lepus californicus*), desert cottontail (*Sylvilagus audubonii*) and the coyote (*Canis latrans*). Special status species also known to be present in the RSPP include Desert kit fox (*Vulpes macrotis arsipus*), Mohave Ground Squirrel (*Spermophilus mohavensis*), Loggerhead shrike *(Lanius ludovicianus),* Le Conte's thrasher (*Toxostoma lecontei*), and the Western burrowing owl (*Athene cunicularia hypugaea*).

HOLOCENE CLIMATE CHANGE

Climatic shifts over the course of the Holocene have resulted in a number of biotic and hydrologic changes that have affected the past distribution of resources important to humans occupying the Mojave Desert (Table 2).

Table 2. Major Climatic Intervals

Climatic Interval	Period (Before Present [B.P.])	Climate and Hydrology
Early Holocene	10,000 - 7000	Cooler summer temperatures; upslope retreat of woodland species; precipitation greater than present
Middle Holocene	7000 - 4000	Warmer temperatures; arrival of modern Colorado Desert vegetation; precipitation generally lower than present
Neoglacial	4000 - 2000	Cooler temperatures; precipitation greater than present
Med. Climatic Anomaly	1150 - 550	Warmer temperatures; extreme droughts from 1060 - 850 and 740 - 600 B.P.
Little Ice Age	450 - 150	Cooler temperatures; precipitation greater than present

Terminal Wisconsin to Middle Holocene

As the Holocene developed after about 10,000 years ago, temperatures increased overall but summer temperatures apparently were still cooler than present. There is some evidence of an increase in precipitation at this time, possibly resulting from more frequent and intense El Niño patterns (Spaulding 1991). The concept of an arid middle Holocene (ca. 7000 - 4000 B.P.), first proposed by Antevs (1948), is now supported by a variety of packrat midden, geomorphic, and pollen data (Byrne et al. 1979; Hall 1985; Holliday 1989; Mehringer 1986; Spaulding 1991). Although many lines of evidence suggest that this period was one of high climatic variability rather than unremitting heat and drought (Grayson 1993), overall it seems to have been warmer and more arid than present.

Late Holocene

Evidence from the late Holocene (after ca. 4000 B.P.) indicates at least three climatic episodes that would affect humans living in the desert. The Neoglacial (ca. 4000 - 2000 B.P.) is a period of generally lower temperatures and increased effective moisture that is indicated both by macrofossils from packrat middens and by hydrologic evidence for extended lacustral intervals in the Mojave Desert (Drover 1979; Enzel et al. 1992; Smith 1979; Wells et al. 1989). Some of the most extensive desert lake stands in the Mojave Sink region were the result of flooding of the Mojave River and thus provide evidence for enhanced precipitation in the Transverse Range.

The Medieval Climatic Anomaly, which extended from about 1,200 to 700 years ago, was marked by generally warm temperatures and punctuated by extreme, extended droughts from A.D. 890 to 1100, and A.D. 1210 and 1350 (Stine 1994). In the Mojave Desert, packrat middens

provide evidence of effectively drier conditions associated with increased temperatures during this period; and, to date, there are no published records of increased spring activity or desert lake high stands throughout the region (Jones et al. 1999).

The arid conditions of the Medieval Climatic Anomaly reversed sharply by about 600 years ago, marking the beginning of the Little Ice Age (Grove 1988). A variety of data from the Mojave Desert indicate both lower temperatures and increased winter precipitation during this period. Cooler temperatures are indicated by the descent of blackbrush scrub at this time; again, evidence for extended lakestands in the Mojave Sink (Enzel et al. 1992) indicates enhanced precipitation in the Transverse Range.

CULTURAL CONTEXT

Prehistory

Archaeological investigations have indicated that although the Mojave Desert had limited resources and surface water, the region supported a long human occupation with population density increasing in the Holocene (Mosely and Smith 1962). Archaeological remains tend to be widely scattered and sparse, and are usually located along the margins of pluvial lakes (Warren 1991; Willig 1988). Prehistoric human occupation has been categorized into the Lake Mojave Complex, the Pinto Complex, the Gypsum Complex, the Rose Springs Complex, and the Late Prehistoric Complex.

Lake Mojave Complex (12,000 to 7000 years B.P.). The Late Pleistocene/Early Holocene Lake Mojave complex (Warren and Crabtree 1986:184) has become the comparative unit for Early Man in the Mojave Desert. Lake Mojave period sites are often limited to surface assemblages, although substantial subsurface deposits have been reported in the central Mojave Desert (Jenkins 1985). Lake Mojave assemblages are marked by various projectile point types, including leaf-shaped points, long-stemmed points with narrow shoulders (Lake Mojave and Parman points), short-bladed stemmed points with distinct shoulders (Silver Lake points), and rare fluted points. Also present are crescents, domed scrapers, heavy core tools, and other items. While Warren and Crabtree (1986) believe that milling stones are rare or absent, recent evidence suggests that these items are more common than previously thought (see Basgall 1994, Basgall and Hall 1994, and Grayson 1993).

Because sites of the Lake Mojave period are often found in association with lake stands and outwash drainages, some researchers have argued that lacustrine resources were a subsistence focus, while others suggest that grasslands suitable for the grazing of large game would have surrounded the lakes, and that these were the primary subsistence focus of Lake Mojave cultures. Materials dating to the Lake Mojave period in the western Mojave Desert are few and confined to areas such as Lake Mojave, Fort Irwin, Twentynine Palms, Rosamond Lake, and China Lake, which is located 12 miles northeast of the APE (Sutton et al. 2007). Surveys around China Lake in the 1960s and 1970s identified surface prehistoric artifact concentrations dating typologically to more than 10,000 years old on the downwind side of the lakebed (Davis 1978, Davis and Palanqui 1978). While further analyses identified post-depositional erosion processes, including

wind and wave forces, at work in forming the concentrations, the findings illustrate the cultural adaptation to pluvial conditions (e.g., lakes, marshes, and grasslands) that flourished for several millennia after 10,500 B.P. (Moratto 1984).

Pinto Complex (7000 to 4000 B.P.). A period of dramatic environmental change has been posited for the Pinto Complex. The middle Holocene environment changed from pluvial to arid conditions, rivers and lakes dried up and animal and plant life changed. This period is seen by Warren (1984) as marking the beginnings of cultural adaptations to the desert. Desert humans either adapted to this change or relocated to areas with more favorable environmental conditions. Depopulation of the area seems evident in the small size of Pinto period sites, which are often limited to surface deposits. These ephemeral sites suggest temporary or seasonal occupations by small groups of people (Moratto 1984), focusing on a forager-like strategy (Sutton et al. 2007).

The most important characteristic of Pinto period assemblages relates to an increase in the abundance of groundstone implements (Sutton et al. 2007). The appearance of significant numbers of milling stones in Pinto assemblages is attributed to the exploitation of hard seeds. This is seen by Warren (1984) as part of the process of subsistence diversification brought on by increased aridity and decreasing game populations. Most Pinto Complex sites have been identified in the eastern Mojave although a few Pinto-style projectile points have been identified in the Tehachapi area and other parts of the western Mojave (Sutton 1988; Sutton et al. 2007).

Gypsum Complex (4000 to 1500 B.P.). The Gypsum Complex is marked by an increase in the number of archaeological components, and increased diversity in assemblage and site setting. Occupations in the Antelope Valley during this period are indicative of large permanent or seasonally occupied villages, with smaller seasonally based special purpose sites including rock rings, lithic scatters and milling stations (Warren 1986). The appearance of large village and special purpose sites in the Antelope Valley has been attributed by Warren (1986) to refined hunting methods and seed processing technologies that raised the regional carrying capacity and facilitated population growth.

Gypsum Complex assemblage sites are characterized by diagnostic projectile points, leaf shaped points, rectangular based knives, flake scrapers, T-shaped drills, large scraper-planes, choppers, and hammerstones. There is an increase in the presence of milling stones, and the mortar and pestle were introduced during this period.

Rose Spring Complex (ca. 1500 to 1000 B.P.). Archaeological evidence for the Rose Spring Complex indicates a major population increase, changes in artifact assemblages, and well developed middens (Sutton 1988). The introduction of small projectile points into assemblages in the Mojave Desert and the Great Basin appear to mark the introduction of the bow and arrow and the decline of the atlatl and spear weaponry (Sutton 1996; Sutton et al. 2007).

Subsistence strategies seem to shift towards the exploitation of small to medium sized game, including lagomorphs and rodents. The milling of plant foods was an important activity with numerous bedrock milling features at Rose Spring, including mortars and slicks (Sutton 1988).

Late Prehistoric Complex (1000 B.P. to European contact). There is an increase in the ethnic and linguistic complexity within the Mojave Desert during this period. Desert Side-notched points and Brownware ceramics become more widely distributed throughout the Mojave Desert and the Great Basin. This development, combined with linguistic evidence, is associated with the Numic-speaking Paiute and Shoshone westward expansion throughout most of the area (Bettinger and Baumhoff 1982).

Characteristic artifacts of this period include Desert series projectile points (Desert Side-notched and Cottonwood Triangular), Brownware ceramics, Lower Colorado Buff Ware, unshaped hand stones and milling stones, incised stones, mortars, pestles, and shell beads from the coast (Warren and Crabtree 1986).

Ethnohistory

The APE is located within the traditional territory of the Kawaiisu, whose core homeland was in the southern Sierra Nevada Mountains south of the Kern River and the northern Tehachapi Mountains. Ethnographic information indicates that they traveled as far east as the Panamint Mountains, and Steward (1937, 1938), assigns the southern portion of Panamint Valley to this group (Cleland 2003). The desert to the east of their core area was used transitorily for seasonal trips to exploit desert resources. Trips were made to obtain salt at Saltdale, a dry lake, and to the other side of Randsburg for obsidian. The latter may refer to a small obsidian source reported near Pilot Knob, located in the vicinity of several of the desert locales utilized by prehistoric peoples Cleland 2003).

A trail system emanating from the Kawaiisu core area encouraged the flow of people and resources (Zigmond 1986). Neighboring groups included the Tubatalubal to the north, the Southern Yokuts to the west, and the Kitanemuk and Serrano groups to the south. During the initial period after European contact, the Kawaiisu claimed a major portion of the western Mojave Desert as their territory, including the Fremont Valley (Sutton 1991).

The Kawaiisu language belongs to the Southern Numic branch of the Northern Uto-Aztecan family, which spans a large part of Mexico and the southwestern United States. Seasonally mobile with a subsistence system based on hunting and gathering, the Kawaiisu relied on acorns and pinyon nuts, supplemented with large and small game, rodents, birds, and insects (Zigmond 1986). Acorns were also used as a commodity in exchange for obsidian and salt.

Family groups formed the basis of the Kawaiisu social organization and there was little tribal identity, with a leader or leaders being recognized through tacit acceptance of the community (Zigmond 1986). Families cooperated in the procurement of subsistence resources, including acorns, tubers, and roots. Material culture included the bow and arrow made of available local woods, lithic tools, elaborate baskets, buckskin clothing, beading worn through pierced ears, and tubular nose plugs (Zigmond 1986). Game included antelope, big horn sheep and chuckwallas (Cleland 2003). Pottery, however, is rarely found and may have been obtained in only limited amounts through trade with neighboring Great Basin groups rather than through manufacture (Zigmond 1986).

History

Early Exploration

Despite early explorations beginning in the 16th century, Euro-American settlement was delayed in the Mojave Desert region until the mid-19th century. This fact creates a long "proto-historic" period, which has been dealt with above from the point of view of Native American history. Below, Euro-American expansion into the region and subsequent historical developments are addressed.

As early as 1539, the Spanish began to explore parts of California. Early explorers, such as Francisco de Ulloa (1539), Hernando de Alarcón (1540), and Francisco de Coronado (1540) led expeditions into the Gulf of Mexico, reaching the mouth of the Colorado River and continuing up the river past the Gila confluence. However, little exploration of the interior deserts was undertaken until much later. Spanish exploration for the next 200 years was intermittent in this area as it was considered remote and difficult to access.

The European period in the Mojave Desert began when Spanish missionaries and explorers entered the area in the 18th century. Among the first Europeans in the Mojave was Pedro Fages, who led an expedition into the western Mojave in 1772 (Pourade 1960). Later exploration into the Mojave was undertaken in 1776 by Francisco Garcés. Garcés was tasked with exploring overland routes between Santa Fe, New Mexico, and southern California. During his expedition, he stayed in what is today the town of Mojave (Coues 1900; Sutton 1991).

American exploration into the Mojave Desert began in the 19th century. Jedediah Smith was the first American to enter the Mojave in 1826 (Pourade 1961). Smith followed the Old Spanish Trail, the trade route approximately 60 miles southeast of the APE that connected Santa Fe with the settlement in Los Angeles, and ultimately reached the Pacific Ocean (Beck and Haase 1974; Norris and Carrico, 1978). In 1844, John C. Fremont, The Great Pathfinder, traveled through the Mojave from the north and eventually met up with the Old Spanish Trail (Beck and Haase 1974; Fremont 1845).

Mining

Some prospectors established mines in the Mojave region in the 1850s, but it was not until the 1860s that mining expanded in the area (Norris and Carrico 1978). As mining increased, so did the number of permanent settlements. From the 1860s to the 1880s, mining became the primary economy in the area. Mining camps grew into mining towns that were connected through a series of stage coach roads. Later, the Southern Pacific Railroad established a stop north of Mojave called Nadeau Station (Warren and Roske 1981).

Various materials were mined in the western Mojave Desert, including gold, silver, and iron (Coombs et al. 1979). Directly south of the APE, gold mining in the El Paso Mountains was most active in the early 1890s, with placer mining for gold moving northeastward into the Summit Range during that decade. Major mining districts in the locality were established in the El Paso Mountains and the Rand Mountains approximately 5 miles to the south (see Hall and Barker 1975). Other large mines included Cerro Gordon in the Owens Valley (125 miles north of the

APE) and Darwin (45 miles north of the APE), where silver was discovered (Norris and Carrico 1978).

An important commercial mining endeavor that took place in the Mojave Desert involved the extraction of borax. Though the pursuit could never be described as a dominant activity in the area, it is celebrated because of its association with the 20-mule teams that carried the raw material from Death Valley into other parts of the western Mojave (Norris and Carrico 1978). The 20-mule teams crossed the Fremont Valley on their way to the town of Mojave (Wynn 1963). Borax mining operations were undertaken by several companies during the late 19th century. Among these were the Eagle Borax Works (founded by Francis C. "Borax" Smith), the Harmony Borax Works, Amargosa Borax, and Pacific Coast Borax Company (Coombs et al. 1979; Norris and Carrico 1978).

Railroads

Railroads developed in the Mojave Desert in response to the mining boom and the desire to move goods between the eastern states and California. Routes had been scoped by earlier expeditions, but the railroad did not arrive near the area until 1876. This rail line ran from Tehachapi to Mojave and then to Los Angeles via the Antelope Valley as part of the Southern Pacific Railroad (Norris and Carrico 1978).

The construction of the Los Angeles Aqueduct between 1905 and 1913 stands as one of the greatest architectural and engineering achievements in the history of southern California. Carrying water 226 miles from Owens Valley, to the northwest of APE, to the rapidly growing Los Angeles metropolitan region, its construction also impacted the development of transportation corridors throughout the region. In 1908, the Nevada and California Railroad (present-day Southern Pacific Railroad) extended its Mojave-Owenyo line to support construction of the Los Angeles Aqueduct, creating a significant impact on the region as it allowed more people to move into the area for mining, business, and agricultural pursuits (Westbrook n.d.). The Terese Siding of this branch line, located six miles south-southeast on Inyokern, is in the southwestern corner of the APE and was connected to roads running north-south and east-west through the APE. The location of Terese was indicated on USGS topographic maps as late as 1943.

Agriculture and Homesteading

Early homesteaders moved into the western Mojave Desert at the same time that mining became the major economic pursuit in the area. The establishment of the railroad enabled more homesteaders to move into the area, particularly near Lucerne Valley and Apple Valley (Coombs et al. 1979).

Water sources were always an issue affecting the rate at which agriculture could grow in the arid environment of the high desert. Farmers generally stayed near rivers for dependable sources of water. Some farmers, however, found moderate success by utilizing wells and pumps to irrigate or by building near dry lake beds that periodically flooded during the rainy winter season. The need for water in association with farming made agricultural growth difficult, but several communities were able to survive on a subsistence farming lifestyle (Norris and Carrico 1978).

A lack of reliable water resources ensured that agriculture did not become a dominant industry in the region. Water resources did become a significant part of the history of the western Mojave Desert and Fremont Valley with the construction of the Los Angeles Aqueduct in the early part of the 20th century.

While homesteaders began arriving in larger numbers in the Indian Wells Valley in 1909 with the arrival of the railroad, there was little activity in the area of APE. The development of brine mining operations in Searles Valley to the east did begin to increase demand for local products in the early 1910s. At this time, Robert and James Crum established a dairy in the area and the small settlement that grew around their enterprise became known as Crumville (City of Ridgecrest 2008). Another early pioneering family in the area, the Robertsons, established a farm at the intersection of Ridgecrest and China Lake Boulevards in 1912, receiving a total of 440 acres of land patents in 1914 (Weals 2001). Others, like the Bowman family, also made investments in the land, holding title to 160 acres along present-day Bowman Road by 1913 (Westbrook n.d.).

Still, attempts were made to settle in the flat lands of the APE. Desert Land Entry and Homestead Entry attempts between 1906 and 1910 show that claims were made in the western portion of the APE, though were cancelled or released soon after (Weals 2001). The 1915 USGS Searles Lake 15' topographic quadrangle, surveyed between 1911 and 1913, shows no buildings present in the APE. The area, however, did continue to serve as a transportation corridor as it had in prehistoric times. A northwest-southeast trending roadway leads east from Freeman Canyon and the town of Freeman through the APE continuing east.

In 1920, the U.S. Geographical Board combined what were previously known as Brown, Salt Wells, and Inyokern Valleys into Indian Wells Valley. An attempt was made by the Inyokern Land and Water Company in the second decade of the twentieth century to dig wells in and around present-day Ridgecrest, though none are shown within the APE.

Settlement attempts seem to be organized primarily to the north and northeast of APE, with 5-acre and 2.5-acre tracts were patented in sections 6, 7, 18 and 19 of Township 27 South, Range 40 East in the 1950s and 1960s. The City of Ridgecrest was incorporated in 1963.

The Military

The military had a significant role in the development of the Mojave Desert in the 20th century. Prior to World War II, the western Mojave was one of the major training grounds in preparation for war. The Mojave Army Antiaircraft Range (later renamed Camp Irwin) was built near Barstow while Condor Field, a glider training base, was established near Twentynine Palms (Coombs et al. 1979; Norris and Carrico 1978).

Muroc Bombing and Gunnery Range, located approximately 40 miles south the Project site, was established in 1933. Later renamed Edwards Air Force Base, it has been one of the most important spots in aviation history, as many experimental aircraft have been designed and tested here. Edwards Air Force Base continues to operate today and is one of the landing sites for the Space Shuttle. To the northeast of the APE in Ridgecrest, the Naval Air Weapons Station (NAWS) China Lake has been in use since 1943 and has been the driver for economic and

demographic growth in the area. Over the decades following the establishment of NAWS China Lake, the town of Ridgecrest grew by providing housing and services in support of Federal employees and contractors. Development outside of the towns of Ridgecrest and nearby Inyokern has still remained sparse.

CHAPTER 3
ARCHIVAL RESEARCH AND CONTACT PROGRAM

This chapter outlines the results of records searches and background research of the APE and Project ROW. Archival research was conducted for the RSPP in order to determine if any previous surveys have been conducted within the limits of or near the APE. Various sources were consulted, including historical maps and photographs on file with different agencies and institutions that may have information pertinent to the APE. A contact program was initiated with individual Native American individuals and tribal groups in order to solicit their input on the project. Historical societies located near the APE were also contacted in order to learn of any additional information or concerns they may have relevant to the project.

Archival research was conducted to encompass the areas required under Section 106 of NHPA and CEC citing regulations; the archival research included a record search (Attachment 4) through the SSJVIC at California State University, Bakersfield.

RECORDS SEARCH

Information regarding previously conducted studies and site records was obtained for a one-mile area around the original Project ROW and within 0.5-mile of the linear facilities routes.

Previous Surveys

A records search request was submitted on February 13, 2009 and results were received on April 20, 2009. The records and literature search results indicated that 15 previous investigations had been conducted within the records search area (Table 3).

Of the 15 previous surveys identified by the records search, seven (KE-00289, KE-00572, KE-02553, KE-02188, KE-02016, KE-003497, KE-02862) were conducted within portions of the APE. KE-00289 consists of a linear study for a proposed gasline corridor; no resources were identified in the APE. KE-02016 consists of a Class III inventory conducted by Southern California Edison for the proposed stringing of the existing Inyokern-Kramer 115kV and 220kV transmission line running through the far southwestern portion of the APE. This study identified one lithic scatter within the APE, recorded as isolate feature IF-KER-435. KE-02188 and KE-02553 consist, respectively, of an original linear survey and a resurvey of sections of the Lone Pine Branch of the Mojave-Owenyo rail alignment, a portion of which runs through the western edge of the APE. These studies recorded and updated this segment of the rail alignment and its associated features (CA-KE-3366H). KE-00572 consists of a Negative Archaeological Survey report on the linear survey for the proposed rehabilitation of Highway 395; one isolate obsidian flake (P-15-10822) was recorded within northeastern portion of the APE. KE-02862 and KE-03497 consist of the Archaeological Survey Report and Historic Properties Survey Report related

to the expansion of Highway 395; no sites were recorded within the APE as part of these two studies.

Table 3. Summary of Previous Surveys within Records Search Limits

Report Number KE-	Date	Author	Title
00289	1993	Berg, John E.	A Technical Report of a Cultural Resources Survey and Inventory for the Mojave Pipeline/Coso Lateral.
02553	1998	Burke, Thomas D.	Re-Examination of Previously Documented Cultural Resources on the Union Pacific Railroad Lone Pine Branch, M.P. 4300.00 Series to M.P. 519.34 Near Lone Pine, on Public Lands Administered by the Bureau of Land Management, Ridgecrest Field Office.
00572	n.d.	Caltrans	Negative Archaeological Survey Report U.S. 395 P.M. 15.0/29.3.
02188	1992	Hall, M.C.	Cultural Resources Survey of a Portion of the Former Southern Pacific Mojave-Owenyo Branch Railroad, Inyo and Kern Counties, California.
00538	1992	Jensen, Peter	Archaeological Inventory Survey, Ridgecrest Solid Waste Landfill Site c. 120 ac at Ridgecrest, Eastern Kern County, California.
00541	1996	Jensen, Peter	Archaeological Inventory Survey Buffer Zone Study Area at the Ridgecrest Solid Waste Landfill, Indian Wells Valley, Eastern Kern County, California.
02403	2000	LSA Associates, Inc.	Cultural Resource Assessment for Pacific Bell Mobile Services Facility LA-973-04, in the County of Kern, California.
00795	1979	No Author	Environmental Impact Statement for Archaeological Values Prepared for Various Projected Facilities of the IWVCWD.
01868	1989	Oxendine, Joan	Cultural Resources Report for the Contel Fiber Optic Cable Ridgecrest Resource Area.
01094	1989	Pruett, Catherine L.	Environmental Impact Evaluation: Archaeological Evaluation for 80 Acres South of Inyokern, Kern County.
00948	1990	Pruett, Catherine L.	Archaeological Evaluation for a Road Right-of-Way across BLM and South of Inyokern, Kern County.
02016	1989	Taylor, Thomas T.	Archaeological Survey Report Inyokern-Kramer 220 kV Transmission Line Conductoring Project Tower Sites, Pulling Areas, Sleeve Areas, and Wire Setups Kern and San Bernardino Counties, California.
03497	2006	Wickstrom, Brian and Lance H. Brangham	Historic Properties Survey Report for the Inyokern Four Lane Project Kern County, California.
02862	2003	Wickstrom, Brian	Archaeological Survey Report for the Inyokern Four Lane Project, Kern County, California.

Report Number KE-	Date	Author	Title
01762	1977	Young, Daniel L.	Archaeological Survey Report for a Shoulder Paving and Resurfacing Project North of Johannesburg on 9-Ker-395-0.0/14.5 E.A. 069001.

Previously Recorded Sites

The records search identified 16 resources within the records search area (Table 4). Two of these previously documented cultural resources are recorded within the APE. These consist of an isolate obsidian flake (P-15-10822), and a segment of the Southern Pacific Railroad alignment (P-15-3366). Cultural resources within the records search buffer area include lithic and groundstone scatters, milling features, rock shelters and alignment, historic debris, and a portion of Old Highway 395.

Table 4. Summary of Previously Recorded Cultural Resources within the Records Search Area

Primary Number (P-15-)	Permanent Trinomial (CA-KER-)	Site Type	Site Constituents	Time Period
000249	249	Rock shelter and lithic scatter	Smoke-blackened granitic rock shelter with obsidian flakes	Prehistoric
001253	1253	Lithic and groundstone scatter	Four chalcedony cores and approximately 25 chalcedony flakes, one obsidian flake, one quartzite hammerstone, obsidian nodules, basalt metate fragments	Prehistoric
001254	1254	Lithic scatter	Chalcedony flakes and one obsidian nodule	Prehistoric
001596	1596	Rock shelters; milling station	Multiple granitic rockshelters including a grinding slick, a possible hearth and a sheepherder's camp	Prehistoric/historic
002034	2034	Rock alignments; lithic isolate	Three curvilinear rock alignments and two cairns, with obsidian flake isolate	Prehistoric/historic?
003366	3366H	Railway alignment	Segment of the Southern Pacific Mojave-Owenyo Railroad Line into Inyo County (CA-INY-4608H)	Historic (early 20th century)

Primary Number (P-15-)	Permanent Trinomial (CA-KER-)	Site Type	Site Constituents	Time Period
003394	3394H	Historical mining debris	Mining prospect, two trash dumps and a can scatter	Historic
007670	436	Lithic scatter (recorded as isolate feature IF-KER-436)	Three chalcedony flakes	Prehistoric
008676		Last Chance Canyon Archaeological District	Prehistoric campsites, house-ring complexes, rockshelters, lithic and groundstone material, petroglyph sites, and burials; unidentified historic period (1870s) sites	Prehistoric/historic
008709	435	Lithic scatter (recorded as isolate feature IF-KER-435)	One white chalcedony flake, two quartzite flakes, and three brown jasper flakes	Prehistoric
008711	800	Milling feature	Unifacially ground, basalt milling slab	Prehistoric
010822		Isolate	Obsidian flake	Prehistoric
012067	6834H	Tin can scatter	Scatter of at least 63 cans that post-date 1945 in age	Historic
012068	6835H	Historic scatter	Adjoining scatters of metal slag, about 50 metal artifacts and one aqua colored glass jug base	Historic
012069	6836H	Historic scatter	Scatter of amber, aqua, and clear bottle glass fragments, crimped seam cans, and fragments of a porcelain tea cup	Historic
012070	6837H	Historic road alignment	Abandoned historic portion of US Highway 395	Historic

The eastern boundary of National Register-listed Last Chance Canyon Archaeological District, P-15-008676, intersects with the western edge of the APE. The limited information available from SJJVIC consists of the National Register of Historic Places Inventory – Nomination Form, a small scale map copied over 8½" by 11" sheets showing the rectangular boundary of the district, two pages of unlabelled photographs, and one 8½" by 11" copy of the northern portion of the Inyokern 15' quadrangle showing a handwritten legend of site symbols but showing neither the boundary of the district nor the location of any recorded sites. The National Register nomination form and accompanying maps were completed by Alex Apostolides in 1971 following the UCLA Archaeological Survey conducted between 1962 and 1970.

The district is described as encompassing Townships 27S, 28S, and 29S and Ranges 37E, 38E, and 39E on the 1943 Saltdale and Inyokern 15' USGS quadrangles. As mapped, the district currently covers approximately one-third of the western portion of the APE. According to available records, there exists no list of the individual sites that were nominated to the NRHP. BLM Archaeologist Don Storm has organized available data regarding the district and has compiled a list of 79 sites, most of which have never received trinomial numbers and all of which are far to the southwest from the APE (Don Storm, personal communication). Cultural resources within the district include both historic and prehistoric sites, including rock shelters, campsites, milling features and groundstone, houserings, rock art, workshop areas/digging stations, and two burials. Occupation evidence is believed to date to as early as 400 B.P., with one obsidian projectile point yielding a hydration date of 3980 B.P.

OTHER ARCHIVAL RESEARCH

Various sources were consulted for the APE. Archival research is useful in learning more about the regional history of an area or provides a more refined historical context for the APE. Research on historical land use and occupation of the APE included historical topographic maps and archival records on file at different agencies and institutions. The results of archival research are discusses below. Historical maps on file at California State University Chico and the University of Alabama were referenced online.

Historical maps

Historic topographic maps can indicate the locations of historic roads or structures. Available historic topographic maps of the APE are listed in Table 5.

Table 5. Historical maps

Map Name/Year	Scale	Source	Notes
Searles Lake 1915	1:125,000	University of Alabama	Overview of APE
Inyokern 1943	1:62,500	University of Alabama	Western portion of APE shown
Ridgecrest 1953	1:62,500	University of Alabama	Eastern portion of APE shown

None of the historic topographic maps examined show standing structures within the APE. Roads identified in the APE include the historic alignment which became the original Highway 395 (now Brown Road), an unnamed dirt road running northwest-southeast paralleling the Terese Siding of the Southern Pacific Railroad's Mojave-Owenyo Branch line, and an unnamed dirt road running southwest-northeast which heads east out of Freeman Canyon crossing the Los Angeles Aqueduct intersects crossing the Terese Siding road and ending in a junction with the present-day Brown Road alignment. These alignments, as well as the Southern Pacific Railroad's Mojave-Owenyo Branch line, appear on the USGS 1:125,000 scale Searles lake 1915 quadrangle.

Museums and Historical Societies

The Historical Society of the Upper Mojave Desert and the Maturango Museum in Ridgecrest, California, were visited on May 9 and May 10, 2009. They provided supplementary materials for the historical narrative of the area, consisting of secondary sources compiling historical information, but did not comment on any specific cultural resources within the APE.

BLM Archives

The Bureau of Land Management Ridgecrest Field Office was visited on May 8, 2009. The BLM office provided information and records related to historic activities in the area, and commented on cultural resources that have been identified in the APE. Archived material included 1856 General Land Office (GLO) plat maps of the APE and mining claim information.

CONTACT PROGRAM

Native American Contact Program

A letter was sent to the Native American Heritage Commission (NAHC) on April 13, 2009 requesting information on sacred lands and traditional cultural properties, and a list of Native American individuals and organizations that might have knowledge or concerns with cultural resources within the APE. A response was received April 20, 2009 indicating that cultural resources are located within a one half-mile radius of the APE. Six Native American representatives were identified by the Commission (Table 6). Letters were sent to these individuals on May 1, 2009 informing them of the Project and asking for their input and concerns. To date, one response has been received from Harold Williams, Chairperson of the Kern Valley Indian Council requesting additional information. Follow-up contacts were made via telephone on August 5, 2009. Upon contact, Harold Williams indicated that he is no longer Chairperson and does not have any comments on the Project. He referred EDAW to Robert Robinson and Ron Wermuth, who have previously been contacted as part of this ongoing program. Results of the Native American Contact Program are provided in Table 6. Copies of the letters and other contact information are provided in Attachment 5.

EDAW assumes that in accordance with Federal mandates BLM will initiate government-to-government consultation with Native Americans. However, CEC requires that applicants show that sufficient efforts have been made to identify Native American concerns for cultural resources and sites of traditional and religious significance.

Table 6. Native American Contacts by Affiliation

Contact	Affiliation	Sent	Response
Neil Peyron, Chairperson	Tule River Indian Tribe	Letter (5/1/2009) Voicemail (8/5/2009)	None to date
Ron Wermuth	None given (Tubatulabal, Kawaiisu, Koso, Yokuts)	Letter (5/1/2009) Voicemail (8/5/2009)	None to date
Kathy Morgan, Chairperson	Tejon Indian Tribe	Letter (5/1/2009) Voicemail (8/5/2009)	None to date
Harold Williams, Chairperson	Kern Valley Indian Council	Letter (5/1/2009) Phone call (8/5/2009)	Request for further communication, 5/15/2009 Is no longer chairman and does not have any comments. Referred to Robert Robinson and Ron Wermuth
Robert Robinson, Historic Preservation Officer	Kern Valley Indian Council	Letter (5/1/2009) Voicemail (8/5/2009)	None to date
Donna Begay, Tribal Chairwoman	Tubatulabals of Kern Valley	Letter (5/1/2009) Voicemail (8/5/2009)	None to date

Historical Society Contact Program

Local historical societies were contacted regarding the Project (Table 7). In addition to the records search conducted by SSJVIC, several historical societies and agencies were contacted by letter on June 1, 2009, requesting any pertinent information regarding historic or other cultural resources within or near the APE. As of August 2009, no responses have been received.

Table 7. Historic Resources Contact Program

Historical Society/Museum	Dates of Contact	Response
Clan Diggers Genealogical Society	6/1/2009 (Letter)	None to date
Historical Society of the Upper Mojave Desert	6/1/2009 (Letter)	None to date
Kern County Museum	6/1/2009 (Letter)	None to date
Maturango Museum	6/1/2009 (Letter)	None to date
Kern River Valley Historical Society and Kern Valley Museum	6/1/2009 (Letter)	None to date

Agency Contacts

Several agencies were contacted for consultation on the RSPP. Relevant agency contacts are provides in Table 8.

Table 8. Agency Contacts for the RSPP

Agency Contact	Phone/E-mail	Permit/Issue
Native American Heritage Commission David Singleton	(916) 653-6251 nahc@pacbell.net	Native American cultural issues
Charles Lackey, Director Kern County Engineering & Survey Services Department Public Services Building 2700 "M" Street, Suite 570 Bakersfield, CA 93301-2370	(661) 862-5100 ess@co.kern.ca.us	Determines compliance with County grading, drainage, and building regulations
Bureau of Land Management Archaeologist Don Storm	(760) 384-5422 Donald_Storm@ca.blm.gov	BLM Fieldwork Authorization Government to government Native American consultation

Permits Required

The RSPP is located on BLM land. Prior to all archaeological field investigations on BLM land, a Fieldwork Authorization Request must be filed and approved by the BLM. EDAW filed a Fieldwork Authorization Request under statewide BLM permit CA-06-21. The request indicated areas to be surveyed, supervisory personnel, and survey dates. Maps of the survey areas accompanied the request. A Fieldwork Authorization was obtained on April 3, 2009 for cultural resources studies of the RSPP.

CHAPTER 4
METHODS

SURVEY METHODOLOGY

EDAW conducted a Class III archaeological survey of the Project disturbance area and, per CEC requirements, a surrounding 200-foot buffer. The survey corridor for linear components included the ROW alignment and 50 feet on both sides of the alignment. A historical architecture field survey of the built environment with a buffer of 0.5-miles was also completed by EDAW. The methods and results of that survey are included in Attachment 8 of this report.

The Class III survey was conducted by qualified four- to nine- person survey teams, each led by a qualified crew chief. A maximum survey interval of 20 meters (m) was employed. Once the survey was completed, sites identified during the survey phase were recorded by a recording team.

When archaeological sites were encountered, the survey crew determined the location of the site using handheld global positioning system (GPS) units. Sites were marked with flagging tape to aid recording teams in relocating sites. An arbitrary distance of 50 m between artifacts and features was used to divide cultural material into individual sites.

Site recordation included photographic documentation (site overviews and detail shots including diagnostic artifacts), site sketch maps as appropriate (recorded with submeter GPS units), artifact and feature descriptions, and environmental context. A noncollective strategy was employed and all flagging tape was removed once a site was recorded.

The pedestrian archaeological survey of the entire survey area was conducted by EDAW between May 4 and May 13, 2009 and between May 18 and May 23, 2009. The survey was conducted in order to identify possible cultural resources that may be affected by the Project. The survey utilized both 7.5-minute U.S. Geological Survey topographic maps and larger scale aerial photographs as well as hand-held submeter GPS units loaded with shape files of the APE and previously recorded sites.

Documentation

Sites identified during the survey were documented on appropriate Department of Parks and Recreation (DPR) 523 forms. These included Primary forms (Form 523A) and USGS Location Map (Form 523J) at a minimum. More complex resources potentially required an Archaeological Site Record (Form 523C), Linear Feature Form (Form 523E), and/or a Sketch Map (Form 523K). Sketch maps included a site datum and features, artifacts concentrations, and other cultural elements. Isolated finds were noted and their locations mapped. All isolates were recorded on a single Primary form and USGS Location Map. Resource locations were determined using a GPS. All completed DPR site forms will be sent to the EIC for the assignment of permanent numbers in the state inventory system. DPR forms are included in this report in Attachment 7.

SITE TYPES

The Class III survey was designed to identify and evaluate archaeological and historical sites to the extent possible from observed surface conditions. Prior to field investigations, it was important to consider first the types of cultural resources that were likely to be encountered and second the relevance of such resources for the investigation of regional research issues. Sites types expected in the Mojave Desert and the RSPP are listed below.

Prehistoric

Trails

Trails are generally tamped into stable surfaces, sometimes with larger gravel and pebbles pushed to the sides to form slight berms along the edges of the trail. In the desert, trails are typically found on shoulders and along tops of ridge systems, relatively stable alluvial fans, and other upland areas, often disappearing into a wash. Prehistoric trails can follow washes for considerable distances.

Lithic Scatters and Flaking Stations

This resource category can range from single flaking stations to large scatters that often contain numerous flaking stations with a light background scatter of debitage. The flaking stations often include cores, but rarely tools. The tools that are found are usually blanks from early in the manufacturing process, or expedient tools. The debitage in the lithic scatters is typically a result of core reduction activities. Debitage size is usually associated with the size of the parent material and is variable. A lithic study in nearby McCoy Wash attempted to looks at reduction techniques and core size to provide a means of relative dating (Spencer et al. 2001). Although lithic scatters are generally interpreted by archaeologists as places where toolstone acquisition and tool manufacture occurred, Native American representatives have pointed out that certain ritual activities also result in the production of scatters of flaked stone materials (e.g., Cachora 1994).

Ceramic Scatters and Pot Drops

"Ceramic scatter" refers to a dispersed surface distribution of ceramics, typically from multiple vessels. A "pot drop" usually refers to a small, distinct concentration of sherds from a single vessel. As early as the 1930s, Malcolm Rogers recognized that trail shrines and other ceremonially significant sites in the Colorado Desert may contain concentrations of prehistoric ceramics.

Rock Rings

Prehistoric rock rings are commonly found throughout southeastern California, southwestern Arizona and Utah, southern Nevada, and the Pinacate region of Mexico. Rock rings are found as isolates or in clusters and are situated in areas of desert pavement or other stable surfaces. Rings larger than 1 m in diameter are generally regarded as habitation places, with the rocks possibly used to support brush "walls" (Pigniolo et al. 1997; von Werlhof and von Werlhof 1977). Smaller rock rings may indicate hearths or may have a ceremonial function (Cleland 2005;

Pigniolo et al. 1997). Although generally circular in shape, these features also occur as ovoids or rectangles (Rogers 1966) and are composed of one (usually) or more courses of rocks ranging from cobble-sized to small boulders.

Prehistoric Cairns
Within the Mojave Desert, prehistoric cairns are typically situated on stable surfaces. The cairns, which may be partially collapsed, are generally composed of multiple courses of rocks consisting of pebbles to small boulders. Prehistoric cairns are frequently found associated with trails or other features.

Habitation Sites
Habitation sites typically show evidence of a variety of occupation debris, including multiple artifact classes, subsistence wastes, fire-affected rock, and/or domestic architecture. This can include living areas (see also rock rings above), cooking hearths, subsistence remains (fish or mammal bone), middens, artifact scatters, and often discrete activity areas, such as lithic reduction, milling, or other subsistence-related locales.

Petroglyphs
Petroglyphs are formed by removing by various means the desert varnish or weathered surface from boulders or bedrock outcrops. Considered ceremonial in nature, petroglyphs in the Mojave Desert include anthropomorphic, zoomorphic, abstract, and geometric forms. Although found singly, petroglyphs usually occur clustered on rock faces, forming "panels."

The Coso Rock Art District is located near the Naval Air Weapons Station China Lake.

Ground Figures - Geoglyphs and Rock Alignments
For the purposes of this study, two types of ground figures are recognized: geoglyphs and rock alignments. Both are considered to have ceremonial or ritual significance. Geoglyphs, sometimes referred to as intaglios, are typically composed of figures incised or scraped into the desert pavement (Harner 1953; Johnson 1985; Rogers 1945). In this kind of geoglyph, the rocks and gravel forming the desert pavement are removed, exposing the lighter-colored soil to form the shape. The removed gravel is often pushed to the edge to form a low gravel berm around the geoglyph. Depending on the construction method and the degree of erosion, these berms can range from well-defined to ill-defined or nonexistent (von Werlhof 1987). Geoglyphs may alternatively be tamped into the desert pavement rather than incised. For example, in tamped rings the pavement surface is compressed but not actually removed; these are thought to been used in ritual circle dances (Johnson 1985; Solari and Johnson 1982; von Werlhof 2004). Ground figures can also be formed by an additive process wherein cobbles and/or small boulders are placed on the ground surface in various types of alignments (Johnson 1985; von Werlhof 1987). Such types are referred to herein as "rock alignments."

Geoglyphs have been identified in the Mojave Desert near Fort Irwin. However, they are not anticipated to be encountered near the current APE.

Cremations/Human Remains
Human remains are highly sensitive culturally and are subject to special protection under Federal and state law. Although relatively rare in the area, sites with cremations or other human remains have been recorded in the Mojave Desert.

Historic

Transportation Routes
Transportation routes consist of historic trails and roads. The condition of the roads may vary from faint two-tracks to graded or paved alignments, where the route not the road material is significant.

Historic Camps
Evidence of temporary historic camps is found throughout the Mojave Desert. The camps may include cleared areas that are possibly historic tent pads; associated features such as campfire/hearths and debris scatters are often present. Types of camps include construction camps for linear facilities (railroads, transmission lines, water conveyance, etc.) and military or mining camps.

Homestead Entry Attempts
Passage of the Homestead Act and Desert Land Act opened public land for claims in the 1860s and 1870s. Archaeological remnants of homestead entry attempts include scattered residential, ranching, and agricultural features that reflect the early settlement of the western Mojave.

Refuse Scatters and Dumps
This feature type ranges from small discrete deposits to large sparse scatters. Often these are found along trails or roads, making associations difficult to establish.

Historic Cairns
Many of the rock piles within the Mojave Desert are associated with historic mining claims. These can vary in size and composition. Sometimes a can in the cairn will contain information regarding the claim.

Isolates
Isolated finds consist of single, occasionally multiple, prehistoric or historic artifacts. Isolates have been found on a variety of surfaces, including desert pavement, gravel beds, and washes.

RESEARCH ISSUES

Prehistoric Research Issues

Human occupation in the Mojave Desert extends from the end of the Pleistocene until historic contact, spanning at least some 11,000 years. This substantial time depth provides the potential for research encompassing the entire prehistory and history of man in the New World. At the end of the Pleistocene Epoch and the last ice age, the Mojave Desert area had a very different climate

and habitat with numerous large pluvial lakes present, fed by both abundant rain and melt-water from adjacent glaciers to the north. This environment provided an abundance of resources for the first humans in the New World. By the onset of the Holocene Epoch, circa 10,000 B.P., this environment had begun to change, gradually becoming dryer, and with the eventual disappearance of the glaciers, the desiccation of most of the lakes in the area had occurred by end of the Early Holocene, circa 7500 B.P. The individual history of each of these lakes has been the subject of considerable archaeological research interest, as they apparently did not all disappear at the same time. Fluctuations in the climate through this time may have allowed several to be temporarily revived subsequent to the end of the Early Holocene. From the Early Holocene into the early Middle Holocene, circa 9000 B.P. to 5000 B.P., archaeological sites along the prehistoric shorelines of some of these lakes show evidence of occupation at different intervals with a broad resource procurement strategy that included both small and large game, indicating that a range of habitats were utilized through time (Sutton et al. 2007). During this period, changes in the archeological assemblages indicate a subsistence transition from a mainly lacustrine focus to a more diversified use of other habitats. This is signified by the new occurrence of groundstone, seed milling tools indicating an increased use of vegetal resources during the late Early Holocene and Middle Holocene (Warren and Crabtree 1986; Basgall 2000; Sutton et al. 2007).

During the latter part of the Middle Holocene, from circa 6000 to 4000 B.P., an extremely dry period appears to have occurred in the Mojave Desert area that lasted at least 1,000 years and may have lasted as long 3,000 years in the western Mojave. During this time, human occupation of much of the Mojave Desert may have essentially ceased. Following this period, at the onset of the Late Holocene, circa 4000 to 2000 B.P., a time of increased precipitation and elevated lake levels in the Great Basin area occurred, apparently including areas of the Mojave Desert as well. During the Late Holocene, this increase in viable living conditions in the central and western Mojave allowed for a return of human activity to the area over the next, approximately, 3,000 to 4,000 years. During this period, the exploitation of a variety of new habitats with a variety of new subsistence strategies occurred, accentuated by the use of several significant new technologies (Sutton et al. 2007).

Chronology building continues to be a major research emphasis in the Mojave Desert. Consequently, one of the most important aspects of prehistoric research for the Mojave Desert should continue to be to aid in the refinement of the regional chronological framework. The APE lies within the Indian Wells Valley. This valley represents the dry basin of Pleistocene Lake China (Davis and Panlaqui 1978a). Lake China (China Lake) and Little Lake, to the north, are two of the better known, and more archaeologically explored pluvial lakes, in the Mojave Desert area (Harrington 1957; Davis 1978; Schroth 1994; Basgall 2005a, 2005b). Artifacts dating to the Early Holocene are often found in proximity to these ancient lake shorelines (Davis and Panlaqui 1978c) and are considered by some researchers to reflect an early lacustrine adaptation by the early human groups in the area of the western U.S. (Bedwell 1970, Hester 1973). Archaeological sites associated with China Lake and Little Lake have already demonstrated that they contain evidence for the Lake Mojave and Pinto complexes, two of the earliest complexes defined for the Mojave Desert (Warren and Crabtree 1986; Sutton 1996). While the elevation of the APE indicates that it was above the maximum stand of pluvial Lake China (Davis and Panlaqui 1978a), and was, therefore, never inundated, its location in the valley in the vicinity of this

ancient pluvial lake bed, provides the potential for a contribution to on-going archeological research concerning the earliest period of human occupation of the western Mojave Desert. The occurrence of diagnostic artifacts in the APE and vicinity, particularly ones associated with Early Holocene occupation in the area, could provide the opportunity to verify, and potentially expand, the known parameters of early complexes defined for the Mojave Desert such as the Lake Mojave and Pinto complexes.

In addition to chronology, changes in settlement and subsistence patterns and strategies, through time, are also an area of archaeological research in the Mojave Desert. Research to date, for example, has also not fully answered questions regarding early occupation and subsistence adaptations to fluctuating, and eventual disappearance of, lacustrine, environments (Sutton et al. 2007). The differences in the archaeological assemblages of the Lake Mojave and Pinto complexes, during the Early Holocene, suggest a period of transition in subsistence strategies from a pluvial lake subsistence focus to a more diversified one encompassing small game and vegetal resources to a greater degree. Warren (1991) has recently proposed that the two complexes are a single cultural tradition with adaptation to changing conditions resulting in a shift to a more broad-based economy over time. The occurrence of artifacts in the APE dating from the Early Holocene, and if associated with these early complexes, could indicate a potential to contribute information to this area of on-going research.

Changes in settlement and subsistence patterns and strategies in the Mojave Desert during the periods subsequent to the Early Holocene are also an area of archaeological research. The APE is located in an area that has been categorized as not containing a substantial human presence during the late Middle Holocene, from circa 7,500 to 4,000 B.P. This assumed to be at least partially as a result of an extremely dry period, between circa 6,000 and 4,000 B.P., during which human occupation of the Mojave Desert may have essentially ceased. The Deadman Lake Complex, the only one associated with the latter part of the Middle Holocene, is currently known only from the southeastern area of the desert (Sutton et al. 2007). Following this period, at the onset of the Late Holocene, circa 4,000 B.P., a period of greater precipitation began (Sutton et al. (2007). The Gypsum Cave Complex has been defined as being associated with this period (Warren 1984; Sutton et al. 2007). While sites specifically associated with the Gypsum Cave Complex are apparently not common in the Indian Wells Valley near the APE, they have been documented at the Rose Spring Site to the north (Lanning 1963; Warren 1984), near Little Lake, and at the Cantil Site to the south near Koehn Lake in the Fremont Valley (Sutton 1996). The discovery of sites or artifacts associated with the Gypsum Cave Complex in the APE would provide new information concerning settlement and subsistence patterns for this complex within the western Mojave area.

Following the Gypsum Cave Complex, beginning approximately, 2,000 years ago, a period of substantial change occurred. According to Sutton et al. (2007), “cultural systems changed dramatically across the Mojave Desert, most notably in the western part of the region.” The complex commonly associated with this change is the Rose Spring Complex (Sutton et al. 2007). Archaeological evidence from sites associated with this complex, especially in the western Mojave Desert area include well-developed middens indicative of major population increases, and dramatic and distinctive changes in the artifact assemblages from previous complexes, indicating the presence of new technologies and tool inventories. Pre-eminent of these new

technologies was the presence of small projectile points indicative of the use of the bow and arrow as a hunting tool. Recently, Sutton and others (Sutton et al. 2007) have proposed a model for culture change in the western Mojave Desert during the Late Holocene. This model attempts to incorporate a number of variables including "environmental data, linguistic prehistory, changing settlement patterns, and stylistic markers to argue for significant shifts in economic practices, mobility, and the distribution of cultural (i.e., linguistic) groups across the western Mojave between Late Gypsum and Late Prehistoric times" (Sutton et al. 2007). Sites associated with the Rose Spring Complex have been documented in the El Paso Mountains to the south of the APE (Warren 1984; Sutton 1996). If resources associated with the Late Holocene Gypsum Cave and Rose Spring complexes are discovered in the APE, they could potentially contribute important information to further understanding of the pattern of dramatic change in cultural systems and settlement that occurred during the Late Holocene.

Also, located in proximity to the APE, and, consequently, of research interest are several identified sources of lithic materials used to make prehistoric tools (Davis and Panlaqui 1978b). Located, nearby, to the south and southwest, in the El Paso Mountains area, are known sources for chalcedony and jasper from the Red Rock and Last Chance Canyon areas, and for agate and chalcedony from the Sheep Springs and Rainbow Canyon areas (Davis and Panlaqui 1978b; McGuire et al. 1982; Warren 1984). Association of these lithic sources with Early Holocene and Late Holocene complexes has also been made by some of these researchers (Davis and Panlaqui 1978b; McGuire et al. 1982; Warren 1984). Several small drainages and washes, emanating from the El Paso Mountains, extend north through the APE into Indian Wells Valley. The recovery of diagnostic artifacts in the APE made of these materials could provide the opportunity to verify the prehistoric use of these materials and to associate this use with particular time periods and archaeological complexes. Such association could potentially expand the known temporal and cultural parameters of the various complexes, defined for the Mojave Desert areas.

Historic Research Issues

During the post-contact period, the area of southern California in and around the RSPP saw little activity by colonial Spanish, Mexican, or American populations until the latter part of the 19th century. An element of the last remaining western frontier of the time, this portion of the Mojave Desert saw development related to the exploration of resources – of minerals, of water, and of the land. These endeavors inform the themes that may be reflected in the cultural resources within the RSPP.

Mining

Though large-scale mining was not undertaken in this part of the Indian Wells Valley and was focused in the mountainous areas to the south, evidence of mining activities is still evident on the landscape. Remnants of prospect mining for various raw materials and claim posts with historic cans or jars attached to hold the claim may indicate that prospecting has taken place. Likewise, historic cairns may also indicate mining activities. Other signs include prospect pits, tailings, and debris located near a cairn or claim post. Historic references indicate that mining took place in the region well into the 20th century. Identifying mining activities, no matter the scale, informs the past development of the APE and the region as a whole.

Agriculture and Homesteading

The remains of homesteading and agriculture efforts within the RSPP and, specifically, the presence of concentrated refuse deposits with diverse classes of artifacts may inform this issue. Refuse deposits associated with homesteading and agriculture may contain information regarding consumer choices, product availability, gender, ethnicity, household composition, lifeways, and technology and adaptations of settlement within a marginal environment. Given the historical records of occupation in this area, however, claims related to homesteading, including material evidence such as wells, irrigation systems, and fencing may form the best contribution to understanding of historic land use patterns in an area no longer occupied.

Railway and Transportation

Over the course of the historic period, the area of the RSPP continued to serve as a corridor for the movement of goods and people as it had in prehistoric times. With the construction of the Southern Pacific Mojave-Owenyo branch line to support the construction of the Los Angeles aqueduct, the area saw new, if not concentrated, development. Workers along the line built not only the railway, but associated infrastructural components like culverts as well as their own camps as their work progressed. Evidence of such camps may be present in the RSPP, as well as the more mundane material remains of railway construction such as the blasting power cans used to level the terrain for the railway grade.

The development of the railroad in the area of the RSPP saw the intensification of use of existing roadways and the construction of new alignments to serve the Terese Siding built west of the APE. The alignment of such early roadways through the RSPP may still be evident on the landscape, and the material culture associated with travel on these routes may be present on the landscape as well. Historic debris from early travel across the desert is evident in the form of cans or other refuse associated with vehicle maintenance. Oftentimes, debris associated with early automobile use is found adjacent to modern roadways, which may indicate the age and historic use of the route through time.

Evidence from mining, homesteading, and railroad construction efforts – and even automotive transportation through the RSPP as part of the 20th century Highway 395 transportation corridor – may come in forms as modest as discarded tin cans. While tin cans tend to have wide dates of manufacture, other aspects such as opening method or specific elements of construction or form can date individual artifacts to a more specific point in time. Tin cans are often overlooked in terms of their potential to yield information, which can lead to inattention to their relevance to archaeological interpretation (Busch 1981). However, proper identification and documentation of cans as one of several lines of evidence has the potential to add information otherwise unavailable from historical sites in desert environments like that of the RSPP.

CHAPTER 5
ARCHAEOLOGICAL RESULTS

Project archaeologists performed pedestrian surveys of the APE between May 4 and May 13, 2009 and between May 18 and May 22, 2009. The ground visibility was good, ranging between 70 and 100 percent. During the course of the survey, project archaeologists identified 446 cultural resources. Seventy-nine are archaeological sites and 367 are isolated finds. Of the 79 archaeological sites that were encountered, 16 are no longer within the APE (IF-KER-435, R-S-150, R-S-151, R-S-164, R-S-18/19, R-S-20, R-S-21, R-S-613, R-S-617, R-S-620, R-S-623/624, R-S-761, R-S-769, R-S-772, R-S-780, and R-S-853). In addition, four archaeological sites are in the 200-ft buffer (R-S-5b, R-S-35, R-S-757, and R-S-758). Since these resources will not be impacted by the Project, no assessments were made. Two archaeological sites, IF-KER-435 and CA-KER-6837H, were previously recorded. The portion of CA-KER-6837H within RSPP was not previously documented. The archaeological survey area, along with site and isolate locations are provided on 7.5' U.S. Geological Survey topographical maps in Attachment 6. A summary of the identified resources are provided in Table 9 and site forms are included in Attachment 7. A geoarchaeological study was separately conducted by SWCA and is attached as Attachment 9.

Table 9. Archaeological Sites

Site Number/Temporary Number	Site Type	Date	In APE	In Buffer	Out of Project
CA-KER-6837H	Old Highway 395 alignment and associated historic debris	Historic	Y		
IF-KER-435	Lithic scatter of Cryptocrystalline Silicate flakes	Prehistoric			Y
R-S-001	Tin can scatter	Historic	Y		
R-S-001b	Tin can scatter	Historic	Y		
R-S-001c	Tin can scatter	Historic	Y		
R-S-002	Claim post feature and tin can scatter	Historic	Y		
R-S-003	Tin can scatter	Historic	Y		
R-S-005a	Tin can scatter	Historic	Y		
R-S-005b	Historic debris scatter (cans, car parts, milled wood)	Historic		Y	
R-S-006	Rock-lined historic roadbed	Historic	Y		
R-S-008	Claim post and can scatter	Historic	Y		
R-S-010	Claim post/rock pile feature	Historic	Y		
R-S-011	Claim post/rock pile feature	Historic	Y		
R-S-012	Claim post/rock pile feature	Historic	Y		
R-S-013	Claim post/rock pile feature	Historic	Y		

Site Number/Temporary Number	Site Type	Date	In APE	In Buffer	Out of Project
R-S-015	Tin can scatter	Historic	Y		
R-S-18/19	Tin can scatter	Historic			Y
R-S-019c	Metate milling feature and CCS biface	Prehistoric	Y		
R-S-020	Historic debris scatter (cans, barrel hoops, milled lumber and railroad tie)	Historic			Y
R-S-021	Tin Can scatter with wood	Historic			Y
R-S-023	Claim post feature	Historic	Y		
R-S-032	Tin can scatter	Historic	Y		
R-S-035	Historic debris scatter (cans, milled wood, ceramic and glass fragments)	Historic		Y	
R-S-037	Tin Can and glass scatter	Historic	Y		
R-S-038	Tin can scatter	Historic	Y		
R-S-039b	Tin can scatter	Historic	Y		
R-S-040b	Tin can scatter	Historic	Y		
R-S-042	Tin can scatter	Historic	Y		
R-S-150	Historic Campsite (dugout tent pad and debris)	Historic			Y
R-S-151	Tin can scatter	Historic			Y
R-S-153	Tin can scatter with and wood	Historic	Y		
R-S-154	Lithic scatter of CCS flakes	Prehistoric	Y		
R-S-155	Tin can and glass scatter	Historic	Y		
R-S-157	Tin can scatter	Historic	Y		
R-S-158	Tin can scatter	Historic	Y		
R-S-159	Tin can scatter	Historic	Y		
R-S-161	Tin can scatter	Historic	Y		
R-S-162/163	Tin can scatter	Historic	Y		
R-S-164	Lithic scatter of obsidian, rhyolite, and CCS flakes	Prehistoric			Y
R-S-166	Historic debris scatter (cans, milled wood, amethyst and other glass fragments)	Historic	Y		
R-S-167	Tin can scatter	Historic	Y		
R-S-325	Tin can scatter	Historic	Y		
R-S-407	Piled rock features	Prehistoric	Y		
R-S-409	Metates and obsidian flake	Prehistoric	Y		

Site Number/Temporary Number	Site Type	Date	In APE	In Buffer	Out of Project
R-S-410	Lithic scatter of obsidian, CCS, and metavolcanic flakes	Prehistoric	Y		
R-S-603	Tin can scatter	Historic	Y		
R-S-604	Whole metate and metate fragment	Prehistoric	Y		
R-S-607	Tin can scatter	Historic	Y		
R-S-613	Lithic scatter of CCS, obsidian, chert and jasper flakes	Prehistoric			Y
R-S-614	Cistern and well	Historic	Y		
R-S-616	Tin can scatter	Historic	Y		
R-S-617	Mano cache	Prehistoric			Y
R-S-618	Tin can scatter	Historic	Y		
R-S-620	Tin can scatter	Historic			Y
R-S-623/624	Tin can scatter	Historic			Y
R-S-700	Tin cans and glass fragments	Historic	Y		
R-S-720	Groundstone scatter (mano and metate fragments)	Prehistoric	Y		
R-S-726	Tin can scatter	Historic	Y		
R-S-728/731	Tin can scatter	Historic	Y		
R-S-739	Tin can scatter	Historic	Y		
R-S-742	Tin can scatter	Historic	Y		
R-S-746	Tin can scatter	Historic	Y		
R-S-750	Tin cans and barrel straps scatter	Historic	Y		
R-S-752	Tin can scatter	Historic	Y		
R-S-757	Tin can scatter	Historic		Y	
R-S-758	Lithic scatter of CCS flakes	Prehistoric		Y	
R-S-761	Tin can scatter	Historic			Y
R-S-769	Lithic and groundstone scatter (CCS and rhyolite flakes, mano and metate fragments)	Prehistoric			Y
R-S-772	Tin can scatter	Historic			Y
R-S-773	Tin can scatter	Historic	Y		
R-S-780	Depressed roadbed alignment with side berms	Historic			Y
R-S-781	Tin can scatter	Historic	Y		
R-S-850	Lithic scatter of CCS flakes and CCS biface	Prehistoric	Y		

Site Number/Temporary Number	Site Type	Date	In APE	In Buffer	Out of Project
R-S-853	Tin can scatter	Historic			Y
R-S-856	Tin can scatter	Historic	Y		
R-S-866	Tin can scatter	Historic	Y		
R-S-868	Historic road alignment	Historic	Y		
R-S-869	Historic road alignment	Historic	Y		
R-S-870	Lithic and groundstone scatter	Prehistoric	Y		

SITE DESCRIPTIONS AND SIGNIFICANCE ASSESSMENTS

CA-KER-6837H

This resource consists of 4.5 km (2.8 miles) of the historic road alignment of Old Highway 395 from its easterly curve away from the Southern Pacific Railroad's Mojave-Owenyo branch line alignment (CA-INY-4607H/IF-KER-3366H) on the west to the previously recorded 400 m (1312 ft) long abandoned portion of the alignment and its former intersection with South China Lake Boulevard Now known as Brown Road and maintained by Kern County, the resource includes 11 associated historic debris scatter loci adjacent to the historic road alignment. The resource cuts through a flat, sandy plain elevated up to approximately five feet above the current roadbed on the north side of the alignment and up to approximately 2 feet along the south side of the alignment. The alignment first appears on the 1915 Searles Lake 15' USGS topographic quadrangle, where it connects with a northwest-southeast trending roadway associated with the Therese Siding of the Mojave-Owenyo branch line on the west and connects with a second east-west trending alignment on the east, continuing toward the rail line's Rademacher Siding. The alignment was designated Highway 395 in 1925 and in use as a two-land asphalt road until 1965 when the highway was officially rerouted to the northeast, bypassing 22 miles of the original highway north through Inyokern and Brown, and the eastern portion of the original alignment was abandoned. Vegetation along the alignment and surrounding the historic debris loci consists of creosote, saltbush, and annual native grasses with smaller amounts of cholla and foxtail near the roadway. Soil in the area of the resource is brown-yellow sand with aggregate pebbles ranging from 1 to 5 cm in length; soil disturbance is present along the road cuts and resulting soil berms on either side of the two-lane paved roadbed.

Locus 1 is a large historic debris scatter consisting of over 150 tin cans in a 149 m (490 ft) east-west by 49 m (160 ft) north-south area located along the north side of Brown Road. The locus is bisected by an unpaved 115kV and 220kV transmission line access road. The majority of the cans are church-key-opened beverage cans, with smaller numbers of bimetal pull-tab cans. Also observed were cone-top beer cans, 1 quart church-key-opened oil cans and rotary-opened sanitary cans. This locus also contains prehistoric isolate R-1-900.

Locus 2 is a historic debris scatter measuring 87 m (285 ft) north-south by 41 m (135 ft) east-west, located north of Brown Road. The locus consists of eight undiagnostic flattened tin cans, a

piece of milled wood measuring 2" by 4" by 11", and undiagnostic fragments of aqua and amethyst glass. An unpaved road is located along the eastern boundary of the locus.

Locus 3 is a historic debris scatter consisting of five undiagnostic church-key-opened cans in a 24 m (78 ft) north-south by 35.5 m (117 ft) east-west area. The locus is situated north of Brown Road. A modern grave or memorial consisting of a handmade wood headstone reading "Paul E. Nelson/"WOG"/'49-'90/SEE YA LATER" over arranged stones, fishing hooks, lures, reels, and a popsicle stick cross is present in the site. Fragments of apparently modern fiestaware-style ceramics and plastic tail light are also found within the locus.

Locus 4 is a historic debris scatter of five tin cans and a metal tub in a 76.5 m (251 ft) north-south by 43 m (142 ft) east-west area located in and around a sandy wash north of Brown Road. Cans consist of one external friction 1 lb. coffee can lid, three church-key-opened beverage cans, one bimetal pull-tab "Olympia" beer can, three knife-opened sanitary cans, and one rotary open sanitary can.

Locus 5 is a historic debris scatter of 29 tin cans and one metal lid in a 61 m (200 ft) north-south by 30.5 m (100 ft) east-west area north of Brown Road. The locus is bisected by a wash running east-west. Components consist of one rotary open sanitary can, ten bimetal pull-tab beverage cans, 18 church-key-opened beverage cans, and one external friction 1 lb. coffee can lid.

Locus 6 is a historic debris scatter consisting of nine tin cans in a 14 m (47 ft) east-west by 7.5 m (25 ft) north-south area located south of Brown Road. Cans represented include two bimetal pull-tab beverage cans, two church opened key beverage cans, three undiagnostic crushed cans, and two knife-opened beverage cans.

Locus 7 is a historic debris scatter of at least 42 tin cans in a 70 m (231 ft) northeast-southwest by 43.5 m (143 ft) northwest-southeast area located north and south of Brown Road. Cans include 20 church-key-opened beverage cans, two sanitary rotary-opened cans, one knife-opened meat tin, and 19 bimetal pull-tab cans.

Locus 8 is a historic debris scatter consisting of 26 tin cans in a 74 m (242 ft) east-west by 21 m (70 ft) north-south area located north of Brown Road. Cans consist of 17 church-key-opened beverage cans, four undiagnostic crushed cans, one cone-top beer can, one key strip tobacco tin, one bimetal pull-tab can, and two knife-opened sanitary cans. Milled wood and a large asphalt pile are present within the locus.

Locus 9 is a historic debris scatter of 11 tin cans in a 46 m (151 ft) north-south by 24 m (80 ft) east-west area north of Brown Road. Cans consist of eight church-key-opened beverage cans, one steel pull-tab can, one rotary-opened juice can, and one rotary-opened sanitary can. Modern refuse is also present.

Locus 10 is a historic debris scatter of six tin cans in a 38 m (125 ft) east-west by 12 m (40 ft) north-south area located north of Brown Road. Artifacts in the locus include five church-key-opened beverage cans and one cone-top beer can. The site has been impacted by off-road vehicular traffic.

Locus 11 is a historic debris scatter consisting of eight tin cans in a 33.5 m (110 ft) east-west by 6 m (20 ft) north-south area located south of Brown Road. Cans consist of one bimetal pull-tab can, two church-key-opened beverage cans, four undiagnostic crushed cans, and one rotary-opened sanitary can. The locus also contains modern refuse including clear glass fragments.

The various loci along the pre-1915 alignment reflect the use of the historic road over the course of the 20th century. Deposits along the roadway appear to reflect the casual dumping of refuse, whether a collection of material or individual items, by users of the thoroughfare. Little information on specific activities, however, can be discerned within the loci.

The historic road alignment of CA-KER-6837H retains integrity of location and setting and, as the original alignment of Highway 395, is recommended eligible for inclusion to the CRHR under Criterion 1 and to the NRHP under Criterion A as contributing to the broad patterns of California's history. The historic alignment was an early thoroughfare through Indian Wells Valley, and part of the early development of the Federal Highway System and its development in California. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

IF-KER-435

This site consists of a prehistoric lithic scatter of six Cryptocrystalline Silicate (CCS) flakes. The site was previously recorded by Thomas T. Taylor in 1989 as a broadly disbursed scatter of flakes. The six flakes were observed in a 20 m, northeast-southwest by 15 m northwest-southeast area, with flakes averaging 3.5 cm by 2.5 cm in size and one flake appearing heat treated. An unnamed wash is located approximately 1.4 km to the east and float material from the wash was suggested as the source of the material. The site is located on a level sandy plain. Vegetation consists of creosote, saltbush, and annual native grasses. Soil at the site is brown-yellow sand with aggregate pebbles ranging from 1 to 5 cm in length.

The CCS flakes consist of red chalcedony and white chert, all of probable local origin. All of the artifacts are located on the alluvial surface and no cultural deposit was observed at the site. It may be possible that a limited cultural deposit could have either been deflated over time, as periods of high wind are common in the area, or, while not likely, a deposit could be obscured by an accumulation of alluvium on the valley floor from the adjacent El Paso Mountains. Based on artifacts at the site, it is not clear if the site is the remnant of a temporary camp, or is a single lithic reduction episode. Potential impacts to the site are associated with continued sheet runoff actions from the adjacent El Paso Mountains that could result in either erosion to the site or possibly the gradual burial of it by alluvium.

Site IF-KER-435 is located outside of the Project and will not be impacted by construction of the RSPP. As such, it was not evaluated for inclusion in the CRHR or the NRHP.

Site R-S-1

R-S-1 is a historic debris scatter consisting of five tin cans sparsely scattered over a 49 m (165 ft) east-west by 7 m (23 ft) north-south area. The site is located on a sandy plain of a stable alluvial fan. Vegetation at the site is dominated by creosote and saltbush, with lesser numbers of cholla and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 2 to 8 cm in length.

Artifacts at R-S-1 include one church-key-opened three piece cylindrical juice can, three church-key-opened beverage cans and one small hole-in-top evaporated milk can with punched holes. The use of church keys to open beverage cans and punched sanitary cans suggest that these artifacts date to the late 1930s or early 1940s (Rock 1987). The site does not appear to have been impacted. The small number of artifacts suggests that the site represents a single event refuse deposit, though alluvial or Aeolian action may have caused redeposition from other areas.

Based on the nature of artifacts at R-S-1, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-1b

R-S-1b is a historic debris scatter consisting of six tin cans sparsely scattered over a 35 m (115 ft) northeast-southwest by 12.5 m (41 ft) northwest-southeast area. The site is located along a low rise on a semi-level sandy plain of a stable alluvial fan. Vegetation at the site is dominated by creosote and saltbush, with lesser numbers of cholla and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 1 to 5 cm in length.

Artifacts at R-S-1b include four church-key-opened beverage cans, one bayonet-opened coffee can, and one bi-metal pull-tab. All cans have crimped seams. The use of church keys, post-dating 1935, to open beverage cans and the presence of the bi-metal pull-tab which originated in the late 1950s, suggests that this site may constitute a single depositional event dating to the first half of the twentieth century or that it is a secondary deposition of cans resulting from alluvial or Aeolian processes (Rock 1987). The site does not appear to have been impacted.

Based on the nature of artifacts at R-S-1b, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or

prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-1c

R-S-1c is a small historic debris scatter consisting of three tin cans sparsely scattered over an approximately 7 m (22 ft) northeast-southwest by 8 m (27 ft) northwest-southeast area. The site is located on a level sandy plain of a stable alluvial fan. Vegetation at the site consists of creosote, saltbush, and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 2 to 8 cm in length.

Artifacts at R-S-1c consist of one knife-opened hole-in-top evaporated milk can and two church-key-opened beverage cans. Based on the opening methods observed, these artifacts post-date 1935. The use of church keys to open beverage cans suggest that these artifacts date to the late 1930s or early 1940s (Rock 1987). The site does not appear to have been impacted. The small number of artifacts suggests that the site may represent a single event refuse deposit, though alluvial or Aeolian action may have caused redeposition from other areas.

Based on the nature of artifacts at R-S-1c, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-2

R-S-2 is a small historic debris scatter consisting of five tin cans and one piece of milled wood sparsely scattered over an approximately 15 m (50 ft) east-west by 14 m (45 ft) north-south area. The site is located on a level sandy plain of a stable alluvial fan. Vegetation at the site is consists of creosote, saltbush, and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 1 to 5 cm in length.

Artifacts at R-S-2 consist of five church-key-opened beverage cans and one piece of milled wood measuring 4" by 4", possibly a fallen claim post though no evidence of a post hole or rock pile base were observed. Based on the methods used to open the beverage cans, these artifacts post-date 1935 (Rock 1987). The site does not appear to have been impacted. The small number of artifacts suggests that the site may represent a single event refuse deposit, though alluvial or Aeolian action may have caused redeposition from other areas.

Based on the nature of artifacts at R-S-2, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not

represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-3

R-S-3 is a small historic debris scatter consisting of seven tin cans sparsely scattered over an approximately 61.5 m (202 ft) northwest-southeast by 15 m (50 ft) northeast-southwest area. The site is located on a level sandy plain of a stable alluvial fan; exfoliated granitic outcrops are present in the center of the site. Vegetation at the site consists of creosote, saltbush, and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 1 to 5 cm in length.

Artifacts at R-S-3 consist of six church-key-opened beverage cans and one 64 oz. three-piece cylindrical can. The use of church keys, posting-dating 1935, to open the beverage cans suggest that these artifacts date to the late 1930s or early 1940s (Rock 1987). The site does not appear to have been impacted. The small number of artifacts suggests that the site may represent a single event refuse deposit, though alluvial or Aeolian action may have caused redeposition from other areas.

Based on the nature of artifacts at R-S-3, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-5a

R-S-5a is a small historic debris scatter consisting of eight tin cans sparsely scattered over an approximately 30 m (98 ft) east-west by 7.5 m (25 ft) north-south area. The site is located on among granitic outcrops rising above a stable alluvial fan north of an unnamed dirt road. Vegetation at the site consists of creosote, saltbush, beavertail cactus, and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 1 to 5 cm in length.

Artifacts at R-S-5a consist of six church-key-opened beverage cans, one hole-in-top evaporated milk can opened with punched holes, and one external friction coffee can. The use of church keys to open beverage cans and punched sanitary cans suggest that these artifacts date to the late 1930s or early 1940s (Rock 1987). The site does not appear to have been impacted. The small number of artifacts suggests that the site may represent a single event refuse deposit, though alluvial or Aeolian action may have caused redeposition from other areas.

Based on the nature of artifacts at R-S-5a, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-5b

R-S-5b is a discrete historic debris scatter comprised of tin cans, glass bottle fragments, auto parts and metal fragments, milled wood, and a single button distributed over an approximately 16 m (53 ft) northwest-southeast by 4.5 m (15 ft) northeast-southwest area, with a concentration at the center measuring approximately 4.5 (15 ft) in diameter at its center. The site is located on a sandy plain of a stable alluvial fan south of Brown Road. Vegetation at the site consists of creosote, saltbush, and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 1 to 5 cm in length.

Artifacts at R-S-5b consist of eight tin cans, unidentified metal car parts and unidentified metal fragments, fragments of milled wood in various lengths, a ceramic shirt button, and a broken brown glass embossed Clorox bottle. Tin cans include two internal friction paint cans, two rotary-opened coffee cans, at least three rotary-opened sanitary cans, and a cone top beer can. While cone top beer cans debuted in 1935, they fell out of use in the 1950s. The embossing on the Clorox bottle fragments appears to post-date 1951 (Sandelin 1988). Combined with the predominance of rotary-opened cans and lack of church-key-opened cans, these dates suggest that these artifacts date to the mid-twentieth century. The site does not appear to have been impacted. The concentration of artifacts, similarity of materials (as in the case of the milled wood fragments), and chronological evidence suggests that the site may represent a single event refuse deposit.

Site R-S-5b is located within the archaeological buffer and will not be impacted by construction of the RSPP. As such, it was not evaluated for inclusion in the CRHR or the NRHP.

Site R-S-6

Site R-S-6 consists of 136 m (446 ft) of an abandoned east-west trending road alignment approximately 3 m (10 ft) in width and lined on either side with small basalt and granite boulders (Plate 1; all plates included as Attachment 2). The resource is located on the slope of a north-south trending rise with exfoliated granitic outcrops north. Vegetation consists of creosote, saltbush, and annual native grasses. Soil at the site is brown-yellow sand with aggregate pebbles ranging from 1 to 5 cm in length. There are no associated artifacts and the alignment does not appear on historic topographic maps, though the 1973 Ridgecrest South 7.5" USGS topographic map shows that the alignment leads toward a cluster of five mining prospects on the ridge.

The section of R-S-6 retains integrity of location and setting but has lost integrity of condition and only a small segment of what was likely a longer alignment remains. Further, it cannot

definitively be associated with any locations or activities in the area. Given these factors, R-S-6 does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-8

R-S-8 is a small historic debris scatter of tin cans and a mining claim post in a 25 m (83 ft) east-west by 26.5 m (87 ft) north-south area. The site is located on a level sandy plain of a stable alluvial fan west of a low ridge of granitic outcrops. Vegetation at the site is consists of creosote, saltbush, cholla, and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 1 to 5 cm in length.

Artifacts at R-S-8 consist of two church-key-opened beverage cans, one knife-opened beverage can, two rotary-opened food cans, one half gallon paint can, and one coffee can. The mining claim feature is comprised of remnants of a 5" x 1" wood post embedded in a 2' by 2' pile of six stacked rocks. Based on the methods used to open the beverage cans, these artifacts post-date 1935 (Rock 1987). The site does not appear to have been impacted. The small number of artifacts suggests that the site may represent a single event refuse deposit, though alluvial or Aeolian action may have caused redeposition from other areas and it is unclear whether they are associated with the undated claim post.

Site R-S-8 is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-10

R-S-10 is a deflated mining claim feature with one associated tin can in an approximately 1 m (3 ft) east-west by 1.5 m (5 ft) north-south area. The site is located on a level sandy plain of a stable alluvial fan west of a low ridge of granitic outcrops. Vegetation at the site is consists of creosote, saltbush, and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 1 to 5 cm in length.

The mining claim feature consists of a 4-foot tall 3.5" x 3.5" wood post resting adjacent to the eastern edge of an approximately 3' by 5' pile of 23 rocks which would previously have been stacked to form the foundation for the claim post (Attachment 2, Plate 2). One upright pocket tobacco tin embossed with "PRINCE ALBERT" is associated with the feature, located directly in the center of the rock pile.

While no wire was found at the site, it is possible that the tin can was used to hold the claim, as evidenced on other claim features of this type. Patented in 1907, pocket tobacco tins began being manufactured in 1908 and were used throughout the first half of the 20th century (Rock 1987). The site has been disturbed though it is unclear whether by natural or human impact.

This site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-11

R-S-11 is comprised of the remains of a mining claim feature measuring approximately 1.5 m (5 ft) east-west by 1 m (3 ft) north-south. The site is located on a level sandy plain of a stable alluvial fan south of a two-track unpaved road. Vegetation at the site is consists of creosote, saltbush, and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 1 to 5 cm in length.

The mining claim feature consists of a 5-foot 4" x 4" wood post fragmented length-wise and its associated base of 16 piled rocks (Attachment 2, Plate 3). The majority of the post lies approximately .6 m (2 ft) to the northwest of the rock pile, with a long thin fragment resting atop the pile in a generally north-south direction. The stacked rock base for the claim appears intact. It is unclear whether the claim post was removed by natural or human impact and no associated tin can for holding the claim was observed.

Based on the condition and nature of R-S-11, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-12

R-S-12 is comprised of the remains of a mining claim feature measuring approximately 1 m (3 ft) east-west by 1.2 m (4 ft) north-south. The site is located on a level sandy plain of a stable alluvial fan on the shoulder of a two track unpaved road. Vegetation at the site is consists of creosote, saltbush, cholla, and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 1 to 5 cm in length.

The mining claim feature consists of a 3-foot 1" x 3" wood post fragmented length-wise and its associated base of 16 piled rocks (Attachment 2, Plate 4). The majority of the post lies less than .2 m (.75 ft) to the west of the rock pile, with a long thin fragment embedded in the pile under a larger rock and pointing to the south. With the exception of the rock pinning the post fragment, the stacked rock base for the claim post appears intact. It is unclear whether the claim post was removed by natural or human impact and no associated tin can for holding the claim was observed.

This site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-13

R-S-13 is comprised of the remains of a mining claim feature measuring approximately 1 m (3 ft) northwest-southeast by 0.6 m (2 ft) northeast-southwest. The site is located on a level sandy plain of a stable alluvial fan west of a low ridge containing granitic outcrops. Vegetation at the site is consists of creosote, saltbush, and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 1 to 5 cm in length.

The feature consists of a deflated pile of 14 rocks and an associated fragmented 2" by 4" wood post approximately 1.5 m (5 ft) to the west of the rock pile (Attachment 2, Plate 5). The stacked rock base for the claim post has been severely disturbed, though it is unclear whether the claim post was removed by natural or human impact and no associated tin can for holding the claim was observed.

Based on the nature of R-S-13, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-15

R-S-15 is a historic debris scatter consisting of three tin cans distributed linearly over a 35 m (115 ft) east-west by 8.5 m (28 ft) north-south area. The site is located north of a major north-south trending seasonal wash on a sandy plain of a stable alluvial fan. Vegetation at the site is dominated by creosote, saltbush, and annual native grasses. Sediments at the site include

brown-yellow sand with angular to subangular aggregate pebbles ranging from 1 to 5 cm in length.

Artifacts at R-S-15 include one gasoline can and two church-key-opened beverage cans. Based on the use of the church key opener, these artifacts post-date 1935 (Rock 1987). The site does not appear to have been impacted. The small number of artifacts and linear distribution suggests that the site represents secondary deposition as a result of alluvial or Aeolian action.

Based on the nature of artifacts at R-S-15, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-18/19

R-S-18/19 is a small historic debris scatter consisting of nine tin cans and two can lids sparsely scattered over a 38 m (125 ft) northwest-southeast by 24 m (80 ft) northeast-southwest area. The site is located on a sandy plain of a stable alluvial fan. Vegetation at the site is dominated by creosote and saltbush, with lesser numbers of cholla and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 1 to 5 cm in length.

Artifacts at R-S-18/19 include one church-key-opened beverage can, three knife-opened sanitary cans, one knife-opened hole-in-cap food can, one key strip sardine lid, one key strip one pound coffee lid, and four unidentified crushed cans. The use of church keys to open beverage cans and punched sanitary cans suggest that these artifacts date to the late 1930s or early 1940s (Rock 1987). The site does not appear to have been impacted, though the small number of artifacts and relatively wide distribution suggests that the site may represent an accumulation of artifacts due to alluvial or Aeolian action.

Site R-S-18/19 is located outside of the Project and will not be impacted by construction of the RSPP. As such, it was not evaluated for inclusion in the CRHR or the NRHP.

Site R-S-19c

Site R-S-19c is a milling feature with an associated CCS flaked-stone biface fragment. The milling feature consists of small, relatively flat vesicular basalt boulder that is 9 cm tall (above the surface of the ground) and 43 cm wide by 44 cm long with a milling surface area measuring 25 by 29 cm. While roughly the size of a large metate, it appears that this milling tool was too large (i.e., heavy) to be portable and was used in place. The CCS biface fragment measures 2.5 long (from base to broken edge), by 1.3 cm wide, by 0.3 cm thick, and was found 11.5 m northeast of the milling feature. The CCS material is white and translucent. The artifact is the basal portion of the biface and the general configuration is a leaf shape, but with a slightly

stemmed appearance due to what appear to be weakly defined shoulders. No other artifacts or cultural materials were observed. The milling feature is located on a small north-facing rise to the south of a small seasonal drainage running northwest to southeast. Vegetation at the site is sparse, consisting of creosote and saltbush. Soil on the site is coarse brown sand, with basalt cobbles and pebbles of various other lithic materials. Site dimensions are 18 m east-west by 5 m north-south. Based on artifacts at the site, the site appears to be an isolated milling station with a single discarded broken lithic tool. No cultural deposit was observed at the site, though it is possible that a limited cultural deposit could have either been deflated over time, as periods of high wind are common in the area, or have been obscured by the continuing accumulation of alluvium from in the valley from the adjacent El Paso Mountains.

The condition of the site, possibly either deflated or obscured by alluvial deposition, and the types of artifacts at the site indicates that the site may have information important to prehistory, especially in regards to the research about sites containing milling implements and possibly diagnostic flaked stone artifacts (possibly of a locally available material) in proximity to local sources and prehistoric lakeshores (See Prehistoric Research Issues above). Site R-S-19c is, therefore, recommended potentially eligible under CRHR Criterion 4 and is unevaluated under NRHP Criterion D. It is recommended not eligible for inclusion to the CRHR under Criteria 1-3, or for inclusion to the NRHP under Criteria A-C. Under CRHR Criteria 1 and NRHP Criteria A, site R-S-19c does not contribute to the broad patterns of history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not related to the lives of people important to the past and is recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. R-S-19c is recommended not eligible for inclusion to the CRHR under Criterion 3 and NRHP Criterion C because it does not represent a unique style, type, or design. Site R-S-19c may, however, yield information important to history or prehistory and is, therefore, recommended potentially eligible under CRHR Criterion 4 and is unevaluated under NRHP Criterion D.

Site R-S-20

R-S-20 is a historic debris scatter comprised of one tin can, metal barrel hoops, and milled wood in an approximately 21 m (70 ft) northeast-southwest by 12 m (40 ft) northwest-southeast area. The site is located on a slope covered by extruded and patinated basalt boulders. Vegetation at the site consists of sparse creosote and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 1 to 5 cm in length.

Artifacts at R-S-20 consist of one church-key-opened beverage can, seven barrel hoops, and milled lumber including one railroad tie. Based on the use of the church key opener, the beverage can post-dates 1935 (Rock 1987). The railroad tie is not likely a remnant of the railroad's construction in the early decades of the 20th century and may have resulted from the removal of the tracks from the graded alignment. The site does not appear to have been impacted. While the small number of artifacts may suggest that the site represents a single event refuse deposit, alluvial or aeolian action may have caused secondary redeposition in this rocky area.

Site R-S-20 is located outside of the Project and will not be impacted by construction of the RSPP. As such, it was not evaluated for inclusion in the CRHR or the NRHP.

Site R-S-21

R-S-21 is a small historic debris scatter consisting of four tin cans and one piece of milled wood sparsely scattered over an approximately 17 m (57 ft) north-south by 8.5 m (28 ft) east-west area. The site is located on a level sandy plain of a stable alluvial fan and is bordered on the east by a seasonal wash. Vegetation at the site is consists of creosote, saltbush, and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 1 to 5 cm in length.

Artifacts at R-S-21 consist of one "T"-cut knife-opened 3" x 4" sanitary evaporated milk can, three unidentifiable crushed cans, and one approximately 16" fragment of milled wood. Little diagnostic information is available, though the sanitary can indicates the site dates to the twentieth century and likely the early to middle portion. The site does not appear to have been impacted. The small number of artifacts suggests that the site may represent a single event refuse deposit, though alluvial or aeolian action may have caused redeposition from other areas.

Site R-S-21 is located outside of the Project and will not be impacted by construction of the RSPP. As such, it was not evaluated for inclusion in the CRHR or the NRHP.

Site R-S-23

R-S-23 is comprised of the remains of a mining claim feature measuring approximately .6 m (2 ft) east-west by O.6 m (2 ft) north-south. The site is located on a level sandy plain of a stable alluvial fan on the shoulder of a two track unpaved road. Vegetation at the site consists of creosote, saltbush, and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 2 to 8 cm in length.

The mining claim feature consists of a pile of eight stacked rocks with a fallen 5-foot 8 ½-inch 4" x 4" wood post with a knife-opened three-piece cylindrical sanitary food can attached approximately 6" below the post top (Attachment 2, Plate 6). The claim post lies to the northwest atop the stacked rocks. With the exception of the fallen post, the stacked rock base for the claim post appears intact.

Based on the nature of R-S-23, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-32

R-S-32 is a small historic debris scatter consisting of seven tin cans sparsely scattered over an approximately 62.5 m (205 ft) northwest-southeast by 46 m (150 ft) northeast-southwest area. The site is located on a level sandy plain of a stable alluvial fan. Vegetation at the site consists of creosote, saltbush, and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 2 to 8 cm in length.

Artifacts at R-S-32 consist of one external friction coffee tin, one rotary-opened sanitary can, and five church-key-opened beverage cans. Based on the opening methods observed, these artifacts post-date 1935 (Rock 1987). The site does not appear to have been impacted. The small number of artifacts may suggest that the site represent a single event refuse deposit, although the wide distribution of the artifacts suggests that alluvial or aeolian processes may have formed site.

Based on the nature of artifacts at R-S-32, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-35

R-S-35 is a relatively discrete historic debris scatter comprised of approximately 250 tin cans, at least five fragments of milled wood in various sizes, unmarked plain whiteware fragments, mid-20th century soda bottles, metal springs and three tire treads distributed over an approximately 16 m (62 ft) east-west by 4.5 m (13 ft) north-south area (Attachment 2, Plate 7). The site is located on a sandy plain of a stable alluvial fan. Vegetation at the site consists of creosote, saltbush, and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 1 to 5 cm in length.

The majority of the artifacts at R-S-35 are church-key-opened beverage cans. Other tin can types identified include church-key-opened motor oil cans, cone top beer cans, and knife-opened food cans. Identifiable glass includes portions of Mission Beverages bottles which were produced under that name between 1929 and the 1950s, 7 oz. Squirt bottles which debuted in 1938, a Fruit Bowl beverage bottle embossed with "Houston, TX", aqua Coca Cola bottles which likely date to the World War II era when copper for production of the by-then green bottle was unavailable, and 7-up bottles with Owens – Illinois' "Duraglas" marks post-dating 1940 (Toulouse 1971). The Coke bottles variously have Bakersfield, Bishop, Los Angeles, and Barstow embossed on their bases. While the church key method of can opening, cone top beer cans, and some beverage brands and bottles may date as early as the 1930s, other diagnostic artifacts like the 7-up bottles move the chronology of the site closer to the mid-20th century. The site does not appear to have been impacted. The relatively discrete nature of the deposit in the context of historic desert debris scatters, the density of artifacts, and chronological evidence suggests that the site may represent a single event of refuse dumping.

Site R-S-35 is located in the archaeological buffer zone and will not be impacted by construction of the RSPP. As such, it was not evaluated for inclusion in the CRHR or the NRHP.

Site R-S-37

R-S-37 is a large historic debris scatter consisting of approximately 200 tin cans sparsely scattered over an area measuring 61.5 m (1100 ft) east-west by 15 m (390 ft) north-south. The site is located on a level sandy plain of a stable alluvial fan, with an unpaved road running north-south through the western portion of the site and a seasonal wash running northwest-southeast through the eastern portion of the site. Vegetation at the site consists of creosote, saltbush, and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 1 to 5 cm in length.

Artifacts at R-S-37 are distributed in three separate loci, connected by lower densities of tin cans. Each locus consists of a relatively sparse scatter. Locus 1 is the primary deposit, consisting of approximately 150 cans located 30 m (94 ft) west of the unpaved road. Represented cans types include sanitary cans, oblong key strip opened fish tins, upright pocket tobacco tins, metal pails, knife-opened three piece cylindrical sanitary food cans, sanitary cans opened with punched holes, water soluble coffee tins, internal friction cans, meat tins, a lid marked "STIR THOROUGLY ONE PINT", evaporated milk cans, and numerous pieces of wire and metal strap. Locus 2 is situated 150 m (492 ft) east of Locus 1, contains 11 beverage cans, including a bi-metal pull-tab "Olympia" beer can, intermixed with church-key-opened cans. Locus 3, containing over 50 cans with some milled wood, is located 80 m (262 ft) east of Locus 2 and is bisected by the seasonal wash. This locus again contains predominantly church-key-opened beverage cans with occasional bimetal pull-tab cans. Undiagnostic aqua, amber, and clear glass fragments as well as one amethyst glass fragment are also present in each of the loci.

The artifacts at R-S-37 reflect tin can types and opening methods used over the course of the early to middle twentieth century. Upright pocket tobacco tins appear as early as 1908 and church-key-opened cans and oblong key-strip fish tins date to the 1930s and 1940s, though the bi-metal pull-tab dates to post-1962 (Rock 1987). While the site does not show evidence of human impact, the lack of discrete concentrations and potentially wide date range suggests that this site does not reflect multiple discrete episodes of refuse deposition over time and space, but rather the uneven distribution of collections of artifacts across the landscape by alluvial or aeolian processes.

Based on the nature of the artifacts at R-S-37, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-38

R-S-38 is an extremely sparse historic debris scatter consisting of two tin cans and a tin can part as well as multiple clear glass fragments scattered over an approximately 30.5 m (100 ft) north-south by 9 m (30 ft) east-west area. The site is located on a level sandy plain of a stable alluvial fan west of an unpaved road. Vegetation at the site consists of creosote, saltbush, and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 1 to 5 cm in length.

Artifacts at R-S-38 consist of two church-key-opened beverage cans and a ring from a one pound coffee can. The use of the church key indicates these beverage cans post-date 1935 (Rock 1987). A "Diamond O-I" Owens-Illinois maker's mark is present on one glass fragment, indicating manufacture between 1929-1930 and 1954. Based on these dates, the site appears to date between 1935 and 1954. However, the small number of artifacts and their sparse distribution suggests that the site may reflect the unassociated deposition of individual artifacts or the result of alluvial or aeolian redeposition from other areas.

Based on the nature of artifacts at R-S-38, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-39b

R-S-39b is a small historic debris scatter consisting of 15 tin cans sparsely distributed over an approximately 46.5 m (153 ft) northwest-southeast by 21 m (70 ft) northeast-southwest area. The site is located on a level sandy plain of a stable alluvial fan. A small seasonal wash bisects the site. Vegetation at the site consists of creosote, saltbush, and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 2 to 8 cm in length.

Artifacts at R-S-39b consist of nine church-key-opened beverage cans, two bayonet-opened sanitary cans, two key strip tapered rectangular meat cans, one external friction coffee can, and one gallon rectangular fuel can. The use of church keys, posting-dating 1935, to open the beverage cans suggest that these artifacts date to the late 1930s or early 1940s (Rock 1987). The site does not appear to have been impacted. The small number of artifacts suggests that the site may represent a single event refuse deposit, though alluvial or aeolian action may have caused redeposition onsite or from other areas, particularly as the site is crossed by a wash.

Based on the nature of artifacts at R-S-39b, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for

inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-40b

R-S-40b is a small historic debris scatter consisting of three tin cans sparsely scattered over an approximately 15 m (50 ft) east-west by 5.5 m (18 ft) north-south area. The site is located on a low slope on stable alluvial fan. A small seasonal wash crosses the site. Vegetation at the site consists of creosote, saltbush, and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 2 to 8 cm in length.

Artifacts at R-S-40b consist of one upright pocket tobacco tin, one hole-in-top can with matchstick post filler, and one church-key-opened beverage can. The use of church keys, posting-dating 1935, to open the beverage cans suggest that these artifacts date to the late 1930s or early 1940s (Rock 1987). The site does not appear to have been impacted. However, the small number of artifacts suggests that the site may represent redeposited materials as a result of alluvial or aeolian action.

Based on the nature of artifacts at R-S-40b, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-42

R-S-42 is a small historic debris scatter consisting of four tin cans scattered over an approximately 11m (36 ft) east-west by 10 m (32 ft) north-south area. The site is located on a low slope on stable alluvial fan east of a seasonal wash. Vegetation at the site consists of creosote, saltbush, and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 1 to 5 cm in length.

Artifacts at R-S-42 consist of one church-key-opened beverage can, one rotary open sanitary can, an unidentified rectangular metal box, and an oil can lid. The use of a church key, posting-dating 1935, to open the beverage can suggests that these artifacts, if associated, date to the late 1930s or early 1940s (Rock 1987). The site does not appear to have been impacted. However, the small number of artifacts suggests that the site may represent redeposited materials as a result of alluvial or aeolian action.

Based on the nature of artifacts at R-S-42, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history

and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-150

Site R-S-150 is a historic campsite which may be associated with construction of the Southern Pacific Railroad's Mojave-Owenyo branch line alignment (CA-INY4607H/IF-KER-3366H). The campsite measures approximately 10.5 m (35 ft) north-south and 7.5 m (25 ft) east-west, consists of a rectangular area cleared of basalt cobbles at the bottom of an east-facing volcanic basalt field in an area of approximately 3 percent slope (Attachment 2, Plate 8). The site also has a historic debris scatter consisting of one key strip sardine can, one meat tin, pieces of wire and wood, at least four amethyst glass fragments, and fragments of an aqua glass insulator that are embedded in the soil. The presence of sun-colored amethyst glass suggests that the site dates to the early decades of the 20th century, possibly contemporaneous with the construction of the rail line on the grade to the east. The site is located adjacent to a seasonal wash that runs north-south and is lined with large creosote and saltbush specimens. Vegetation surrounding the site is sparse due to the concentration of basalt cobbles measuring 15 to 50 cm covering the ground surface. Soil at the site is yellow-brown silty loam with basalt pebbles between 2 and 10cm in length.

Site R-S-150 is located outside of the Project and will not be impacted by construction of the RSPP. As such, it was not evaluated for inclusion in the CRHR or the NRHP.

Site R-S-151

R-S-151 is a historic debris scatter comprised of ceramics, glass fragments, and four tin cans in an area measuring approximately 28 m (93 ft) north-south by 23 m (76 ft) east-west area. The site is located on a sandy plain of a stable alluvial fan. Vegetation at the site consists of creosote, saltbush, and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 1 to 5 cm in length.

The non-metal artifacts at R-S-151 consist of 35 unidentifiable white ceramic figurine fragments, undiagnostic whiteware fragments with brown glaze decoration, a whiteware fragment finished with a mustard slip, numerous aqua glass fragments. Tin cans represented include three hole-in-cap cans, one church-key-opened beverage can, and one external friction lid. While most of the material at R-S-151 is undiagnostic, the use of church keys to open the beverage cans suggest that these artifacts date to the late 1930s or early 1940s (Rock 1987). The site does not appear to have been impacted. The presence of multiple fragments of the same vessels suggests that the site has not undergone significant disturbance, though it appears limited to the ground surface and is unlikely to have a subsurface deposit.

Site R-S-151 is located outside of the Project and will not be impacted by construction of the RSPP. As such, it was not evaluated for inclusion in the CRHR or the NRHP.

Site R-S-153

R-S-153 is a small historic debris scatter consisting of two tin cans, milled lumber with wire nails, and an end portion of a wood-framed metal box spring scattered over an approximately 33 m (109 ft) north-south by 7.5 m (25 ft) east-west area. The site is located on a level sandy plain of a stable alluvial fan. Vegetation at the site consists of creosote, saltbush, and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 1 to 5 cm in length.

Artifacts at R-S-153 consist of a knife-opened hole-in-cap milk can and a rotary-opened sanitary can. The milled wood fragments measure 7'2" by 1", 1 1/2" by 1", and 2' by 2 1/2" and the box spring end appears to be approximately ¼ of a twin size bed. While the hole-in-cap milk can suggests a date in the early decades of the 20th century and wire nails also appeared early in the century, these nails continue to be used today and any association between the artifacts or their deposition at R-S-153 is unclear.

Based on the nature of artifacts at R-S-153, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-154

Site R-S-154 is a low density lithic scatter. Approximately 22 CCS flakes are located in a 26 m east-west by 18 m north-south area. The site is situated in a flat desert plain with a surface crust indicating sheet runoff during rain events. Vegetation at the site is very sparse and consists of creosote and annual native grasses. Soils on site are a mix of brown-yellow find sand and loam, with aggregate pebbles measuring 2 to 5 cm and occasional pebbles measuring over 5 cm. Aside from limited erosion, the site is largely undisturbed.

Most of the CCS flakes appear to be chalcedony, probably of local origin. All of the artifacts appear to be located on the alluvial surface and no cultural deposit was observed at the site. It may be possible that a limited cultural deposit could have either been deflated over time, as periods of high wind are common in the area, or, while not likely, one could be obscured by an accumulation of alluvium on the valley floor from the adjacent El Paso Mountains. Based on artifacts at the site, it is not clear if the site is the remnants of a temporary camp or a single lithic reduction episode. Potential impacts to the site are associated with continued sheet runoff actions from the adjacent El Paso Mountains that could result in either erosion to the site or the possibly the gradual burial of it by alluvium.

The condition of the site, possibly either deflated or obscured by alluvial deposition, and the types and materials of artifacts at the site indicates that the site may have information important

to prehistory, especially in regards to the research about sites containing possibly local CCS flaked stone materials, and located in proximity to local sources and prehistoric lakeshores (See Prehistoric Research Issues above). Site R-S-154 is, therefore, recommended potentially eligible under CRHR Criterion 4 and is unevaluated under NRHP Criterion D. It is recommended not eligible for inclusion to the CRHR under Criteria 1-3, or to the NRHP under Criteria A-C. Under CRHR Criteria 1 and NRHP Criteria A, site R-S-154 does not contribute to the broad patterns of history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not related to the lives of people important to the past and is recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. R-S-154 is recommended not eligible for inclusion to the CRHR under Criterion 3 and NRHP Criterion C because it does not represent a unique style, type, or design. Site R-S-154 may, however, yield information important to history or prehistory and is, therefore, recommended potentially eligible under CRHR Criterion 4 and is unevaluated under NRHP Criterion D.

This site does appear to qualify to be addressed under California Archaeological Resources Identification Data Acquisition Program (CARIDAP): Sparse Lithic Scatters (OHP 1988). Successful treatment under CARIDAP would result in a no historic property finding.

Site R-S-155

R-S-155 is a historic debris scatter consisting of four tin cans and glass fragments sparsely scattered over a 35 m (85 ft) east-west by 12.5 m (63 ft) north-south area. The site is located along a low rise on a level sandy plain of a stable alluvial fan directly north of an unpaved east-west trending unpaved roadway alignment. Vegetation at the site is sparse and includes creosote, saltbush, foxtail, and annual native grasses. Sediments at the site are primarily angular to subangular aggregate pebbles ranging from 1 to 5 cm in length underlain by silt and brown-yellow sand.

Artifacts at R-S-155 consist of two upright pocket tobacco tins, including one embossed with "PRINCE ALBERT", a rotary-opened side crimped three piece cylindrical sanitary can, and a side crimped three piece cylindrical sanitary food can. Numerous undiagnostic green and amber glass bottle fragments are also present. The standardization of machine made glass colors early in the 20th century, and which is reflected in modern glass bottles as well, hinders the utility of the glass fragments to provide chronological information. Pocket tobacco tins began being manufactured in 1908 and were used until mid-century, suggesting that this site may constitute a single depositional event dating to the first half of the twentieth century or that it is a secondary deposition of cans resulting from alluvial or aeolian processes (Rock 1987). The site does not appear to have been otherwise impacted.

Based on the nature of artifacts at R-S-155, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or

prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-157

R-S-157 is a small historic debris scatter consisting of eight tin cans scattered over an approximately 9.5 m (31 ft) north-south by 5.5 m (18 ft) east-west area. The site is located on a low rise directly west of a major braided wash and east of an unpaved road on a stable alluvial fan. Vegetation at the site consists of creosote, saltbush, and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 2 to 8 cm in length.

Artifacts at R-S-157 consist of two church-key-opened beverage cans, five bayonet-opened sanitary cans, and one hole-in-top with match-stick filler can. Based on the opening methods observed, these artifacts post-date 1935 (Rock 1987). The site does not appear to have been impacted. The small number of artifacts may suggest that the site represent a single event refuse deposit, although the wide distribution of the artifacts suggests that alluvial or aeolian processes may have formed site.

Based on the nature of artifacts at R-S-157, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-158

R-S-158 is an extremely sparse historic debris scatter consisting of 11 tin cans scattered over an approximately 9.5 m (148 ft) east-west by 5.5 m (63 ft) north-south area. The site is located on a level sandy plain of a stable alluvial fan. Vegetation at the site consists of creosote, saltbush, and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 2 to 8 cm in length.

Artifacts at R-S-158 consist of one knife-opened hole-in-top with matchstick post filler condensed milk can, one church-key-opened hole-in-top with matchstick post filler milk can, one internal friction gallon paint can, five rotary-opened sanitary cans, one knife-opened gallon hole-in-cap can, and two church-key-opened beverage cans. Based on the church key and rotary opening methods observed, these artifacts post-date 1935 and possibly into the 1940s and 1950s (Rock 1987). The site has been disturbed by off-road vehicular traffic.

Based on the nature of artifacts at R-S-158, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for

inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-159

R-S-159 is a small historic debris scatter consisting of four tin cans scattered over an approximately 17 m (55 ft) east-west by 7 m (22 ft) north-south area. The site is located on a level sandy plain of a stable alluvial fan. Vegetation at the site consists of creosote, saltbush, and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 1 to 5 cm in length.

Artifacts at R-S-159 include one screw top rectangular charcoal lighter fluid can, three rotary-opened sanitary cans, and a ham tin lid. Based on the rotary opening methods observed and the charcoal lighter fluid can, these artifacts likely do not pre-date the mid-20th century. The small number of artifacts may suggest that the site represent a single event refuse deposit, although the wide distribution of the artifacts suggests that alluvial or aeolian processes may have formed the association between the artifacts.

Based on the nature of artifacts at R-S-159, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-161

R-S-161 is a small, relatively dense historic debris scatter consisting of approximately 50 tin cans in an approximately 14 m (46 ft) north-south by 26.5 m (87 ft) east-west area. The site is located on a level sandy plain of a stable alluvial fan west of a large north-south trending seasonal wash. Vegetation at the site consists of creosote and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 2 to 5 cm in length. The site has been disturbed by the deposition of modern, non-historic refuse.

Identifiable artifacts observed at R-S-161 consist of church-key-opened sanitary food cans and beverage cans. The use of church keys, posting-dating 1935, to open the beverage cans suggest that these artifacts date to the late 1930s or early 1940s (Rock 1987). The large number of artifacts deposited in a relatively small area, and the limited variety of artifact types suggests that the site represent a single event refuse deposit representing the detritus of multiple meals or a large provisioning effort. The deposit rests on the ground surface and there is no observable indication of a subsurface deposit.

While R-S-161 may represent one of the few examples of a single depositional event in the RSPP, it has been impacted by the addition of non-historical material over time. As such, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-162/163

R-S-162/163 is a historic debris scatter consisting of 16 tin cans and one piece of milled wood with wire attached scattered in an area measuring 35 m (450 ft) north-south by 12.5 m (90 ft) east-west. The site is located on a level sandy plain of a stable alluvial fan. Vegetation at the site is dominated by creosote and saltbush, with lesser numbers of cholla and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 1 to 5 cm in length.

Artifacts at R-S-162/163 include eight large knife-opened hole-in-cap cans, two unidentifiable crushed cans, one key strip gallon can, three knife-opened 3"x4" hole-in–cap evaporated milk can, one 25-pound blasting powder can, and one machine-soldered side seam internal friction gallon can (Attachment 2, Plate 9). The milled wood is a 4x4" measuring 6'7" in length with wire wrapped around one end. The predominance of knife-opened cans, presence of the hole-in-cap and machine-soldered cans, and lack of church-key-opened cans which post-date 1935 suggests that this site may constitute a single depositional event dating to the early 20th century. The presence of the blasting powder can, while potentially used in mining efforts, may be related to the construction of the Southern Pacific Mojave-Owenyo railroad branch west of the site beginning in 1908. While the site may have experienced minor impacts from alluvial or aeolian processes, the limited chronology of the artifacts suggests the site is relatively intact. It does not appear that the site has a subsurface component.

While the site appears to reflect an earlier date than most historic assemblages in this area of the Mojave Desert, this limited scatter of cans and wood is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield further information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-164

Site R-S-164 is a large lithic scatter comprised of approximately 31 flakes, consisting of 26 CCS and 5 obsidian flakes within a 101 m northwest-southeast by 95 m northeast-southwest area. The site is located on a flat stream terrace to the west of a small shallow seasonal wash running north-south. Vegetation covers the site and consists largely of creosote with interspersed low annual grasses and saltbush, with greater concentrations of the same species lining both sides of the adjacent wash. Soils on the site consist of yellow-brown silty loam with aggregate pebbles of rhyolite, sandstone and basalt. The site is largely undisturbed; 220kV line electrical tower 40-4 is located approximately 65m to the west of the site.

The CCS flakes consist of both opaque and translucent varieties with colorations of red, yellow, white. The translucent materials appear to be chalcedony and agate, and the opaque materials, jasper, all of probable local origin. The presence of obsidian indicates sources more distant from the site, possibly from the Coso Mountains to the north. All of the artifacts appear to be located on the alluvial surface and no cultural deposit was observed at the site. It may be possible that a limited cultural deposit could have either been deflated over time, as periods of high wind are common in the area, or, while not likely, a deposit could be obscured by an accumulation of alluvium on the valley floor from the adjacent El Paso Mountains. Based on artifacts at the site, it is not clear if the site is the remnant of a temporary camp, and/or of single or multiple lithic reduction episodes. The presence of obsidian indicates that other than local materials were brought to the site, possibly indicating a temporary camp. Potential impacts to the site are associated with continued sheet runoff actions from the adjacent El Paso Mountains that could result in either erosion to the site or possibly the gradual burial of it by alluvium.

Site R-S-164 is located outside of the Project and will not be impacted by construction of the RSPP. As such, it was not evaluated for inclusion in the CRHR or the NRHP.

Site R-S-166

R-S-166 is a small historic debris scatter comprised of three tin cans, milled wood fragments, and glass bottle fragments distributed over an approximately 17 m (55 ft) east-west by 14.5 m (48 ft) north-south area. The site is located on a sandy plain of a stable alluvial fan. Vegetation at the site consists of creosote, saltbush, and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 1 to 5 cm in length.

R-S-166 is comprised of three key strip opened sardine tins, milled wood, and numerous amethyst, amber, green, and aqua glass fragments (Attachment 2, Plate 10). Among the glass fragments are an olive crown finish and an amber crown finish. The low density of artifacts, diversity of artifacts (in particular glass bottles) represented, and the highly fragmented condition of the glass suggests that the site may have accumulated slowly over time through repeated use of the area. However, the condition of the glass may also reflect disturbance from vehicular traffic or recreational shooting known to occur in the area.

Based on the nature of artifacts at R-S-166, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not

associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-167

R-S-167 is a historic debris scatter consisting of three tin cans scattered over an approximately 16.5 m (54 ft) north-south by 9 m (30 ft) east-west area. The site is located on a level sandy plain of a stable alluvial fan. Vegetation at the site is consists of creosote, saltbush, and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 1 to 5 cm in length.

Artifacts at R-S-167 include a five-gallon rectangular fuel can, a knife-opened hole-in-cap milk can, and a one-gallon rectangular fuel can. Little diagnostic information is available, though the method of knife opening on the hole-in-cap can indicates the site dates to the twentieth century and possibly the early to middle portion. The site does not appear to have been impacted. The small number of artifacts suggests that the site may represent a single event refuse deposit, though alluvial or aeolian action may have caused redeposition from other areas.

Based on the nature of artifacts at R-S-167, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-325

R-S-325 is a historic debris scatter consisting of seven tin cans scattered over an approximately 24.5 m (81 ft) northwest-southeast by 16 m (52 ft) northeast-southwest area. The site is located on a low, very slight slope southeast of a small seasonal wash trending north-south west of an unpaved north-south trending road. Vegetation at the site is sparse and consists of saltbush, creosote, and annual native grasses though the flora lining the wash is denser. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 1 to 5 cm in length.

Artifacts at R-S-325 consist of two hole-in-top milk cans, three key strip sardine cans, one possible paint can, and one undiagnostic knife-opened can. Little diagnostic information is available, though the method of knife opening on the hole-in-cap can indicates the site dates to the twentieth century and possibly the early to middle portion. The small number of artifacts suggests that the site may represent a single event refuse deposit, though alluvial or aeolian

action may have caused redeposition from other areas. Site R-S-325 has been impacted through recent use as a refuse dump with a significant amount of modern glass and household refuse.

Based on the nature of artifacts at R-S-325, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

***Site* R-S-407**

Site R-S-407 is comprised of two, roughly, round, rock pile features located within a meter of each other. Feature 1 consists of approximately 14, mostly basalt, cobbles stacked to a maximum height of 24 cm. Oval in shape, Feature 1 measures 110 cm, north to south, and 90 cm east to west. Feature 2 consists of approximately 16 mostly basalt cobbles stacked to a maximum height of 22 cm. Also oval in shape, Feature 2 measures 79 cm north to south and 117 cm east to west. The bottom course of cobbles in each feature is embedded in the soil. Vegetation around the features is sparse, consisting of saltbush, creosote and annual native grasses. Soils on site are coarse brown-yellow sand with aggregate gravel. The site, located approximately 50 m north of an unpaved road, appears undisturbed. Site dimensions are 5 m north-south by 5 m east-west.

The interpretation of a prehistoric origin for these features is based, primarily, on the degree to which the stones are imbedded into the soil, indicating their existence for a considerable period of time. No prehistoric or historic artifacts were found associated with the features, and their possible prehistoric function is unknown.

The intact condition of the features at the site, and the degree to which the stones are imbedded into the soil, possibly indicating their existence for a considerable period of time, may imply an association with the other prehistoric sites and activities situated in this same area of the project. Consequently, the site may have information important to prehistory, especially in regards to the research about adjacent sites located in proximity to prehistoric lakeshores (See Prehistoric Research Issues above). Site R-S-407 is, therefore, recommended potentially eligible under CRHR Criterion 4 and unevaluated under NRHP Criterion D. It is recommended not eligible for inclusion to the CRHR under Criteria 1-3, or for inclusion to the NRHP under Criteria A-C. Under CRHR Criteria 1 and NRHP Criteria A, site R-S-407 does not contribute to the broad patterns of history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not related to the lives of people important to the past and is recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. R-S-407 is recommended not eligible for inclusion to the CRHR under Criterion 3 and NRHP Criterion C because it does not represent a unique style, type, or design. Site R-S-407 may, however, yield information important to history or prehistory and is, therefore,

recommended potentially eligible under CRHR Criterion 4 and is unevaluated under NRHP Criterion D.

Site R-S-409

Site R-S-409 consists of two basalt metates, one basalt metate fragment, and one, possibly utilized, obsidian flake, in a 35m northeast-southwest by 5m northwest-southeast area. Metate 1 is 18cm high with a surface area of 33 by 36cm and a milling surface of 22 by 28cm. Metate 2 is 20cm high, with a surface area of 32 by 26cm and a milling surface of 30 by 32cm. The obsidian flake was located approximately 31 m southwest of the two metates and fragment. The site is situated on a flat desert plain. There are no discernable water sources in the vicinity. Vegetation on site is sparse and consists of saltbush and creosote interspersed with annual native grasses. Soils on site are brown-yellow sand with aggregate pebbles ranging between 2 and 8 cm in length. The site is located approximately 190 m west from an unpaved road. Based on artifacts at the site, the site appears to be a milling station with a single discarded, possibly utilized, obsidian flake. While one metate appears to be portable, the other appears to be too large (i.e., heavy) to be easily portable and, therefore, was possibly used in place. No cultural deposit was observed at the site, though it is possible that a limited cultural deposit could have either been deflated over time, as periods of high wind are common in the area, or have been obscured by the continuing accumulation of alluvium in the valley from the adjacent El Paso Mountains.

The condition of the site, possibly either deflated or obscured by alluvial deposition, and the types of artifacts at the site indicates that the site may have information important to prehistory, especially in regards to the research about sites containing milling implements and possibly diagnostic flaked stone artifacts (of an imported, and datable and sourceable material) in proximity to prehistoric lakeshores (See Prehistoric Research Issues above). Site R-S-409 is, therefore, recommended potentially eligible under CRHR Criterion 4 and unevaluated under NRHP Criterion D. It is recommended not eligible for inclusion to the CRHR under Criteria 1-3, or for inclusion to the NRHP under Criteria A-C. Under CRHR Criteria 1 and NRHP Criteria A, site R-S-409 does not contribute to the broad patterns of history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not related to the lives of people important to the past and is recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. R-S-409 is recommended not eligible for inclusion to the CRHR under Criterion 3 and NRHP Criterion C because it does not represent a unique style, type, or design. Site R-S-409 may, however, yield information important to history or prehistory and is, therefore, recommended potentially eligible under CRHR Criterion 4 and is unevaluated under NRHP Criterion D.

Site R-S-410

Site R-S-410 is a low density lithic scatter. Approximately seven flakes (one obsidian, two CCS, three fine-grained metavolcanic, and one chert) are located within a 45m north-south by 20m east-west area. The site is located approximately 100 m east of a low, north-south running rise. No discernable surface water features were observed in the vicinity. Vegetation at the site is sparse and consists of creosote, saltbush and annual native grasses. Soils on site are coarse brown-yellow sand with mixed aggregate pebbles ranging from 1 to 5 cm in length, with occasional pebbles measuring greater than 5 cm.

The CCS flakes appear to be chalcedony or chert, probably of local origin. The presence of obsidian indicates sources more distant from the site, possibly from the Coso Mountains to the north. All of the artifacts appear to be located on the alluvial surface and no cultural deposit was observed at the site. It may be possible that a limited cultural deposit could have either been deflated over time, as periods of high wind are common in the area, or, while not likely, one could be obscured by an accumulation of alluvium on the valley floor from the adjacent El Paso Mountains. Based on artifacts at the site, it is not clear if the site is the remnants of a temporary camp or a single lithic reduction episode. Potential impacts to the site are associated with continued sheet runoff actions from the adjacent El Paso Mountains that could result in either erosion to the site or the possibly the gradual burial of it by alluvium.

The condition of the site, possibly either deflated or obscured by alluvial deposition, and the types and raw materials of the artifacts at the site indicates that the site may have information important to prehistory, especially in regards to the research about sites containing possibly local CCS flaked stone materials, and obsidian, and located in proximity to local sources and prehistoric lakeshores (See Prehistoric Research Issues above). Site R-S-410 is, therefore, recommended potentially eligible under CRHR Criterion 4 and unevaluated under NRHP Criterion D. It is recommended not eligible for inclusion to the CRHR under Criteria 1-3, or for inclusion to the NRHP under Criteria A-C. Under CRHR Criteria 1 and NRHP Criteria A, site R-S-410 does not contribute to the broad patterns of history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not related to the lives of people important to the past and is recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. R-S-410 is recommended not eligible for inclusion to the CRHR under Criterion 3 and NRHP Criterion C because it does not represent a unique style, type, or design. Site R-S-410 may, however, yield information important to history or prehistory and is, therefore, recommended potentially eligible under CRHR Criterion 4 and is unevaluated under NRHP Criterion D.

This site does appear to qualify to be addressed under California Archaeological Resources Identification Data Acquisition Program (CARIDAP): Sparse Lithic Scatters (OHP 1988). Successful treatment under CARIDAP would result in a no historic property finding.

Site R-S-603

R-S-603 is comprised of a secondary historic debris scatter situated in a large seasonal wash. Approximately 40 cans are sparsely scattered in a 85 m (280 ft) northwest-southeast by 12 m (40 ft) northeast-southwest area. The site sits within a major braided wash trending north-south and measuring approximately 30 m (98 ft) in width. The wash is flanked on both sides by low rising grass-covered knolls and includes several long, low rises aligned with the water flow in the creek bed. Unpaved north-south trending roads are located east and west of the site. Vegetation along the wash is denser than in surrounding areas and includes creosote, saltbush, cholla, and native grasses.

Artifacts at R-S-603 consist of one upright pocket “Prince Albert” tobacco tin, two one-gallon knife-opened paint cans with holes punched in the can, one evaporated milk can, five metal nursery containers, one wastebasket, one 5-gallon bucket, two church-key-opened food tins, one church-key-opened beer can, two kerosene cans, two key strip sardine tins, an undiagnostic

sanitary can, a key strip gallon can, one bimetal pull-tab, ten rotary open cans, and nine unidentified church-key-opened cans. The range of can types and opening methods representing a range of dates, as well as the linear distribution of the artifacts within the seasonally active wash, indicate that this site represents a secondary deposit of likely unassociated cans accumulated by alluvial action.

Site R-S-603 is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-604

Site R-S-604 is a milling site consisting of one 11-cm high basalt metate measuring 14 by 26 cm, with a milling surface measuring 13 by 19 cm, and two large metate fragments in an area 4 m east-west by 4 m north-south. The whole metate is 11-cm high, by 14 cm wide, by 26 cm long, with a milling surface measuring 13 by 19 cm. This metate and the two fragments are situated on a small east-facing rise. No other artifacts or cultural materials were observed at the site. Vegetation at the site is sparse, with creosote and annual native grasses as the dominant species. Less sparse vegetation flanks the site's eastern edge and continues to the aforementioned wash. This area has saltbush and cholla in addition to creosote. Soils at the site are brown-yellow silty sand and include aggregate pebbles ranging from 1 to 6 cm in length. The site appears to be largely undisturbed.

Based on artifacts at the site, the site appears to be an isolated milling station. No cultural deposit was observed at the site, though it is possible that a limited cultural deposit could have either been deflated over time, as periods of high wind are common in the area, or have been obscured by the continuing accumulation of alluvium from in the valley from the adjacent El Paso Mountains.

The condition of the site, possibly either deflated or obscured by alluvial deposition, and the types of artifacts at the site indicates that the site may have information important to prehistory, especially in regards to the research about sites containing milling implements in proximity to prehistoric lakeshores (See Prehistoric Research Issues above). Site R-S-604 is, therefore, recommended potentially eligible under CRHR Criterion 4 and unevaluated under NRHP Criterion D. It is recommended not eligible for inclusion to the CRHR under Criteria 1-3, or for inclusion to the NRHP under Criteria A-C. Under CRHR Criteria 1 and NRHP Criteria A, site R-S-604 does not contribute to the broad patterns of history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not related to the lives of people important to the past and is recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. R-S-604 is recommended not eligible for inclusion to the CRHR under Criterion 3 and NRHP Criterion C because it does not represent a unique style, type, or design. Site R-S-604 may, however, yield information important to history or prehistory

and is, therefore, recommended potentially eligible under CRHR Criterion 4 and is unevaluated under NRHP Criterion D.

Site R-S-607

R-S-607 is a small, low density historic debris scatter consisting of six tin cans scattered over an approximately 5 m (16 ft) diameter area. The site is located on a level sandy plain of a stable alluvial fan adjacent to an unpaved northwest-southeast trending road located to the west. Vegetation is very sparse, consisting of creosote, saltbush, cholla, and annual native grasses. Soils onsite consist of brown-yellow sand with aggregate pebbles between 2 and 5 cm long, with occasional pebbles larger than 5 cm.

Artifacts at R-S-607 include three evaporated milk cans, two hole-in-cap cans and one unidentifiable can. While the hole-in-cap cans may suggest a date sometime in the early twentieth century, little diagnostic information is available as standard evaporated milk cans continued to be produced for a much longer period of time. While the site does not show any observable impacts, the small number of artifacts suggests that the site either represents a limited single event refuse deposit or is the result of alluvial or aeolian action redepositing objects from other areas.

Based on the nature of site R-S-607, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-613

Site R-S-613 is a large, low-density lithic scatter of 18 flakes, consisting of two obsidian and 16 CCS flakes within a 51 m north-south by 41 m east-west area. The site is situated on a flat desert plain with no discernable water sources in the vicinity. Vegetation at the site is sparse and consists of saltbush, creosote and native annual grasses. Soils at the site area are coarse brown-yellow sand with chert, chalcedony, rhyolite, and basalt pebbles raging from 2 to 10 cm in length. The site appears undisturbed. An unpaved road is located approximately 150 m west of the site. A possible hearth is present at the site's northwest edge, though its date could not be determined.

The CCS flakes consist of materials such as chalcedony and agate, all of probable local origin. The presence of obsidian indicates sources more distant from the site, possibly from the Coso Mountains to the north. All of the artifacts appear to be located on the alluvial surface and no cultural deposit was observed at the site. It may be possible that a limited cultural deposit could have either been deflated over time, as periods of high wind are common in the area, or, while not likely, a deposit could be obscured by an accumulation of alluvium on the valley floor from the adjacent El Paso Mountains. Based on artifacts at the site, it is not clear if the site is the

remnant of a temporary camp, and/or of single or multiple lithic reduction episodes. The presence of obsidian indicates that other than local materials were brought to the site, possibly indicating a temporary camp. Potential impacts to the site are associated with continued sheet runoff actions from the adjacent El Paso Mountains that could result in either erosion to the site or possibly the gradual burial of it by alluvium.

Site R-S-613 is located outside of the Project and will not be impacted by construction of the RSPP. As such, it was not evaluated for inclusion in the CRHR or the NRHP.

Site R-S-614

R-S-614 is a hydrologic feature location in an area measuring 54 m (178 ft) east-west by 23 m (75 ft) north-south. The site is located on a level sandy plain of a stable alluvial fan approximately 23 m (75 ft) west of an unpaved two-track road. Vegetation at the site consists of creosote, saltbush, and annual native grasses. Soils onsite consist of brown-yellow sand with aggregate pebbles between 2 and 8 cm long.

The feature consists of a primarily subsurface circular galvanized tin receptacle measuring approximately 2 m (8 ft) in diameter and 0.5 m (1.5 ft) deep, and a hydraulic engineering feature comprised of two vertical iron water main stand pipe lengths embedded in the ground (Attachment 2, Plate 11). The first measures approximately 10 inches in diameter and extends 14 inches above grade; the second is placed inside the first, measuring approximately 7 inches in diameter with a threaded lip and extending 24 inches above grade. The interior pipe is capped by a 4-inch iron threaded joiner cuff measuring 7.5 inches in diameter. The lower portion of the feature is encased by two milled wood brackets held together by two 17 inch iron bolts with large iron plate washers and 1-inch nuts at each end. A raised earth feature extends 39.5 m (130 ft) west from the hydraulic feature, indicating a possible pipe alignment. The remnants of a 1.5-inch pipe with attached spun wire cord are located approximately 8 feet west of the feature. A basalt rock pile measuring approximately 2 m by 3 m (8 ft by 12 ft) is located northwest of the site and may represent the clearing of basalt from the water feature site during its construction.

Based on the condition and unassociated nature of site R-S-614, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-616

R-S-616 is a historic debris scatter comprised of ten tin cans in an area measuring approximately 32 m (104 ft) east-west by 19 m (61 ft) north-south area. The site is located on a sandy plain of a stable alluvial fan. Vegetation at the site consists of creosote, saltbush, and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 1 to 5 cm in length.

Artifacts at R-S-616 consist of two knife-opened hole-in-top with matchstick post filler milk cans, a quart oil can with punched holes embossed with "SAE 30", three knife-opened sanitary cans, two church-key-opened beverage cans, and a hole-in-top with matchstick post filler milk can with punched holes. The presence of church-key-opened beverage cans indicates that at least a portion of the site assemblages dates to the late 1930s or early 1940s (Rock 1987). While there is no apparent disturbance to the site, the small number of artifacts may suggest either that the site represents a single dispersed refuse deposit event or that alluvial or aeolian action may have caused redeposition of these artifacts from other areas.

Given the nature of the undiagnostic artifacts and their dispersed distribution at R-S-616, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-617

Site R-S-617 is a cache of eight manos (two granitic and six basalt), one core tool and one flake placed underneath a creosote bush. The core tool is made of green metavolcanic and is a small scraper plane. The flake is red jasper. The site is situated 32 m south of Brown Road and 17 m west of power line tower 121048 in flat terrain. Surrounding vegetation is sparse and consists of creosote and saltbush. Soils on site are coarse tan sand with scattered rhyolite gravel. The area around the site has been impacted by the construction and use of an unpaved access road associated with the 115kV and 220kV line.

The condition of the site, possibly either deflated or obscured by alluvial deposition, and the types of artifacts at the site indicates that the site may have information important to prehistory, especially in regards to the research about sites containing milling implements in proximity to prehistoric lakeshores (See Prehistoric Research Issues above).

Site R-S-617 is located outside of the Project and will not be impacted by construction of the RSPP. As such, it was not evaluated for inclusion in the CRHR or the NRHP.

Site R-S-618

R-S-618 is a historic debris scatter comprised of four tin cans in an area measuring approximately 18 m (60 ft) northeast-southwest by 8 m (26 ft) northwest-southeast area. The site is located on a sandy, basalt cobble-strewn plain on a stable alluvial fan. Vegetation at the site consists of sparse creosote, saltbush, and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 2 to 8 cm in length with basalt cobbles measuring 15 to 20 cm in length.

Artifacts at R-S-618 consist of two church-key-opened beverage cans, one knife-opened 64 oz. three piece cylindrical can, and one bayonet-opened 1-gallon hole-in-cap can. A rock pile of basalt stacked on the ground surface approximately 35 cm high is present on site and appears to be of either historic or recent construction. The presence of church-key-opened beverage cans indicates that the site post-dates 1935 (Rock 1987). While there is no apparent disturbance to the site, the small number of artifacts may suggest either that the site represents a single dispersed refuse deposit event or that alluvial or aeolian action may have caused redeposition of these artifacts from other areas.

Given the nature of the artifacts at R-S-618, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-620

Site R-S-620 is a historic debris scatter consisting of 37 tin cans and one crushed enameled metal bowl in a 124 m (408 ft) east-west by 125 m (410 ft) north-south area. The site is located on a sandy alluvial plain. Vegetation consists of creosote, saltbush, and annual native grasses. Soil in the area of the site is brown-yellow sand with aggregate pebbles ranging from 1 to 5 cm in length.

The cans at R-S-620 include seven hole-in-top with matchstick-post-filler milk cans, opened with punched holes; three hole-in-top with matchstick post filler knife-opened milk cans; four bayonet-opened sanitary cans, two church-key-opened beverage cans; one possible paint can; one key-strip meat tin; one upright pocket tobacco tin embossed with "PRINCE ALBERT"; one unidentified external friction can; one sanitary can with punched holes; one knife-opened sanitary can; and one unidentified can. The use of church keys to open beverage cans and punched sanitary cans suggest that these artifacts date to the late 1930s or early 1940s (Rock 1987). While there is no apparent disturbance to the site, the low density of artifacts in such a large area suggests that the site represents a single dispersed refuse deposit event or that alluvial or aeolian action may have caused redeposition of these artifacts from other areas.

Site R-S-620 is located outside of the Project and will not be impacted by construction of the RSPP. As such, it was not evaluated for inclusion in the CRHR or the NRHP.

Site R-S-623/624

Site R-S-623/624 is a historic debris scatter containing two loci of historic tin cans, ceramics, glass, and auto parts in an area measuring 90 m (295 ft) east-west by 15 m (50 ft) north-south. The site is located on a level sandy plain. Vegetation consists of creosote, saltbush, and annual native grasses. Soil in the area of the site is brown-yellow sand with aggregate pebbles ranging

from 1 to 5 cm in length. The site has been disturbed by the recent deposition of non-historic refuse.

Locus 1, measuring 2.7 m (9 ft) by 1 m (3.5 ft), consists of approximately 100 cans that appear to have been burnt (Attachment 2, Plate 12). Can types include 3x4" hole-in-top with matchstick-post-filler milk cans, key-strip sardine tins, upright pocket tobacco tins, paint can lids, and various beer/beverage containers. Locus 2, measuring 8 m (26 ft) by 8 m (26 ft) and located approximately 70 m (230 ft) to the east, consists of approximately 240 cans and miscellaneous historic refuse. The whole concentration appears to have been burnt. In addition to the can types that are represented Locus 2 contains an oblong oval fish tin, and several 4x5" food canisters. Can opening methods include knife-opened and church-key-opened. In addition to cans, Locus 2 also contains whiteware ceramic fragments, including a coffee cup with a transfer print; baling wire; olive, amber, cobalt, and clear glass fragments, including an amber medicine bottle base with an Owens, Illinois maker's mark as well as undiagnostic bottle fragments and possible windshield fragments; and various automobile or tractor parts including a fender, three tires, and springs. All of the artifacts sit on the ground surface and there is no indication of a subsurface component to the deposit. The relatively discrete nature of the concentrations in the context of historic desert debris scatters, the density of artifacts, and chronological evidence suggests that the site may represent a discrete refuse dumping events.

Site R-S-623/624 is located outside of the Project and will not be impacted by construction of the RSPP. As such, it was not evaluated for inclusion in the CRHR or the NRHP.

Site R-S-700

Site R-S-700 consists of a small historic refuse deposit in an area measuring 3 m (10 ft) by 3 m (10 ft). The site is located on a low slope overlooking an unpaved road to the east. Vegetation consists of creosote, saltbush, and annual native grasses. Soil in the area of the site is brown-yellow sand with aggregate pebbles ranging from 2 to 8 cm in length.

The deposit contains approximately 30 cans, three one pound coffee can lids, turquoise glazed Fiestaware fragments, a steel medical tape roll, and numerous glass fragments. Can types include key strip hole-in-cap meat tins, church-key-opened beverage cans, spice tins, and food tins. Glass fragments are clear, green, milk, and amber in color. Some of them are solarized. The glass fragments are from screw top jars, bottles, cold cream containers, and window panes. Maker's marks represented include Latchford-Marble and Owens-Illinois, including Duraglas dating to the 1950's. Some cans are slightly embedded in the sandy soil, though it appears that the site consists only of the surface scatter. Based on this chronologically diagnostic mark, the site appears to be a small, discrete episode of refuse dumping dating to the mid-twentieth century. The site does not appear to have been disturbed.

Based on the nature of artifacts at R-S-700, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3

and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-720

Site R-S-720 consists of a prehistoric groundstone scatter, including two manos and four metate fragments in an area measuring 16 m northeast-southwest by 12 m northwest-southeast. The site is located on a sandy plain. Low density vegetation consists of creosote, saltbush, and annual native grasses. Soil at the site is brown-yellow sand, with a localized increase in the site area and vicinity, of gravel and basalt cobbles measuring between 15 and 50 cm. No flaked stone was observed.

The condition of the site, possibly either deflated or obscured by alluvial deposition, and the types of artifacts at the site indicates that the site may have information important to prehistory, especially in regards to the research about sites containing milling implements in proximity to prehistoric lakeshores (See Prehistoric Research Issues above). Site R-S-720 is, therefore, recommended potentially eligible under CRHR Criterion 4 and is unevaluated under NRHP Criterion D. It is recommended not eligible for inclusion to the CRHR under Criteria 1-3, or for inclusion to the NRHP under Criteria A-C. Under CRHR Criteria 1 and NRHP Criteria A, site R-S-720 does not contribute to the broad patterns of history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not related to the lives of people important to the past and is recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. R-S-720 is recommended not eligible for inclusion to the CRHR under Criterion 3 and NRHP Criterion C because it does not represent a unique style, type, or design. Site R-S-720 may, however, yield information important to history or prehistory and is, therefore, recommended potentially eligible under CRHR Criterion 4 and unevaluated under NRHP Criterion D.

Site R-S-726

Site R-S-726 is a sparse historic debris scatter consisting of six tin cans in an area measuring 82 m (270 ft) north-south by 50 m (165 ft) east-west. The site is located on a level sandy plain on a stable alluvial fan. Vegetation consists of creosote, saltbush, and annual native grasses. Soil at the site is brown-yellow sand with aggregate pebbles ranging from 1 to 5 cm in length.

Artifacts at R-S-726 include five large knife-opened hole-in-cap cans, one large cylindrical-circle-slice can, and one 5 gallon rectangular kerosene can modified with a braided wire handle (Attachment 2, Plate 13). Little diagnostic information is available, though the method of knife opening on the hole-in-cap can and lack of church-key-opened cans suggests the site dates to the twentieth century and possibly the early to middle portion. The small number of artifacts suggests that the site may represent the deposition of isolated refuse items, though alluvial or aeolian action may have caused redeposition from other areas. The site does not appear to have been otherwise disturbed.

Based on the nature of the artifacts and their distribution at R-S-726, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP

Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-728/731

Site R-S-728/731 is a large, sparse historic debris scatter in an area measuring 238 m (780 ft) east-west by 100 m (330 ft) north-south. The site is located on a level sandy plain on a stable alluvial fan. Vegetation consists of creosote, saltbush, cholla, and annual native grasses. Soil at the site is brown-yellow sand with aggregate pebbles ranging from 1 to 5 cm in length.

The debris scatter contains over 100 tin cans, milled lumber, aqua and amber glass fragments (including an amber finish and base), and a fragment of a stove pipe. Can types include key strip sardine tins, hole-in-top with matchstick post filler sanitary cans, knife-opened gallon hole-in-cap cans, church-key-opened beverage cans, knife-opened 3x4" hole-in-cap cans, and 25-pound Du Pont powder cans (Attachment 2, Plate 14). The majority of cans are of the hole-in-cap variety. While the blasting powder cans may be associated with the construction of the Mojave-Owenyo branch of the Southern Pacific Railroad beginning in 1908, the can types and opening methods present at R-S-728/731 reflect a potentially wide date range spanning the early to mid-twentieth century. Combined with the sparse distribution of artifacts, this suggests that the site may reflect the deposition of refuse repeatedly over time or may be the result of alluvial or aeolian redeposition from other areas. The site does not appear to have been otherwise disturbed.

Based on the nature of artifacts at R-S-728/731, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-739

Site R-S-739 is a sparse historic debris scatter comprised of four tin cans in an approximately 34 m (110 ft) by 34 m (110 ft) area. The site is located on a level sandy plain on a stable alluvial fan. Vegetation consists of creosote, saltbush, and annual native grasses. Soil in the area of the site is brown-yellow sand with aggregate pebbles ranging from 1 to 5 cm in length.

Artifacts at the site consist of two church-key-opened beverage cans, one 25-pound blasting powder can, and one half-gallon external friction can modified with a wire handle to form a bucket. While the blasting powder can may be associated with the construction of the Mojave-Owenyo branch of the Southern Pacific Railroad beginning in 1908, the presence of church-key-

opened cans dates these artifacts to post-1935. Combined with the sparse distribution of artifacts, this suggests that the site may reflect the deposition of refuse repeatedly over time individual artifacts or may be the result of alluvial or aeolian redeposition from other areas. The site does not appear to have been otherwise disturbed.

Based on the nature of artifacts at R-S-739, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-742

Site R-S-742 is a sparse historic debris scatter consisting of 12 historic tin cans in an approximately 55 m (180 ft) northeast-southwest by 35 m (115 ft) northwest-southeast area. The site is located on a level sandy plain on a stable alluvial fan. Vegetation consists of creosote, saltbush, and annual native grasses. Soil in the area of the site is brown-yellow sand with aggregate pebbles ranging from 1 to 5 cm in length.

Cans in the scatter include eight knife-opened hole-in-cap cans, two knife-opened sanitary cans, one knife-opened hole-in-top with matchstick post filler can, and one knife-opened one gallon hole-in-cap can. The lack of church-key-opened cans and presence of hole-in-cap cans indicates an early 20th century date for the site. The sparse nature of the site suggests that it may reflect a single episode of refuse deposition which has been redistributed by alluvial or aeolian processes, or that the site itself may have been formed by those processes redistributing artifacts from other areas. The site does not appear to have been otherwise disturbed.

Based on the nature of artifacts at R-S-742, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-746

Site R-S-746 is a small historic debris scatter consisting of six historic tin cans in an approximately 18 m (60 ft) east-west by 9 m (30 ft) north-south area. The site is located on a level sandy plain on a stable alluvial fan. Vegetation at the site consists of creosote, saltbush, and annual native grasses. Sediments at the site include brown-yellow sand with aggregate pebbles ranging from 1 to 5 cm in length.

Artifacts at R-S-746 consist of two knife-opened sanitary cans, one small rectangular spice tin, one upright pocket tobacco tin with strike plate, and two knife-opened hole-in-cap cans. The lack of church-key-opened cans and predominance of hole-in-cap cans suggests that this site dates to the early decades of the twentieth century. While the small number of artifacts may indicate that the site represents a single event refuse deposit, alluvial or aeolian action may have caused secondary redeposition. The site does not otherwise appear to have been disturbed

Based on the nature of artifacts at R-S-746, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-750

R-S-750 is a sparse historic debris scatter in an approximately 34 m (113 ft) northwest-southeast by 14 m (45 ft) northeast-southwest area. The site is located on a level sandy plain on a stable alluvial fan east of the abandoned Southern Pacific Railroad alignment (IF-KER-3366H). Vegetation at the site consists of creosote, saltbush, and annual native grasses. Sediments at the site include brown-yellow sand with aggregate pebbles ranging from 1 to 5 cm in length.

Artifacts at R-S-750 consist of one bayonet-opened hole-in-cap can, one lid from a bayonet-opened gallon hole-in-cap can, and nine metal barrel straps. The lack of church-key-opened cans and presence of hole-in-cap cans suggests an early twentieth century date for the site; the barrel straps may be associated with containers whose materials were used in the construction of the Mojave-Owenyo branch line located west of the site. The site has been heavily disturbed by the deposition of modern refuse and off-road vehicular activity.

Based on the nature of artifacts at R-S-750, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-752

R-S-752 is a sparse historic debris scatter consisting of four historic tin cans in an approximately 18 m (60 ft) east-west by 15 m (50 ft) north-south area. The site is located on a level sandy plain

on a stable alluvial fan east of the abandoned Southern Pacific Railroad alignment (IF-KER-3366H). The site is crossed by a small seasonal wash. Vegetation at the site consists of creosote, saltbush, and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 1 to 5 cm in length.

Artifacts at R-S-752 include one 25-pound blasting powder can, one upright pocket tobacco tin, one rectangular gallon fuel can, and one knife-opened hole-in-top with matchstick post filler can. The blasting powder can. The blasting powder cans may be associated with the construction of the Mojave-Owenyo branch of the Southern Pacific Railroad beginning in 1908, and the lack of church-key-opened cans suggests a pre-1935 date for the assemblage. The small number of artifacts and sparse distribution, however, suggests that the site reflects either the deposition of individual unassociated cans or that the site may be the result of alluvial or aeolian redeposition, particularly given the wash bisecting the site. The site does not appear to have been otherwise disturbed.

Based on the nature of artifacts at R-S-752, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-757

R-S-757 is a historic debris scatter consisting of four tin cans scattered over an 20 m (65 ft) northeast-southwest by 7 m (22 ft) northwest-southeast area. The site is located on a level sandy plain on a stable alluvial fan east of the abandoned Southern Pacific Railroad alignment (IF-KER-3366H). Vegetation at the site consists of creosote, saltbush, and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 1 to 5 cm in length.

Artifacts at R-S-757 consist of one bayonet-opened gallon hole-in-cap can, one hole-in-top with matchstick post filler milk can with punched holes, one knife-opened hole-in-cap can, and one knife-opened hole-in-top with matchstick post filler can. The presence of the hole-in-cap cans and lack of post-1935 church-key-opened cans suggests an early twentieth century date for the assemblage. The small number of artifacts and sparse distribution, however, suggests that the site reflects either the deposition of individual unassociated cans or that the site may be the result of alluvial or aeolian redeposition. The site does not appear to have been otherwise disturbed.

Site R-S-757 is located in the archaeological buffer zone and will not be impacted by construction of the RSPP. As such, it was not evaluated for inclusion in the CRHR or the NRHP.

Site R-S-758

Site R-S-758 consists of a prehistoric lithic scatter of six CCS flakes in a 18 m northwest-southeast by 8 m northeast-southwest area. The site is located on a sandy plain. Vegetation consists of creosote, saltbush, and annual native grasses. Soil at the site is brown-yellow sand with aggregate pebbles ranging from 1 to 5 cm in length.

The CCS flakes consist of chalcedony and white chert, but mostly the latter, all of probable local origin. All of the artifacts are located on the alluvial surface and no cultural deposit was observed at the site. It may be possible that a limited cultural deposit could have either been deflated over time, as periods of high wind are common in the area, or, while not likely, a deposit could be obscured by an accumulation of alluvium on the valley floor from the adjacent El Paso Mountains. Based on artifacts at the site, it is not clear if the site is the remnant of a temporary camp, or is a single lithic reduction episode. Potential impacts to the site are associated with continued sheet runoff actions from the adjacent El Paso Mountains that could result in either erosion to the site or possibly the gradual burial of it by alluvium.

Site R-S-758 is located in the archaeological buffer zone and will not be impacted by construction of the RSPP. As such, it was not evaluated for inclusion in the CRHR or the NRHP.

Site R-S-761

R-S-761 is a historic debris scatter consisting of five historic tin cans in an approximately 38 m (124 ft) east-west by 11 m (36 ft) north-south area. The site is located on a level sandy plain on a stable alluvial fan east of the abandoned Southern Pacific Railroad alignment (IF-KER-3366H). Vegetation at the site consists of creosote, saltbush, and annual native grasses. Sediments at the site include brown-yellow sand with angular to subangular aggregate pebbles ranging from 1 to 5 cm in length.

Artifacts at R-S-761 include two bayonet-opened hole-in-cap cans and three bayonet-opened sanitary cans. While there is little diagnostic information available, the presence of hole-in-cap cans and the lack of church-key-opened cans suggests a pre-1935 date. The small number of artifacts suggests that the site reflects either the deposition of individual unassociated cans or that the site may be the result of alluvial or aeolian redeposition from other areas. The site does not appear to have been otherwise disturbed.

Site R-S-761 is located outside of the Project and will not be impacted by construction of the RSPP. As such, it was not evaluated for inclusion in the CRHR or the NRHP.

Site R-S-769

Site R-S-769 consists of a prehistoric flaked lithic and groundstone tool scatter, comprised of one metate, one mano, four CCS flakes, and one rhyolite biface in a 63 m north-south by 13 m east-west area. The site is located on a sandy plain approximately 85 m west of an unpaved 115kV and 220kV transmission line access road. Vegetation consists of creosote, saltbush, and annual native grasses. Soil in the area of the site is brown-yellow sand with aggregate cobbles and pebbles ranging from 1 to 35 cm in length. This prehistoric site, overlaps historic can scatter site R-S-620. The metate consists of a vesicular basalt boulder roughly triangular in cross-section measuring 16 cm tall and 18 cm wide by 40 cm long with a roughly circular milling surface area

measuring 15 by 16 cm. The rhyolite biface fragment measures 3.0 cm long (from base to broken edge), by 2.8 cm wide, by 0.5 cm thick, and was found 20 cm northeast of the metate. Most of the CCS material is white. The artifact is the basal portion of the biface and the general configuration is convex. The mano is a granitic cobble and measures 12 cm by 9 cm by 6 cm. Based on the diversity of artifacts at the site, the site appears to be a possible temporary camp. No cultural deposit was observed at the site, though it is possible that a limited cultural deposit could have either been deflated over time, as periods of high wind are common in the area, or have been obscured by the continuing gradual accumulation of alluvium in the valley from the adjacent El Paso Mountains.

Site R-S-769 is located outside of the Project and will not be impacted by construction of the RSPP. As such, it was not evaluated for inclusion in the CRHR or the NRHP.

Site R-S-772

Site R-S-772 is a dispersed historic debris scatter consisting of 48 tin cans and glass bottle fragments distributed over a 159 m (520 ft) north-south by 98 m (320 ft) east-west area. The site is located on a level sandy plain on a stable alluvial fan east of the abandoned Southern Pacific Railroad alignment (IF-KER-3366H). Vegetation on site consists of creosote, saltbush, and annual native grasses. Soil at the site consists of brown-yellow sand with angular to subangular aggregate pebbles measuring between 2 and 5 cm in length.

Artifacts at R-S-772 include nine knife-opened milk cans, three key strip meat tins, two bayonet-opened coffee cans, one church-key-opened beverage can, one upright pocket-hinged tobacco tin, five knife-opened sanitary cans, 22 bayonet-opened sanitary cans, one circle-slice-opened sanitary can, one unidentified external friction tin, two unidentified screw top cans, and one unidentified P38-opened can. Glass fragments include one amber and one clear glass bottle bottom as well as fragment from a "Delaware Punch" non-carbonated soft-drink bottle. The clear base is embossed with "TABLE PRODUCTS, INC./LOS ANGELES 1698 REC CAL." The presence of the P38-opened can indicates that at least some elements of the assemblage post-dates 1942, when the US Army developed the opener to be included in its K-ration packs. The low density and wide distribution of materials at R-S-772 makes association between individual artifacts difficult. Nearly all of the materials at R-S-772 sit on the ground surface, though some have become lightly embedded in the alluvial sediment likely due to aeolian action, and there is no indication of a subsurface deposit.

Site R-S-772 is located outside of the Project and will not be impacted by construction of the RSPP. As such, it was not evaluated for inclusion in the CRHR or the NRHP.

Site R-S-773

Site R-S-773 is a historic debris scatter consisting of 15 historic tin cans in an area measuring 70 m (230 ft) north-south by 28 m (92 ft) east-west. The site is located on a level sandy plain on a stable alluvial fan south of Brown Road. Vegetation consists of creosote, saltbush, cholla, and annual native grasses. Soil at the site is brown-yellow sand with aggregate pebbles ranging from 1 to 5 cm in length.

Artifacts at R-S-773 include two corrugated one-gallon three piece cylindrical food cans, four bi-metal pull-tab beverage cans, one hinged-top spice tin, one rectangular kerosene can, one bayonet-opened sanitary food can, one knife-opened hole-in-cap can, one knife-opened hole-in-top with matchstick-post-filler can, and four rotary-opened sanitary cans. This site appears to be a mix of material dating from the early to mid twentieth century, with the bi-metal pull-tab cans post-dating 1962. While the site does not show evidence of human impact, the lack of discrete concentrations and potentially wide date range suggests that this site does not reflect multiple discrete episodes of refuse deposition over time and space, but rather the uneven distribution of collections of artifacts across the landscape by alluvial or aeolian processes. The site does not appear otherwise disturbed.

Based on the nature of artifacts at R-S-773, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-780

Site R-S-780 consists of an approximately 102 m (335 ft) segment of a low roadbed 2/3 m (8 ft) in width (Attachment 2, Plate 15). The alignment has berms on either side measuring approximately .5 m (1.5 ft) in width and approximately .1 m (4 in) high. The resource is located on a sandy plain on the north side of Brown Road. Vegetation consists of creosote, saltbush, and annual native grasses. Soil in the area of the resource is brown-yellow sand with aggregate pebbles ranging from 1 to 5 cm in length. There are no associated artifacts and the alignment does not appear on historic topographic maps, though it is west of Calvert Boulevard and may represent an earlier alignment of this north-south roadway.

Site R-S-780 is located outside of the Project and will not be impacted by construction of the RSPP. As such, it was not evaluated for inclusion in the CRHR or the NRHP.

Site R-S-781

Site R-S-781 is a sparse historic debris scatter consisting of 12 tin cans distributed linearly in an approximately 87 m (285 ft) northwest-southeast by 7 m (22 ft) northeast-southwest area. The site is located on a flat, sandy plain of an alluvial fan. Vegetation consists of creosote, saltbush, and annual native grasses. Soil in the area of the site is brown-yellow sand with aggregate pebbles ranging from 1 to 5 cm in length.

Artifacts at R-S-781 include eight church-key-opened beverage cans, one rotary-opened sanitary can, one bi-metal pull-tab beverage can, one knife-opened one-gallon hole-in-cap can, and one unidentifiable crushed can. The linear distribution of the artifacts, following the flow of the seasonally active wash, indicate that this site represents a secondary deposit of likely unassociated cans accumulated by alluvial action.

Based on the nature of artifacts at R-S-781, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-850

This site consists of a prehistoric lithic scatter of three CCS flakes and one CCS biface fragment in a 22 m east-west by 25 m north-south area. The site is situated on a level sandy plain with vegetation consisting of creosote, saltbush, cholla, and native grasses. An unnamed wash is located approximately 1.4 km to the east. Soil at the site is brown-yellow sand with aggregate cobbles and pebbles ranging from 1 to 5 cm in length.

The CCS biface fragment appears to be from a tool broken early during manufacture and, consequently, does not have any temporally diagnostic attributes. The CCS flakes consist of chalcedony, jasper, and chert, all of various hues of red, and all of probable local origin. All of the artifacts are located on the alluvial surface and no cultural deposit was observed at the site. It may be possible that a limited cultural deposit could have either been deflated over time, as periods of high wind are common in the area, or, while not likely, a deposit could be obscured by an accumulation of alluvium on the valley floor from the adjacent El Paso Mountains. Based on artifacts at the site, it is not clear if the site is the remnant of a temporary camp, or is a single lithic reduction episode. Potential impacts to the site are associated with continued sheet runoff actions from the adjacent El Paso Mountains that could result in either erosion to the site or possibly the gradual burial of it by alluvium.

The condition of the site, possibly either deflated or obscured by alluvial deposition, and the types and raw materials of the artifacts at the site indicates that the site may have information important to prehistory, especially in regards to the research about sites containing possibly local CCS flaked stone materials, located in proximity to local sources and prehistoric lakeshores (See Prehistoric Research Issues above). Site R-S-850 is, therefore, recommended potentially eligible under CRHR Criterion 4 and is unevaluated under NRHP Criterion D. It is recommended not eligible for inclusion to the CRHR under Criteria 1-3, or to the NRHP under Criteria A-C. Under CRHR Criteria 1 and NRHP Criteria A, site R-S-850 does not contribute to the broad patterns of history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not related to the lives of people important to the past and is recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. R-S-758 is recommended not eligible for inclusion to the CRHR under Criterion 3 and NRHP Criterion C because it does not represent a unique style, type, or design. Site R-S-850 may, however, yield information important to history or prehistory and is, therefore, recommended potentially eligible under CRHR Criterion 4 and is unevaluated under NRHP Criterion D.

This site does appear to qualify to be addressed under California Archaeological Resources Identification Data Acquisition Program (CARIDAP): Sparse Lithic Scatters (OHP 1988). Successful treatment under CARIDAP would result in a no historic property finding.

Site R-S-853

Site R-S-853 is a sparse historic debris scatter consisting of 10 tin cans in an approximately 32 m (105 ft) east-west by 24 m (77 ft) north-south area. The site is located on a flat, sandy plain of an alluvial fan north of Brown Road. Vegetation consists of creosote, saltbush, and annual native grasses. Soil in the area of the site is brown-yellow sand with aggregate pebbles ranging from 1 to 5 cm in length.

Artifacts at R-S-853 include seven church-key-opened beverage cans, a one-pound coffee can, a bayonet-opened sanitary can, and a rotary-opened sanitary can. Based on the opening methods observed, these artifacts post-date 1935. The use of church keys to open beverage cans suggest that these artifacts date to the late 1930s or early 1940s (Rock 1987). The site does not appear to have been impacted. The small number of artifacts suggests that the site may represent a single event refuse deposit, though alluvial or aeolian action may have caused redeposition from other areas.

Site R-S-853 is located outside of the Project and will not be impacted by construction of the RSPP. As such, it was not evaluated for inclusion in the CRHR or the NRHP.

Site R-S-856

Site R-S-856 is a sparse historic debris scatter consisting of five tin cans in an approximately 39 m (128 ft) northwest-southeast by 41 m (135 ft) northeast-southwest area. The site is located on a flat, sandy plain of an alluvial fan adjacent to a seasonal drainage to the northeast. Vegetation consists of creosote, saltbush, and annual native grasses. Soil in the area of the site is brown-yellow sand with aggregate pebbles generally ranging from 1 to 5 cm in length.

Artifacts at R-S-856 include two church-key-opened beverage cans, one strip-opened sanitary can, and two knife-opened sanitary cans. The presence of church-key-opened cans suggests that this site post-dates 1935, when the church key opener was introduced. However, given its location adjacent to a seasonal wash, the site may represent a secondary deposit of cans accumulated by alluvial action. The site otherwise appears undisturbed.

Based on the nature of artifacts at R-S-856, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-866

Site R-S-866 is a large historic debris scatter comprised of over 50 tin cans in an approximately 73 m (240 ft) north-south by 52 m (170 ft) east-west area. The site is situated north of Brown Road on a flat, sandy plain of an alluvial fan. Vegetation consists of creosote, saltbush, cholla, and annual native grasses. Soil in the area of the site is brown-yellow sand with aggregate pebbles generally ranging from 1 to 5 cm in length, with some pebbles larger than 5 cm.

The majority of the artifacts at R-S-866 cans are church-key-opened beverage cans. Bi-metal pull-ring beverage cans, rotary-opened sanitary cans, one quart oil cans, and bayonet-opened sanitary cans are also present. The presence of church-key-opened cans suggests that this site post-dates 1935, when the church key opener was introduced. However, given its location adjacent to a seasonal wash, the site may represent a secondary deposit of cans accumulated by alluvial action. The site otherwise appears undisturbed.

Based on the nature of artifacts at R-S-866, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-868

Site R-S-868 consists of a 4.7-km (2.9-mile) segment of an unpaved one-lane historic road alignment paralleling the Therese Siding section of the Southern Pacific Railroad's Mojave-Owenyo branch line (CA-INY4607H/IF-KER-3366H). The northwest-southeast trending roadway is approximately 2.4 m (8 ft) wide and runs between 270 m (886 ft) and 495 m (1624 ft) east of the former railway grade cut into a basalt boulder-covered slope of a low ridgeline. The road first appears on the 1915 Searles Lake 15' USGS topographic quadrangle. Vegetation along the alignment consists of creosote, saltbush, and annual native grasses with smaller amounts of cholla and foxtail near the roadway. Soil in the area of the resource is brown-yellow sand with aggregate pebbles ranging from 2 to 8 cm in length. It is still in use as an unpaved road.

R-S-868 maintains integrity of location and setting, though no concrete associations with historical persons or events have been determined. Based on the nature of R-S-868, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-869

Site R-S-869 consists of a 3.4-km (2.1-mile) segment of an unpaved one-lane historic road alignment. The road first appears on the 1915 Searles Lake 15' USGS topographic quadrangle. On this map, the road continued westward toward Freeman Canyon and the homestead settlement of Freeman Junction. Vegetation along the alignment consists of creosote, saltbush, and annual native grasses. Soil along the resource is brown-yellow sand with aggregate pebbles ranging from 2 to 8 cm in length. It is still in use as an unpaved road.

R-S-869 maintains integrity of location and setting, though no concrete associations with historical persons or events have been determined. Based on the nature of R-S-869, the site is recommended not eligible for inclusion to the CRHR and NRHP. The site does not contribute to the broad patterns of California's history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not associated with persons important to California's past and recommended not eligible for inclusion to the CRHR under Criterion 2 and the NRHP under Criterion B. The site does not represent a distinct type, style, or design and recommended not eligible under CRHR Criterion 3 and NRHP Criterion C. Lastly, the site is unlikely to yield information important to history or prehistory and is recommended not eligible for inclusion to the CRHR under Criterion 4 and NRHP under Criterion D.

Site R-S-870

This site consists of a prehistoric lithic and groundstone artifact scatter consisting of a sandstone metate, a granitic cobble mano fragment, a CCS scraper, and a piece of chert debitage. The metate measures 35 cm by 35 cm, by 10 cm with a 1 cm deep oval basin. The scraper is 4 cm by 3.5 cm by 1 cm. The site is located on a level sandy plain. An unnamed wash is located approximately 1.4 km to the east. Vegetation in the area of the site consists of sparse creosote, saltbush, and annual native grasses. Soil at the site is brown-yellow sand with aggregate pebbles ranging from 1 to 5 cm in length. The site dimensions are 14 m east-west by 8 m north-south.

Based on the diversity of artifacts at the site, the site appears to be a possible temporary camp. While no cultural deposit was observed at the site, though it is possible that a limited cultural deposit could have either been deflated over time, as periods of high wind are common in the area, or have been obscured by the continuing gradual accumulation of alluvium in the valley from the adjacent El Paso Mountains

The condition of the site, possibly either deflated or obscured by alluvial deposition, and the types of artifacts at the site indicates that the site may have information important to prehistory, especially in regards to the research about sites containing milling implements and possibly diagnostic flaked stone artifacts (possibly of a locally available material) in proximity to local sources and prehistoric lakeshores (See Prehistoric Research Issues above). Site R-S-870 is, therefore, recommended potentially eligible under CRHR Criterion 4 and is unevaluated under NRHP Criterion D. It is recommended not eligible for inclusion to the CRHR under Criteria 1-3, or for inclusion to the NRHP under Criteria A-C. Under CRHR Criteria 1 and NRHP Criteria A, site R-S-870 does not contribute to the broad patterns of history and is recommended not eligible under CRHR Criterion 1 and NRHP Criterion A. The site is not related to the lives of people important to the past and is recommended not eligible for inclusion to the CRHR under Criterion

2 and the NRHP under Criterion B. R-S-870 is recommended not eligible for inclusion to the CRHR under Criterion 3 and NRHP Criterion C because it does not represent a unique style, type, or design. Site R-S-870 may, however, yield information important to history or prehistory and is, therefore, recommended potentially eligible under CRHR Criterion 4 and unevaluated under NRHP Criterion D.

Isolated Finds

A total of 367 isolates were identified during Class III surveys. Isolates identified are listed in Table 10 below. Seventy-seven of these isolates are no longer within the APE, due to changes in the Project design. The majority of the 290 isolated finds in the APE are single metal cans. Fifty-nine prehistoric isolated finds were documented, consisting primarily of flakes.

Table 10. Isolated Artifacts Identified in the RSPP

Isolate Number (SMP-I-)	Description
Historic	
I-1	Upright pocket tobacco tin
I-2	Undiagnostic tin can
I-3	Rebar and possible claim post
I-4	Clear glass bottle fragments
I-5	2 church-key-opened cans
I-6	Church-key-opened can
I-7b	Crimped seam can
I-9b	Cast iron post
I-10b	Milled wood
I-12	Hole-in-top can
I-13	Crimped seam can
I-14	2 undiagnostic tin cans
I-15b	2 church-key-opened cans
I-17a*	2 undiagnostic tin cans
I-17b*	2 crimped seam cans
I-18a*	Crimped seam can
I-18b*	2 crimped seam cans
I-20a*	Crimped seam can
I-20b*	Milled wood post and glass fragments
I-21*	Hole-in-top can
I-22a	Motor oil can
I-22b	Horseshoe and bridle part
I-23*	Possible solvent can
I-24*	Soldered top crimped seam can
I-25	Railroad spike
I-26	Undiagnostic tin can

Isolate Number (SMP-I-)	Description
I-28	Church-key-opened crimped seam can
I-29	Hole-in-top can
I-30	Knife cut crimped seam can
I-31	Knife cut crimped seam can
I-32	Fallen cast iron post
I-33	Church-key-opened can
I-34	Hole-in-top can
I-36	2 church-key-opened cans
I-37	2 church-key-opened cans
I-38	2 undiagnostic tin cans
I-39a	Undiagnostic tin can
I-39b	Undiagnostic tin can
I-40	Church-key-opened can
I-41	Church-key-opened can
I-43a	Church-key-opened can
I-43b	Hole-in-cap can, church-key-opened can
I-44	Undiagnostic tin can
I-46	Cast iron post
I-47a*	Church-key-opened can
I-47b	2 hole-in-top soldered bottom cans
I-48a	Coffee can?
I-48b	2 church-key-opened cans
I-49	Knife cut food can
I-52	Historic post
I-53	Upright pocket tobacco tin
I-54	Stand pipe
I-55	Undiagnostic food can
I-59	Undiagnostic food can
I-60	Fence post
I-61	Church-key-opened food can
I-62*	Church-key-opened food can
I-63*	Upright pocket tobacco tin
I-64	2 Whiteware fragments, "Arkansas"
I-65*	Crimped milk can base and crimped coffee can
I-66*	Church-key-opened food can
I-67	Metal roof shingle
I-68	Church-key-opened food can
I-69	2 bottle fragments, "Dr. Pepper"
I-70*	Pull cap crimped seam can
I-71*	Blasting powder can, embossed "BLASTING"

Isolate Number (SMP-I-)	Description
I-72	Blasting powder can, embossed "BLASTING"
I-73	Church-key-opened food can
I-74	Church-key-opened food can
I-75	Church-key-opened food can
I-76	Church-key-opened interlocking seam can
I-77	Church-key-opened interlocking seam can
I-78	Crimped seam motor oil can, embossedd "SAE 30"
I-79	Can opener opened tuna can and undiagnostic crushed can
I-80	Church-key-opened food can
I-81	Upright pocket tobacco tin
I-82	Stand pipe
I-84	Stand pipe
I-85	Milk can
I-86	Food can
I-88	Church-key-opened food can
I-90	Church-key-opened food can
I-91	Downed fence post
I-93	Soldered bottom can
I-94	Auto exhaust system parts
I-95	Church-key-opened can
I-97	Milk can
I-98	Milk can
I-99	Amethyst glass bottle
I-101	Large rectangular (fuel?) Can
I-104	1 punch bottom food can, 1 undiagnostic food can
I-105	Amethyst glass
I-106	2 church-key-opened cans
I-107	Box spring
I-108	Motor oil can, embossedd "SAE 20"
I-110	Church-key-opened large rectangular can
I-112	Motor oil can
I-113	Church-key-opened food can
I-114	Blasting powder can, embossed "BLASTING"
I-115	Unidagnostic food can
I-119	Motor oil can, embossed (unreadable)
I-121	Unidagnostic food can
I-122	Rock pile
I-124	Square can with screw top
I-125	Metal wire
I-126	Fence post

Isolate Number (SMP-I-)	Description
I-150	Upright pocket tobacco tin
I-151	2 interlocking seam church-key-opened cans
I-152	1 gallon size bayonet cut can
I-153	Punch-opened can
I-154	Church-key-opened can
I-155	Church-key-opened can
I-157a	Knife cut food can
I-157b	Blasting powder can, embossed "DUPONT"
I-158	Punch-opened can
I-159	Church-key-opened can
I-160	Hole-in-top can
I-161	Church-key-opened can
I-162	Soldered bottom can
I-163	Church-key-opened can
I-164	Church-key-opened can
I-165	Hole-in-top sanitary can
I-168	Key wind can
I-169	Punched can
I-170*	Soldered can
I-172*	Church-key-opened can
I-173a*	Barrel hoop
I-173b	Sanitary can
I-175	Bayonet cut can
I-176	Knife cut can
I-177	Church-key-opened can
I-178	Church-key-opened can
I-179	Soldered can
I-181	Punch-opened can
I-182	Perforated motor oil can
I-183	Undiagnostic tin can
I-184	Church-key-opened can
I-185	Church-key-opened can
I-186	Punch-opened can
I-187	Knife cut can
I-188	2 knife cut cans
I-189	2 solder top cans
I-190	Hole-in-top can and punched can
I-191	Fence post
I-192	2 church-key-opened cans
I-193	Church-key-opened can and sardine can

Isolate Number (SMP-I-)	Description
I-194	Knife cut hole-in-cap paint can
I-195*	Church-key-opened can
I-197*	Solder top milk can, punch-opened
I-198	Horseshoe
I-200	Solder top can
I-201	Knife cut can
I-204	Solder top can
I-205	Solder top can
I-206*	8" x 8" post stump
I-207*	8" x 8" post stump
I-209	Solder top cans and blasting powder can
I-304	Undiagnostic tin can
I-305	Whiskey bottle with seam
I-306	Church-key-opened can
I-307	Church-key-opened can
I-308	Crimped, church-key-opened Motor oil can
I-309	Solder top crimped seam can
I-311	Knife cut oil can
I-312	Undiagnostic tin can
I-316	Sanitary crimped seam cans
I-317	Sanitary knife cut can
I-318	Church-key-opened can
I-319	Crimped seam can
I-321	Crimped seam can
I-322	Solder top can
I-324	Church-key-opened can
I-326	Upright pocket tobacco tin
I-401	Seamed can
I-402	Barbed wire
I-408	Seamed can
I-600	Blasting powder can
I-601a	Upright pocket tobacco tin
I-601b	Milk can, church-key-opened can
I-602	Screw top cooking oil can
I-603	Milk can inside food can
I-604	Milk can
I-605	Paint can
I-606a	Knife cut crushed can
I-606b	Wood debris
I-607	Undiagnostic tin can

Isolate Number (SMP-I-)	Description
I-608a	Milled wood
I-608b	Church-key-opened can, paint can
I-609a	3 gallon paint bucket
I-609b	Milk can
I-610	Blasting powder can, church-key-opened can
I-611b*	Milk can, solder top church-key-opened can
I-612a	Paint can
I-612b*	Barbed wire
I-613	Welded bottom can
I-614	Paint can
I-615a	Milk can
I-615b	Evaporated milk can
I-617	Hole-in-top can
I-619	Church-key-opened can
I-620	Milk can
I-621	Fence post
I-623	Hole-in-top soldered can
I-624	Hole-in-bottom knife cut can
I-625*	Hole-in-top knife cut can
I-627*	1 gallon internal friction paint can
I-628*	Knife cut milk can
I-632	Soldered paint can
I-633	Blasting powder can, embossed "BLASTING"
I-634	Soldered 3 gallon can
I-635	2 hole-in-bottom knife cut can
I-636	Blasting powder can
I-638*	Claim post
I-639b	Horseshoe with 8 square nails
I-640	Milk can and whiteware fragment
I-641	Fallen 4" x 6" post
I-642	1 gallon paint can
I-644	Knife cut paint can
I-645	Soldered can
I-646	Milk can and tobacco tin bottom
I-647	Soldered can
I-648	Railroad spike
I-651*	Blasting powder can
I-652*	Canteen cup
I-653*	Rectangular key wind can
I-654*	Rotary cut crimped seam can and milk can

Isolate Number (SMP-I-)	Description
I-655*	Hole-in-top can
I-656	Knife cut can crimped
I-658*	Knife cut crimped seam can
I-659*	Upright pocket tobacco tin, "Prince Albert"
I-670*	Evaporated milk can
I-671*	Hole-in-top can
I-672*	Knife cut sanitary can
I-673*	Upright pocket tobacco tin
I-674*	Hole-in-top can
I-675*	Church-key-opened crimped seam can
I-676*	Evaporated milk can
I-677*	4" x 4" post
I-678*	Church-key-opened crimped seam can
I-679	Church-key-opened crimped seam can
I-701	Church-key-opened juice can
I-702	2 crimped church-key-opened cans
I-703	2 crimped church-key-opened cans
I-705	Blasting powder can
I-706	Church-key-opened can and knife cut can
I-707	Key wind can and bayonet-opened crimped seam can
I-708a	Church-key-opened can and whiteware fragment
I-708b	Church-key-opened can and crimped seam can
I-709	Crimped seam can
I-711a	Church-key-opened can
I-712	Church-key-opened can
I-714	Church-key-opened cans
I-715	Church-key-opened ACME beer can
I-716	Crimped seam church-key-opened juice can
I-717a	Disintegrated wood post, stump in ground
I-717b	Church-key-opened crimped seam can
I-718	Knife cut crimped seam can
I-721	Rectangular hole-in-top punch opened crimped seam can
I-723	Amethyst glass fragments, perfume bottle?
I-724	Evaporated milk can
I-725	Bayonet cut solder top can
I-727	2 hole-in-top cans
I-729	Hole-in-cap gallon can and hole in bottom can
I-731	Hole-in-cap punch open can
I-733	Aqua glass fragments
I-734	2 church-key-opened cans

Isolate Number (SMP-I-)	Description
I-735	Side strip sanitary coffee can
I-737	Blasting powder can
I-738	Knife cut crimped seam can
I-740	2 hole-in-top paint cans
I-741	Ironstone fragment (Thos. Hutchinson CHINA)
I-742	Hole-in-top paint can
I-743	2 church-key-opened cans
I-748a	2 blasting powder cans
I-748b	Soldered hole-in-top can
I-749	2 aqua insulator fragments
I-751	Church-key-opened can
I-753	Church-key-opened can
I-755	Hole-in-bottom Knife cut crimped seam can
I-756*	Crimped seam church-key-opened can
I-758*	Church-key-opened motor oil can, "SAE 20"
I-762*	Knife cut can and knife cut hole-in-cap can
I-763*	Crimped seam screw top rotary-opened can
I-764*	Church-key-opened crimped seam can
I-765*	Milk can, church-key-opened crimped seam can
I-768*	Crimped seam milk can
I-770*	Hole-in-top can
I-771*	Upright pocket tobacco tin, "Prince Albert"
I-773*	Crimped seam knife cut can
I-774b	Cone top notched seam beverage can
I-776*	2 external friction cans
I-778	Star cut crimped seam can
I-779	Crimped seam church-key-opened can
I-780	10" square crimped seam can with circular opening, fuel?
I-782	Church-key-opened can
I-800	Church-key-opened can
I-854	Crimped seam can
I-857*	Tall boy church-key-opened can
I-858*	2 church-key-opened cans
I-859*	Hole-in-top Knife cut milk can
I-860*	Blasting powder can
I-861a*	1 church-key-opened can and 1 cone-top beverage can
I-861b	Church-key-opened can
I-862	Hole-in-cap gallon can
I-863	2 church-key-opened cans
I-867	Church-key-opened can and large square can

Isolate Number (SMP-I-)	Description
I-868	Church-key-opened opened motor oil can
Prehistoric	
I-7a	CCS flake
I-9a	CCS flake and core
I-10a	Patinated obsidian flake
I-11	Patinated obsidian flake
I-15a*	CCS flake
I-16*	Tested quartzite cobble
I-19*	Porphorytic flake
I-27	Flaked cobble/tested core
I-35	Possibly worked black aphanitic
I-42	Chert side scraper
I-45	Chert flake
I-51	CCS flake
I-56	Obsidian flake
I-57	Ccs core
I-58	Metavolcanic flake
I-102	Basalt metate fragment
I-103	CCS flake
I-109	Ccs core
I-120	Chert flake
I-123	Obsidian flake
I-156	Brown CCS flake
I-167	Edge modified obsidian flake
I-171*	CCS core fragment
I-174	CCS flake
I-180	CCS flake
I-196*	CCS flake
I-199	Obsidian flake
I-202	CCS flake
I-203	CCS flake
I-208	CCS flake
I-611a	Moss agate flake
I-616	Obsidian flake
I-618	Retouched chalcedony flake
I-622	Retouched chalcedony flake
I-626*	Chert flake
I-629	Basalt metate fragment
I-630	Metavolcanic flake
I-637*	Moss agate flake
I-639a	CCS core

Isolate Number (SMP-I-)	Description
I-643	White chert flake
I-650*	Obsidian flake
I-657*	Chalcedony flake
I-711b	Retouched CCS flake
I-713	Basalt metate fragment
I-722	Chalcedony flake
I-730	Retouched chalcedony cortical flake
I-736	Chert flake
I-744	Moss agate flake
I-745	Retouched obsidian flake
I-747	Chert flake
I-754	Jasper flake
I-759*	Quartzite flake
I-760*	CCS flake, chert flake
I-766*	Jasper shatter
I-772*	CCS flakes
I-774a*	Obsidian flake
I-775	Jasper flake and obsidian flake
I-864	Quartz core
I-900*	Mano fragment
I-901*	Jasper flake

*Isolates out of the RSPP due to Project redesigns.

DISCUSSION

The prehistory and history of the APE are reflected in the range of types of archaeological resources identified during this study. Both prehistoric and historic sites were documented, though few temporally diagnostic items were recovered. This may reflect the use of this area as a transitional corridor between tribal homelands and as a lithic resource procurement area, particularly from the El Paso Mountains to the south, rather than a center of occupation.

Some sites exhibit disturbance, related primarily to off-road vehicle use as well as the multiple informal dirt roads and the maintained transmission line access road crossing the RSPP. In addition, the natural processes of alluvial deposition and aeolian deflation are likely to have resulted in the secondary deposition of cultural materials, particularly in the case of historic material in and around seasonal washes.

The Indian Wells Valley, located within the rain shadow of the Sierra Nevada, is covered with alluvium and alluvial fan sediments on a gently sloping basin floor that spread eastward from the range, and from smaller ranges to the north and south (Wickstrom and Donahue 2003). This valley represents the dry basin of Pleistocene Lake China (China Lake). Some researchers have proposed an early lacustrine adaptation by the early human groups associated with such lakes in the area of the western U.S. (Bedwell 1970, Hester 1973). Archaeological sites associated with

China Lake have already demonstrated evidence for the Lake Mojave and Pinto complexes, two of the earliest complexes defined for the Mojave Desert (Davis and Panlaqui 1978b; Warren and Crabtree 1986; Sutton 1996). While the elevation of the RSPP indicates that it was above the maximum stand of pluvial Lake China (Davis and Panlaqui 1978a), and was, therefore, never inundated by the lake, its location in the valley in the vicinity of this ancient pluvial lake bed, provides the potential for the presence of evidence of the earliest period of human occupation of the western Mojave Desert.

Subsequent to Early Holocene times, during the Middle and Late Holocene, the climate has fluctuated between periods of increased precipitation and extreme aridity. In general, during this period, it has become gradually semi-arid with low humidity, limiting the range of plant and animal life. As a result, springs, and smaller drainages and washes, and basins such as China Lake that occasionally contained water during wet periods, may have become the focus of human activity (Davis and Panlaqui 1978b; Sutton 1996). For Late Holocene times, Sutton has described settlement models for the western Mojave, reflecting shifts in settlement resulting from these apparent variations in precipitation. The proposed shifts begin with a focus on stream and spring associated settlement, and then a shift to lake shore settlement, and then back to a stream and spring associated pattern (Sutton 1996). Not too surprising, then, in a desert environment, water availability has had a significant influence in determining the location of prehistoric habitation sites in the APE through time.

Within the APE, evidence of prehistoric activity is in the form of low-density flaked lithic and groundstone tool scatters and isolated artifacts. While the distribution of the prehistoric isolates equates to a very low-density artifact scatter across the property (see Figures 4a and 4b), nearly all of the prehistoric sites, and a majority of the prehistoric isolates, occurred, either, in the southwestern one-third of the RSPP, or along the major drainages/washes within the RSPP (see Figures 3a, 3b, 4a and 4b). These prehistoric sites and isolates include groundstone and flaked stone tools, and flaked stone debitage. While the reason for this pattern of occurrence is not certain, surface visibility during survey was not likely a factor as visibility in a majority of the RSPP during the survey was good. A possibly influencing factor, however, could be the prehistoric procurement and use of locally available lithic raw materials.

With the exceptions of an outcrop of granitic rocks along the central western edge of the RSPP, and basalt boulders along the southwestern edge, the RSPP contains exclusively sedimentary formations at the surface. Wickstrom and Donahue (2003) have described these sediments as consisting of three types: older alluvium, younger fan deposits, and younger alluvium. Only the older alluvium and younger alluvium, however, are indicated as present in the RSPP (Wickstrom and Donahue 2003: Figure 4). The older alluvium, attributed to the late Tertiary, and early and middle Pleistocene, consists of silt, sand, gravel and boulders. The younger alluvium is middle to late Pleistocene and Holocene in age and consists of unconsolidated, clay, silt, sand, and gravel. While in most other areas of Indian Wells Valley, this younger alluvium originates from the Sierra Nevada, within the RSPP, it is mostly derived from the El Paso Mountains adjacent to the southern portion of the RSPP. The ground surface of the RSPP consists, principally, of older alluvium, also derived mostly from the El Paso Mountains to the south (Wickstrom and Donahue 2003), with limited expanses of the younger alluvium present in the southernmost area and along the larger washes that traverse the RSPP (Wickstrom and Donahue 2003: Figure 4).

Several local sources of lithic materials used to make prehistoric tools have been identified (Davis and Panlaqui 1978b). To the south and southwest, in the El Paso Mountains area, are known sources for chalcedony and jasper from the Red Rock and Last Chance Canyon areas, and for agate and chalcedony from the Sheep Springs and Rainbow Canyon areas (Davis and Panlaqui 1978b; McGuire et al. 1982; Warren 1984). Several of the small drainages and washes that emanate from the El Paso Mountains, extend north through the RSPP into Indian Wells Valley. Wickstrom and Donahue (2003) have observed that within this area and vicinity, prehistoric cultural materials could be expected to more likely occur in areas where the younger alluvium is present on the surface, versus in areas of older alluvium. This prediction seems to fit the pattern in the APE with the distribution of prehistoric sites and isolates appearing to correlate with the surface presence of the younger alluvium as delineated in Wickstrom and Donahue (2003: Figure 4). While Wickstrom and Donahue do not explain the basis for this prediction, it appears most likely to be as a result of a greater content of CCS materials in the younger alluvium in the form of angular cobbles and pebbles (cf. Taylor 1989). Also present to a greater degree are cobbles of basalt, the most commonly used material for groundstone tools observed in the RSPP. The bedrock sources of these raw materials are also located on (e.g., basalt), or in proximity to, the RSPP in the El Paso Mountains to the south and west. The presence of these raw materials, frequently used prehistorically for flaked stone and groundstone tool manufacture, could possibly account for the pattern of occurrence of the prehistoric sites in the RSPP area.

While a variety of flaked stone and groundstone tools were represented in the sites and isolates identified in the RSPP, none were especially temporarily diagnostic. Groundstone tools consisted of both manos and metates, some of the latter so large that they appeared unlikely to be portable. Metates and large metate fragments were also sometimes observed to occur in clusters of three. No mortars or pestles were identified. While several flaked stone biface tools were found, all were fragments and, only one, a large CCS leaf-shaped fragment may be considered to have any diagnostic traits. Also noted at one site was a well made circular CCS scraper. Obsidian biface fragments, possibly utilized flakes, and debitage were fairly common occurrences, both within sites and as isolates. Obsidian occurring at sites in this area is commonly assumed to most likely have derived from sources in the Coso Mountains 30 to 35 miles (48 to 56 km) to the north of the RSPP (Gilreath and Hildebrandt 1997).

While, as described, primarily depositional actions have likely predominated in the area of the RSPP, it also seems like that deflation of soils in the area as a result of aeolian action has also occurred in the area over time. Certainly periods of high winds are common in the western Mojave and the high erodibility of these soils may have resulted in the deflation of some site deposits. While, given the alluvial depositional conditions in the RSPP, it is possible that some archeological deposits in the RSPP could be buried (see Sutton 1996), there is currently no evidence to suggest that there is a high likelihood of significant buried cultural resources being affected by the Project.

Even mundane artifacts reflect the history and past events of the RSPP. The majority of the identified sites are historic debris scatters and appear to date to the post-1935 era. Most of these sites cannot be directly linked to a particular time period, relying on characteristics of tin can types or can opening methods as a marker of a site's *terminus post quem*. This is complicated,

however, by the fact that many of the historic sites are sparse, low density tin can scatters which cannot be associated with any particular historic activity or depositional episode. It is likely that a number of these sites have been impacted due to (or potentially created by) alluvial or aeolian processes, or disturbed as a result of human activity like off-road vehicular traffic and modern refuse dumping.

The overall picture, however, illustrates that while the area of the RSPP was never intensively homesteaded and does not contain substantial historical archaeological sites, it did see use over the course of the twentieth century. Archaeological evidence of the construction of the railway in the early decades of the century, the staking of mining claims and development of water storage systems, and debris from everyday activities like eating and drinking illustrate the continual effort to exploit and make hospitable this small piece of the Mojave Desert.

CHAPTER 6
SUMMARY AND MANAGEMENT RECOMMENDATIONS

SUMMARY

Field investigations identified 79 archaeological sites, 367 archaeological isolates and 13 architectural resources. The architectural resources are addressed in Attachment 8 to this report.

Based on changes to the Project design subsequent to the survey, 16 of the sites (Table 11) and 77 of the isolates (see Table 10 above) are no longer within the APE. Four other sites are located in the archaeological survey buffer zone and were not evaluated. None of the isolated finds are eligible for listing in the NRHP or CRHR. Based on surface observations, potentially significant impacts are possible at nine archaeological sites (Sites R-S-019c, R-S-154, R-S-407, R-S-409, R-S-410, R-S-604, -S-720, R-S-850, and R-S-870). As discussed in Chapter 5, these resources are assessed as potentially significant under CRHR eligibility criteria and unevaluated under NRHR eligibility criteria, and subject to potential impacts from construction of the Project. Three of these sites (R-S-154, R-S-410, and R-S-850) appear to qualify for the California Archaeological Resources Identification and Data Acquisition Program: Sparse Lithic Scatters (CARIDAP). Successful treatment under this program results in a not eligible and "No Effect on historic properties" determination under Section 106 of the NHPA. Under CEQA and NHPA, with implementation of mitigation measures at the remaining eight sites, potential impacts would be mitigated to a less than significant level under CEQA and would be addressed through consultation with BLM, SHPO, and interested parties.

Preservation of cultural resources is preferred. It may be possible through careful design efforts that some of the identified cultural resources may be avoided. If avoidance is not possible then some sites will require further investigation to determine eligibility to the NRHP and CRHR.

Table 11. Sites No Longer in APE

Temporary Number	Site Type/Historic Context	Date	Significance	Project Impact
IF-KER-435	Lithic scatter	Prehistoric	Not evaluated	None
R-S-18/19	Tin can scatter	Post-1935	Not evaluated	None
R-S-20	Historic debris scatter (cans, barrel hoops, milled lumber and railroad tie)	Post-1935	Not evaluated	None
R-S-21	Tin Can scatter with wood	Early to Mid-20th century	Not evaluated	None
R-S-150	Railroad camp (dugout tent pad and debris)	Early 20th century	Not evaluated	None
R-S-151	Historic debris	Post-1935	Not evaluated	None

Temporary Number	Site Type/Historic Context	Date	Significance	Project Impact
	scatter			
R-S-164	Lithic scatter	Prehistoric	Not evaluated	None
R-S-613	Lithic scatter	Prehistoric	Not evaluated	None
R-S-617	Mano cache	Prehistoric	Not evaluated	None
R-S-620	Tin can scatter	Post-1935	Not evaluated	None
R-S-623/624	Tin can scatter	Early to mid-20th century	Not evaluated	None
R-S-761	Tin can scatter	Early to mid-20th century	Not evaluated	None
R-S-769	Lithic and groundstone scatter	Prehistoric	Not evaluated	None
R-S-772	Tin can scatter	Mid-20th century	Not evaluated	None
R-S-780	Depressed roadbed alignment with side berms	Mid-20th century?	Not evaluated	None
R-S-853	Tin can scatter	Post-1935	Not evaluated	None

Preservation of cultural resources is preferred. It may be possible to avoid some of the identified cultural resources through project design. If avoidance is not possible then some sites will require further investigation to determine eligibility for listing in the CRHR and the NRHP. Potential Project impacts to archaeological sites within the APE are summarized in Table 12.

RECOMMENDATIONS

Archaeological Resources

Currently, three sparse lithic scatters appear eligible for CARIDAP treatment under Section 106. A subsurface testing program is recommended for six sites which possess a potential to qualify for the CRHR and are unevaluated under NRHP, and that will be potentially impacted by the Project. These are listed in Table 12.

Table 12. Archaeological Sites to be Evaluated

Temporary Number	Site Type	Date	Significance	Project Component
R-S-19c	Metate milling feature and CCS biface	Prehistoric	Potentially eligible under CRHR Criterion 4 and unevaluated under NRHP Criterion D	Solar field
R-S-407	Piled rock features	Prehistoric	Potentially eligible under CRHR Criterion 4 and unevaluated under NRHP Criterion D	Solar field

Temporary Number	Site Type	Date	Significance	Project Component
R-S-409	Metates and obsidian flake	Prehistoric	Potentially eligible under CRHR Criterion 4 and unevaluated under NRHP Criterion D	Solar field
R-S-604	Whole metate and metate fragment	Prehistoric	Potentially eligible under CRHR Criterion 4 and unevaluated under NRHP Criterion D	Solar field
R-S-720	Groundstone scatter (mano and metate fragments)	Prehistoric	Potentially eligible under CRHR Criterion 4 and unevaluated under NRHP Criterion D	Solar field
R-S-870	Lithic and groundstone scatter	Prehistoric	Potentially eligible under CRHR Criterion 4 and unevaluated under NRHP Criterion D	Solar field

Potential Project impacts to all of the identified archaeological sites are summarized in Table 13. Since the majority of archaeological resources that would be impacted by the construction of the plant site are not eligible for the CRHR or the NRHP, no mitigation is needed for these sites.

Table 13. Summary of Impacts to Archaeological Sites in the RSPP APE

Resource Number	Site Type/Historic Context	Date	Significance Potential	Project Impact
Archaeological Resources				
CA-KER-6837H	Old Highway 395 alignment and associated historic debris	Early to Mid-20th century	Potentially eligible under NRHP criterion A and CRHR Criterion 1; character defining features will not be impacted	Not significant; character defining features will be avoided
R-S-1	Tin can scatter	Post-1935	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-1b	Tin can scatter	Post-1935	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant

Resource Number	Site Type/Historic Context	Date	Significance Potential	Project Impact
R-S-1c	Tin can scatter	Post-1935	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-2	Claim post feature and tin can scatter	Post-1935	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-3	Tin can scatter	Post-1935	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-5a	Tin can scatter	Post-1935	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-5b	Historic debris scatter (cans, car parts, milled wood)	Mid-20th century	Not evaluated	None; in buffer zone
R-S-6	Rock-lined historic roadbed	Mid-20th century?	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-8	Claim post and can scatter	Post-1935	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-10	Claim post/rock pile feature	Post-1907	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-11	Claim post/rock pile feature	Early to Mid-20th century	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-12	Claim post/rock pile feature	Early to Mid-20th century	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-13	Claim post/rock pile feature	Early to Mid-20th century	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant

Resource Number	Site Type/Historic Context	Date	Significance Potential	Project Impact
R-S-15	Tin can scatter	Post-1935	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-19c	Metate milling feature and biface	Prehistoric	Potentially eligible under CRHR Criterion 4 and unevaluated under NRHP Criterion D	If eligible, impact less than significant with mitigation under CEQA; adverse effect under NHPA addressed by consultation between BLM, SHPO and interested parties
R-S-23	Claim post feature	Early to Mid-20th century	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-32	Tin can scatter	Post-1935	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-35	Historic debris scatter (cans, milled wood, ceramic and glass fragments)	Mid-20th century	Not evaluated	None; in buffer zone
R-S-37	Tin can and glass scatter	Early to mid-20th century	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-38	Tin can scatter	Post-1935	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-39b	Tin can scatter	Post-1935	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-40b	Tin can scatter	Post-1935	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-42	Tin can scatter	Post-1935	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant

Resource Number	Site Type/Historic Context	Date	Significance Potential	Project Impact
R-S-153	Tin can scatter with and wood	Early to mid-20th century	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-154	Lithic scatter of CCS flakes	Prehistoric	Appears to meet requirements for CARIDAP	Solar Field; if eligible, impact less than significant with mitigation under CEQA; no historic properties affected if addressed under CARIDAP for NHPA
R-S-155	Tin can and glass scatter	Early to mid-20th century	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-157	Tin can scatter	Post-1935	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-158	Tin can scatter	Post-1935	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-159	Tin can scatter	Early to mid-20th century	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-161	Tin can scatter	Post-1935	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-162/163	Tin can scatter	Early 20th century	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-166	Historic debris scatter (cans, milled wood, amethyst and other glass fragments)	Mid 20th century	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-167	Tin can scatter	Early to mid-20th century	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant

Resource Number	Site Type/Historic Context	Date	Significance Potential	Project Impact
R-S-325	Tin can scatter	Early to mid-20th century	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-407	Piled rock features	Prehistoric	Potentially eligible under CRHR Criterion 4 and unevaluated under NRHP Criterion D	If eligible, impact less than significant with mitigation under CEQA; adverse effect under NHPA addressed by consultation between BLM, SHPO and interested parties
R-S-409	Metates and obsidian flake	Prehistoric	Potentially eligible under CRHR Criterion 4 and unevaluated under NRHP Criterion D	If eligible, impact less than significant with mitigation under CEQA; adverse effect under NHPA addressed by consultation between BLM, SHPO and interested parties
R-S-410	Lithic scatter	Prehistoric	Appears to meet requirements for CARIDAP	Solar Field; if eligible, impact less than significant with mitigation under CEQA; no historic properties affected if addressed under CARIDAP for NHPA
R-S-603	Tin can scatter	Post-1935	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant

Resource Number	Site Type/Historic Context	Date	Significance Potential	Project Impact
R-S-604	Whole metate and metate fragment	Prehistoric	Potentially eligible under CRHR Criterion 4 and unevaluated under NRHP Criterion D	If eligible, impact less than significant with mitigation under CEQA; adverse effect under NHPA addressed by consultation between BLM, SHPO and interested parties
R-S-607	Tin can scatter	Early to mid-20th century	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-614	Cistern and well	Early to mid-20th century	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-616	Tin can scatter	Post-1935	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-618	Tin can scatter	Post-1935	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-700	Tin cans and glass fragments	Post-1935	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-720	Groundstone scatter (mano and metate fragments)	Prehistoric	Potentially eligible under CRHR Criterion 4 and unevaluated under NRHP Criterion D	If eligible, impact less than significant with mitigation under CEQA; adverse effect under NHPA addressed by consultation between BLM, SHPO and interested parties
R-S-726	Tin can scatter	Early to mid-20th century	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant

Resource Number	Site Type/Historic Context	Date	Significance Potential	Project Impact
R-S-728/731	Tin can scatter	Early to mid-20th century	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-739	Tin can scatter	Early to mid-20th century	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-742	Tin can scatter	Early 20th century	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-746	Tin can scatter	Early 20th century	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-750	Tin cans and barrel straps scatter	Early to mid-20th century	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-752	Tin can scatter	Early 20th century	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-757	Tin can scatter	Early 20th century	Not evaluated	None; in buffer zone
R-S-758	Lithic scatter	Prehistoric	Not evaluated	None; in buffer zone
R-S-773	Tin can scatter	Mid-20th century	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-781	Tin can scatter	Mid-20th century	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-850	Lithic scatter	Prehistoric	Appears to meet requirements for CARIDAP	Solar Field; if eligible, impact less than significant with mitigation under CEQA; no historic properties affected if addressed under CARIDAP for NHPA

Resource Number	Site Type/Historic Context	Date	Significance Potential	Project Impact
R-S-853	Tin can scatter	Post-1935	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-856	Tin can scatter	Post-1935	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-866	Tin can scatter	Mid-20th century	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-868	Historic road alignment	Pre-1915	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-869	Historic road alignment	Pre-1915	Not significant; does not meet NRHP or CRHR criteria or criteria for uniqueness	Not significant
R-S-870	Lithic and groundstone scatter	Prehistoric	Potentially eligible under CRHR Criterion 4 and unevaluated under NRHP Criterion D	If eligible, impact less than significant with mitigation under CEQA; adverse effect under NHPA addressed by consultation between BLM, SHPO and interested parties

If significant or potentially significant cultural resources cannot be avoided, the project owner should retain a qualified Cultural Resources Specialist to prepare and implement a data recovery program for the affected resources. The Principal Investigator for the mitigation program will meet the minimum Principal Investigator qualifications under the Secretary of the Interior's Standards for Archaeology.

A designated Cultural Resources Specialist should be available during the construction to inspect and evaluate any finds of potentially significant buried cultural material. The Cultural Resources Specialist will coordinate with the project owner's construction manager and environmental compliance manager to stop all work in the vicinity of the find until it can be assessed. If the discovery is determined to be not significant through consultation with CEC and BLM staff, work will be allowed to continue.

If in consultation with the CEC and BLM a discovery is determined to be significant, a mitigation plan should be prepared and carried out in accordance with State guidelines. If the resources cannot be avoided, a data recovery plan should be developed to ensure collection of sufficient information to address archaeological to historical research questions.

A professional technical report should be prepared documenting any assessment and data recovery investigations. The report should describe the methods and materials collected, and provide conclusions regarding the results of the investigations. The report should be submitted to the curatorial facility with the artifacts.

Cultural material collected as part of an assessment or data recovery mitigation should be curated at a qualified curation facility. Field notes and other pertinent materials should be curated along with the archaeological collection.

CHAPTER 7
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ATTACHMENT 1
FIGURES

Map Location

1 inch = 40 miles

0 40 80 Miles

Source: ESRI; AECOM 2009

Class III Cultural Resources Report for the Ridgecrest Solar Power Project

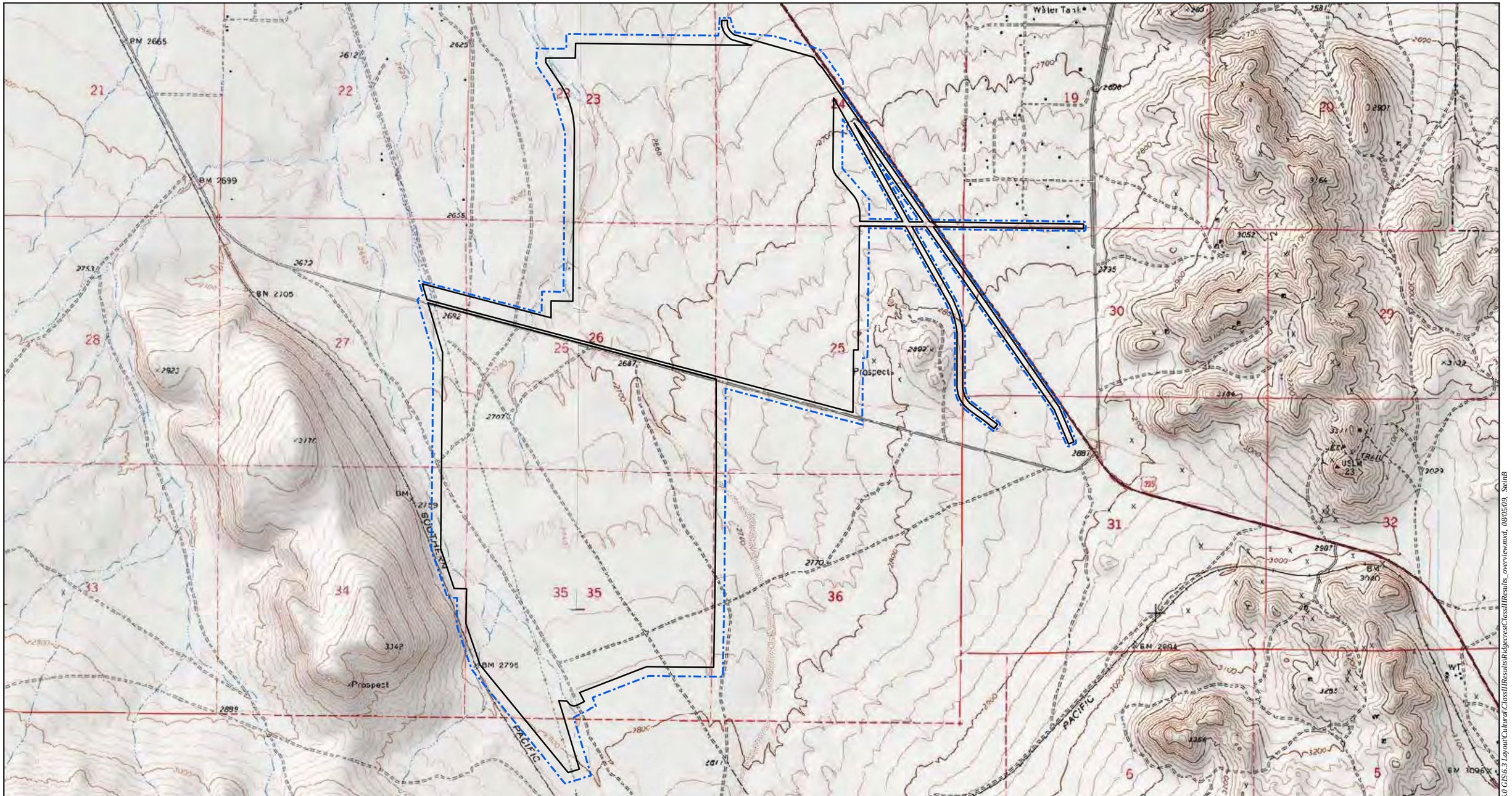
Figure 1
Regional Map

Solar Millennium

AECOM

Date: August 2009

Path: P:\2009\09080080 Sol Mil Ridgecrest\6.0 GIS\6.3 Layout\Reports\ClassIIIArchyReport\Fig1_RSPP_RegionalLocation.mxd, 08/05/09, SteinB



Map Location

Legend

- Archaeological Survey Area
- Disturbance Limits

Source: USGS; AECOM 2009

N
W
E
S

1 inch = 2,000 feet

0 2,000 4,000 Feet

Class III Cultural Resources Report for the Ridgecrest Solar Power Project

Figure 2
Project Area

Solar Millennium

AECOM

Date: August 2009

Path: P:\2009\09080080 Sol Mil Ridgecrest\6.0 GIS\6.3 Layout\Cultural\ClassIIIResults\RidgecrestClassIIIResults_overview.mxd, 08/05/09, SteinB

ATTACHMENT 2
PLATES

Plate 1. Site R-S-6. Road Alignment, View East.

Plate 2. Site R-S-10. Deflated Mining Claim, View East.

Plate 3. Site R-S-11. Mining Claim, View East.

Plate 4. Site R-S-12. Mining Claim, View North.

Plate 5. Site R-S-13. Mining Claim, View South.

Plate 6. Site R-S-23. Mining Claim Post.

Plate 7. Site R-S-35. Site Overview, View West.

Plate 8. R-S-150. Cleared Campsite, View West.

Plate 9. R-S-162/163. Machine-Soldered Can.

Plate 10. R-S-166. Artifact Scatter, View Northeast.

Plate 11. Site R-S-614. Stand Pipe, View South.

Plate 12. Site R-S-623/624. Locus 1, View Southwest.

Plate 13. Site R-S-726. Modified Can, View Northeast.

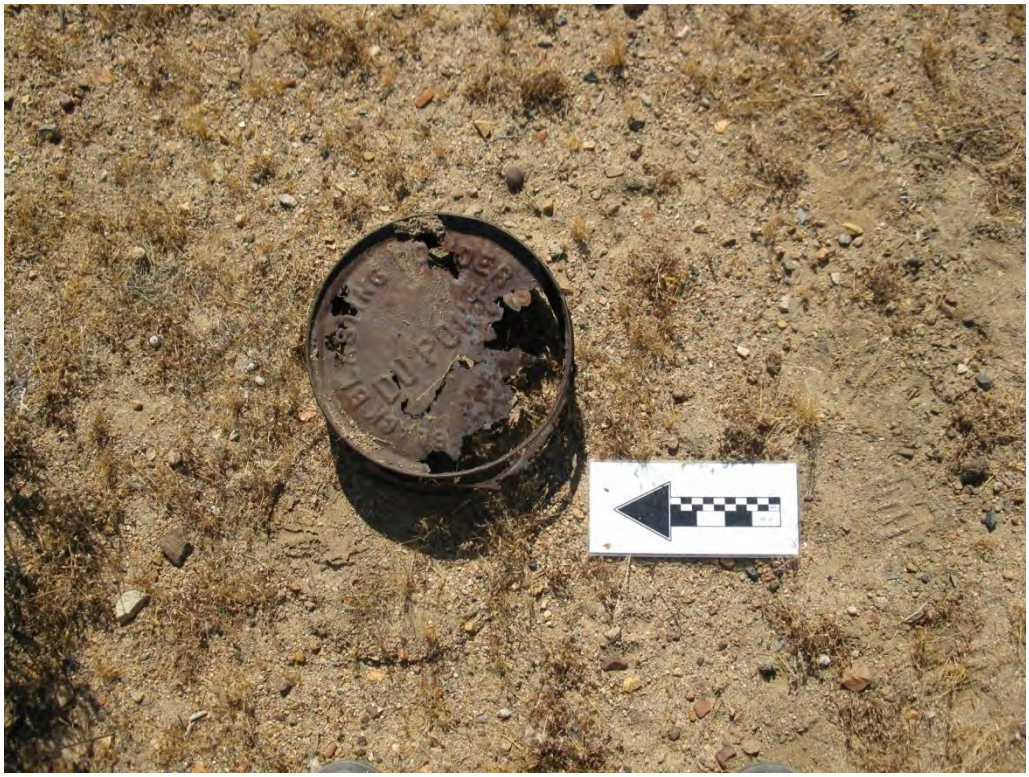


Plate 14. Site R-S-728/731. Du Pont Blasting Powder Can.

Plate 15. Site R-S-780. Road Alignment, View North.

ATTACHMENT 3
RESUMES

REBECCA MCCORKLE APPLE, RPA
Principal/Manager, Cultural Resources Group/
Senior Archaeologist

SUMMARY
Expertise with CEQA/NEPA requirements

Experience with Section 106 compliance and mitigation programs

Over 20 years experience in cultural resource management

EDUCATION
MA, Anthropology, San Diego State University, 1990

BA, Anthropology, San Diego State University, 1978

AFFILIATIONS
Society for American Archaeology

Society for California Archaeology

CERTIFICATIONS
Register of Professional Archaeologists

Certified Archaeology Consultant, County of San Diego

ACADEMIC AWARDS AND SCHOLARSHIPS
Phi Kappa Phi

Phi Beta Kappa

University Scholar, 1987 and 1988

PAPERS AND PUBLICATIONS
Setting the Scene: Interpretive Planning and Implementation in Old Town Historic State Park. Paper presented at the 42nd Annual Meeting for the Society of California Archaeology, Burbank, California (2008).

Mapping and Managing Pathway to the Past. Paper presented at the 22nd Annual ESRI International User Conference, San Diego, California (2002).

Introduction to Recent Archeological Investigations at the Salton Sea Test Base, Imperial County California. Proceedings of the Society for California Archaeology, Volume 12. Fresno, California (1999).

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A Lake Mojave Period Site Near Silver Lake, California (with A. York). Presented at the 26th Annual Meeting of the Society for California Archaeology, Pasadena (1992).

Recent Archaeological Investigations in the North Las Vegas Valley (with J.H. Cleland and M.S. Kelly). In Crossing the Borders: Quaternary Studies in Eastern California and Southwestern Nevada. San Bernardino County Museum Association Special Publication (1991).

Rebecca Apple has over 20 years of experience in cultural resource management and serves as senior archaeologist for EDAW. Her experience includes managing cultural resources compliance efforts for large complex projects. She is knowledgeable in the procedures and guidelines associated with implementation of NHPA and CEQA. She has managed numerous cultural resource projects, including prehistoric, historic, and ethnographic studies. She has directed inventories, evaluations, data recovery efforts, and monitoring programs. She has also prepared management plans and conducted feasibility studies. Her work frequently includes consultation with municipal, state, and federal agencies, as well as Native American representatives and the public. As part of interdisciplinary teams, she has managed cultural resources investigations and authored cultural resource sections for ISs, EAs, EIRs, and EISs. Her experience includes cultural resource investigations for pipelines, transmission lines, power plants, highways, landfills, water resource facilities, military installations, and commercial and residential development.

ENERGY AND TRANSMISSION PROJECTS

CONFIDENTIAL PROJECT
Task Manager
CLIENT: CONFIDENTIAL CLIENT
Responsible for oversight of archaeological and architectural surveys, technical reports, coordination with CEC staff, and preparation of AFC sections for a 2,000–acre solar project.

Yuma Lateral Pipeline Project, Yuma, AZ
Project Manager
CLIENT: North Baja LLC (TransCanada)
Responsible for cultural services, conducting records searches, archival research, Native American consultation, and survey of the preferred alignment. Identified resources included the Yuma Valley Railroad, a National Register-eligible property.

Harper Lake Cultural Resources Constraints Study, San Bernardino County, CA
Task Manager
CLIENT: ENSR/Harper Lake, LLC
Responsible for field reconnaissance and constraints analysis for a proposed 3,300-acre specific plan area. Potential development included a diary and energy park.

North Baja Pipeline Project, Ehrenberg, Arizona to Mexican Border
Project Manager
CLIENT: Foster Wheeler
Responsible for cultural services, conducting records searches, archival research, Native American consultation, survey of the preferred alignment and alternatives, site evaluation, and data recovery.

DeAnza Pipeline Constraints and Permitting Analysis, Ehrenberg, AZ to Calexico, CA
Resource Manager
CLIENT: AEP
Responsible for cultural services, providing information on distribution of natural and cultural resources along the proposed pipeline corridor in report

REBECCA MCCORKLE APPLE

format, with accompanying maps showing these resources and other constraints.

SEMPRA On-call Cultural Services, CA
Resource Manager
CLIENT: SEMPRA
Resource manager for cultural resource task orders. Most recent task order dealt with artifact curation for a City project.

Imperial Irrigation District Cultural Survey, Imperial County, CA
Project Manager
CLIENT: Imperial Irrigation District
Responsible for cultural resources component of two transmission line studies. Survey and testing were conducted in conjunction with pole replacement along the R and L transmission lines.

Mead-Adelanto Transmission Line, Clark County, NV, and San Bernardino County, CA
Resource Manager
CLIENT: Los Angeles Department of Water and Power
Cultural resource survey.

Sycamore Canyon Substation to Rancho Carmel Substation 69-kV Transmission Line Project, San Diego County, CA
Project Manager
CLIENT: San Diego Gas & Electric
Responsible for cultural resources component of a PEA document for submittal to the CPUC that evaluated the potential environmental impacts of a proposed 69-kV transmission line.

Coso Known Geothermal Resource Area, Inyo County, CA
Resource Manager
CLIENT: Los Angeles Department of Water and Power
Responsible for data recovery investigations at two geothermal well-pads located in the Sugarloaf Mountain Obsidian Source National Register District.

Santa Ynez Unit Development, Santa Barbara County, CA
Field Director
CLIENT: Exxon Corporation
Supervised data recovery excavations of a prehistoric coastal site.

Big Creek Expansion Project Transmission Line, South Central, CA
Data Manager
CLIENT: Southern California Edison
Responsible for cultural resource impact assessment of alternative routes for a proposed transmission line from the Big Creek Hydroelectric Project in the Sierras to the Los Angeles Basin.

Kern River Gas Transmission Project, WY, UT, NV, and CA
Task and Resource Manager
CLIENT: Kern River Gas Transmission Company
Inventory, evaluation, data recovery, and construction monitoring for California portion of this Class I overview.

Argus Cogeneration Expansion, San Bernardino and Inyo Counties, CA
Project Archaeologist
CLIENT: Kerr-McGee
Supervised cultural resource survey and documentation for a water pipeline.

REBECCA MCCORKLE APPLE

Geothermal Public Power Line Project, North Central CA
Resource Manager
CLIENT: Sacramento Municipal Utility District
Responsible for cultural resource surveys for a proposed transmission line from the Geysers Geothermal Area to Sacramento.

Southwest Powerlink 500-kV Transmission Line EIR/EIS, Imperial and San Diego Counties, CA
Resource Manager
CLIENT: San Diego Gas & Electric
Participated in Section 106 compliance activities, including data recovery, analysis, and report preparation.

MILITARY PROJECTS

Integrated Cultural Resources Management Plan and Cultural Affiliation Study, Chocolate Mountains Aerial Gunnery Range, Marine Corps Air Station Yuma, Riverside, and Imperial Counties, CA
Co-Principal Investigator
CLIENT: U.S. Navy, Naval Facilities Engineering Command, Southwest and MCAS Yuma
Preparing an ICRMP for CMAGR to guide cultural resources compliance efforts to facilitate CMAGR mission. ICRMP will summarize existing inventory and provide a process to streamline the inventory and evaluation process. Components of the ICRMP are a Regional Archaeological Research Design and a Cultural Affiliation Study.

Archaeological Evaluation of Sites on San Clemente Island, Los Angeles County, CA
Principal Investigator
CLIENT: U.S. Navy Southwest Division and Navy Region Southwest
Responsible for National Register of Historic Places Evaluation of four archaeological sites on San Clemente Island.

Cultural Resources Survey and Evaluation for Spring Hill and Associated Access Roads, Riverside County, CA
Principal Investigator
CLIENT: U.S. Navy, Naval Facilities Engineering Command, Southwest and MCAS Yuma
Directed archaeological resource survey of proposed facility to improve communications for aircraft and vehicles with the Chocolate Mountain Aerial Gunnery Range (CMAGR). Two sites were evaluated for eligibility to the National Register of Historic Places. One site appeared to contain very limited information potential and did not qualify for the NRHP. Site CA-RIV-8236 appeared to possess information relevant to addressing regional research issues and was recommended eligible for the NRHP.

Integrated Cultural Resources Management Plan Naval Base Point Loma, San Diego, CA
Project Manager
CLIENT: U.S. Navy, Naval Facilities Engineering Command and Naval Base Point Loma
Preparing an ICRMP for CMAGR to guide cultural resources compliance efforts to facilitate CMAGR mission. ICRMP will summarize existing inventory and provide a process to streamline the inventory and evaluation process. Components of the ICRMP are a Regional Archaeological Research Design and a Cultural Affiliation Study.

REBECCA MCCORKLE APPLE

Archaeological Survey for the Chocolate Mountains Aerial Gunnery Range Central Training Area, Marine Corps Air Station Yuma, Imperial County, CA
Resource Manager
CLIENT: U.S. Navy, Southwest Division and MCAS Yuma
Responsible for cultural resource survey of proposed central training area on CMAGR. The 1,580-acre survey identified fours sites on R-2507S and four on R-2507 N. One of the sites on the South Range (the remains of a ranch complex) and three of the sites on the North Range (rock art, ceramics scatter, and a rock ring) were identified as potentially eligible for the National Register of Historic Places.

Chocolate Mountains Aerial Gunnery Range: Cultural Resources Survey of 12 Targets and Monitoring of 14 Archaeological Sites, Riverside and Imperial Counties, CA
Principal Investigator
CLIENT: U.S. Navy, Southwest Division and MCAS Yuma
Directed cultural resource survey of 1,523 acres and site monitoring program on CMAGR. Inventoried site types were lithic scatters, trail segments, pot-drops, rock features, and a mining area. Monitoring program included lithic scatters, rock art, cleared circles, mining complexes, and a segment of historic road.

Cultural Resources Survey of Six Areas on the Chocolate Mountains Aerial Gunnery Range, Imperial County, CA
Principal Investigator
CLIENT: U.S. Navy, Southwest Division and MCAS Yuma
Directed cultural resource survey of proposed Forward Air Reporting Position, range access, and target areas.

Evaluation of 24 Sites at the Chocolate Mountains Aerial Gunnery Range, Imperial County, CA
Principal Investigator
CLIENT: U.S. Navy, Southwest Division and MCAS Yuma
Responsible for National Register of Historic Places evaluation of 24 sites in the Chocolate Mountains.

Historic and Archaeological Resources Protection Plan, Chocolate Mountain Aerial Gunnery Range, Imperial and Riverside Counties, CA
Project Manager
CLIENT: U.S. Navy, Southwest Division and MCAS Yuma
Directed archival archaeological research and field visit for the Chocolate Mountain Aerial Gunnery Range. Prepared HARP Plan for the installation.

Evaluation of Two Sites, MCAS Yuma, AZ
Project Manager
CLIENT: U.S. Navy, Southwest Division and MCAS Yuma
Evaluation of two archaeological sites near the MCAS Yuma airfield.

San Clemente Island Operations Management Plan EIS, Naval Auxiliary Air Field, San Clemente Island, Los Angeles County, CA
Resource Manager
CLIENT: U.S. Navy, Southwest Division and SRS Technologies
Assessed current cultural resource inventory and supplemented in specific areas. Project involved preparation of technical report documenting inventory efforts, including shipwreck study. Impact analysis conducted for existing and proposed military operations on San Clemente Island.

REBECCA MCCORKLE APPLE

Indefinite Quantity Contract for Cultural Resource Services, CA and AZ
Project Manager
CLIENT: U.S. Navy, Southwest Division
Contract manager for multiple task orders on a variety of projects involving archaeological surveys and archaeological evaluations throughout California and Arizona. Tasks include managing budget, overseeing staff, acting as point of contact, and preparation of final reports.

Archaeological Support for Environmental Assessment of Wind Farm Project, Naval Auxiliary Landing Field, San Clemente Island, Los Angeles County, CA
Resource Manager
CLIENT: U.S. Navy, Southwest Division
Prepared cultural resource portion of the EA and placed protective signs at nine archaeological sites near or adjacent to the Wind Farm construction area.

Special Warfare Training and Range Survey, Naval Auxiliary Landing Field, San Clemente Island, Los Angeles County, CA
Senior Archaeologist
CLIENT: U.S. Navy, Southwest Division
Performed cultural resource survey of proposed training ranges on San Clemente Island. Prepared technical report in support of an EA.

Evaluation of Six Sites near the Missile Impact Range, Naval Auxiliary Landing Field, San Clemente Island, Los Angeles County, CA
Project Manager
CLIENT: U.S. Navy, North Island, Natural Resources Office
Provided technical assistance for the NRHP evaluation of six archaeological sites on the Central Plateau of San Clemente Island.

Historic and Archaeological Resources Protection Plan, MCAS Yuma, AZ
Project Manager
CLIENT: U.S. Navy, Southwest Division and MCAS Yuma
Directed archival archaeological research and building inventory for MCAS Yuma. Lead author on Historic and Archeological Resources Protection Plan for the installation.

Pumped-Hydro Storage Wind/Energy System, Naval Auxiliary Air Field, San Clemente Island, Los Angeles County, CA
Resource Manager
CLIENT: U.S. Navy, Southwest Division
Relocated and recorded 76 archaeological sites in proposed water storage and wind/energy development area. Prepared existing conditions report.

Tactical Aircrew Combat Training System Range Upgrade, MCAS Yuma, AZ
Project Manager
CLIENT: U.S. Navy, Southwest Division
Performed cultural resource survey of proposed transmission line and 17 threat emitter stations. Prepared testing plan.

Cultural Resource Inventory Survey at Salton Sea Test Base, Imperial County, CA
Project Archaeologist
CLIENT: U.S. Navy, Southwest Division
Conducted intensive cultural resource survey for approximately 6,000 acres and evaluation program for 170 sites. Survey and test excavations were conducted in compliance with the NHPA, NAGPRA, and other federal regulations.

REBECCA MCCORKLE APPLE

Historic and Archeological Resources Protection Plans, Los Angeles, Imperial, and San Diego Counties, CA
Resource Manager
CLIENT: U.S. Navy, Southwest Division
Prepared HARP Plans for the following six Naval installations: Morris Dam Test Facility, Azusa; Naval Air Facility, El Centro; Naval Shipyard, Long Beach; Point Loma Complex, San Diego; Naval Station, San Diego; and the Naval Radio Receiving Facility, Imperial Beach.

Cultural Resources Technical Studies, MCAS Yuma, Yuma Training Range Complex, AZ and CA
Project Archaeologist
CLIENT: U.S. Navy, Southwest Division
Directed cultural resource sample survey in the Chocolate Mountains Gunnery Range.

Mission Trails Regional Park Explosive Ordnance Demolition Environmental Assessment, San Diego County, CA
Project Manager
CLIENT: U.S. Army Corps of Engineers
Directed cultural resource survey in support of an environmental assessment addressing the removal of ordnance from the former location of Camp Elliott.

Archeological Survey of Sierra I Impact Area, MCB Camp Pendleton, San Diego County, CA
Resource Manager
CLIENT: U.S. Marine Corps
Performed cultural resource survey of approximately 2,500 acres on the northern portion of MCB Camp Pendleton.

WATER PROJECTS

Emergency Storage Project, San Diego County, CA
Resource Manager
CLIENT: San Diego County Water Authority
Responsible for the cultural Resources Evaluation Program and Treatment Program. Assisted SDCWA with Native American consultation, implementation of a programmatic agreement, and coordination with ACOE. Project involved evaluation of over 20 cultural resources including San Vicente Dam. Under a Historic Properties Treatment Plan prepared by EDAW, research designs were prepared and carried out for prehistoric and historic period resources. Treatment measures included data recovery, site stabilization, and preparation of Historic American Engineering Record documentation for San Vicente Dam. Prepared Public Interpretive Plan.

North City Water Treatment Plant, San Diego, CA
Resource Manager
CLIENT: City of San Diego Water Department
Managed cultural resource component of the North City Water Treatment Plant EIR. Project included survey and limited testing.

Balboa Park Wastewater Treatment, San Diego County, CA
Archaeologist
CLIENT: City of San Diego
Participated in cultural resource documentation for a facility siting study.

Mission Valley Water Reclamation Plant, San Diego County, CA
Resource Manager
CLIENT: City of San Diego
Responsible for archaeological testing and monitoring program in an area of potential archaeological sensitivity.

REBECCA MCCORKLE APPLE

North Metro Interceptor Sewer, San Diego County, CA
Resource Manager
CLIENT: City of San Diego
Responsible for cultural resource investigations for constraints analysis of proposed sewer alignments.

Freeman Junction, Kern County, CA
Resource Manager
CLIENT: Los Angeles Department of Water and Power
Responsible for the survey of portions of 1st Los Angeles Aqueduct for cap strengthening project.

Eastern Sierra Hydroelectric Relicensing, Mono and Inyo Counties, CA
Field Director
CLIENT: Southern California Edison
Participated in assessment of 22 sites within three hydroelectric project areas.

Pit 3, 4, and 5 Hydroelectric Relicensing Project, Shasta County, CA
Project Archaeologist
CLIENT: Pacific Gas and Electric Company
Directed limited data recovery efforts at six archaeological sites threatened by shoreline erosion prior to stabilization.

Rose Canyon Trunk Sewer EIR, San Diego County, CA
Archaeologist
CLIENT: City of San Diego
Conducted windshield reconnaissance and records search and prepared overview for proposed sewer.

Pamo Dam and Reservoir, San Diego County, CA
Archaeologist
CLIENT: San Diego County Water Authority
Assisted in preparation of research design and conducted archaeological monitoring of geotechnical investigations.

Reservoir 657-2, San Diego County, CA
Archaeologist
CLIENT: Otay Water District
Supervised survey and report preparation of proposed covered reservoir site in Spring Valley.

Mokelumne River Hydroelectric Relicensing, Alpine, Amador, and Calaveras Counties, CA
Crew Chief
CLIENT: Pacific Gas and Electric Company
Participated in archaeological test excavations and NRHP evaluations.

TRANSPORTATION PROJECTS

Southern Nevada Supplemental Airport EIS, Clark County, NV
Co-Principal Investigator
CLIENT: ENSR, VHB, and Clark County Department of Aviation
Responsible for cultural resource inventory of over 17,000 acres for a BLM and transfer. Class III survey also included Radar and Navaid facilities and retention basins. Class I studies for multiple alternatives. Project involved consultation with BLM, USFS, FAA, SHPO, Native American groups, and 106 other interested parties.

REBECCA MCCORKLE APPLE

SR-76 East, San Diego County, CA
Principal Investigator
CLIENT: Caltrans and SANDAG
Responsible for the cultural resource inventory and evaluation program for the SR-76 East widening project. Oversaw the survey of three alternative routes for archaeological and architectural resources, along with Extend Phase I excavations, ASR, HRER, and HPSR.

SR-56, San Diego County, CA
Resource Manager
CLIENT: City of San Diego
Responsible for the cultural resource evaluation program for the SR-56 EIR. Evaluated 16 sites along two alternative freeway alignments.

La Costa Avenue/I-5 Interchange, San Diego County, CA
Project Archaeologist
CLIENT: Caltrans
Directed an archaeological survey of proposed interchange improvements in the City of Carlsbad. The project requires close coordination with City and Caltrans staff.

SA 680/SF 728 Roadway Project Environmental Studies/EIR, San Diego County, CA
Project Archaeologist
CLIENT: County of San Diego
Directed the test excavation and NRHP evaluation of four sites on the proposed project alignment. These investigations addressed the potential association of the sites with the Harris Site Complex.

SR-79, Riverside County, CA
Resource Manager
CLIENT: Riverside County Transportation Commission
Responsible for cultural resource investigations for widening and realigning two highway segments. Prepared cultural resource sections for ISs and coordinated archaeological survey reports, historic architectural survey reports, and historic study report.

Victorville La Mesa/Nisqually Road Overpass, San Bernardino County, CA
Project Archaeologist
CLIENT: City of Victorville
Supervised survey and prepared positive archaeological survey report and historic property survey report.

LANDFILL AND WASTE-RELATED PROJECTS

Elsmere Canyon Landfill, Los Angeles County, CA
Project Archaeologist
CLIENT: Elsmere Corporation
Directed cultural resource assessment for the EIR/EIS.

Southwest San Diego Landfill Siting Study, San Diego County, CA
Resource Manager
CLIENT: County of San Diego
Responsible for cultural resource assessments of potential landfill sites throughout the southwestern quadrant of San Diego County. Ranked the relative sensitivity of each potential site.

REBECCA MCCORKLE APPLE

LAND DEVELOPMENT PROJECTS

Heber Dunes Off-Highway Vehicle Park, Imperial County, CA
Cultural Resources Project Manager
CLIENT: State of California Department of Parks and Recreation Off-Highway Motor Vehicle Recreation Division
State Parks recently acquired Heber Dunes and is in the process of preparing a General Plan and EIR for the Park. As part of these efforts approximately 350 acres were inventoried for cultural resources.

Laborde Canyon Off-Highway Vehicle Park, Riverside County, CA
Cultural Resources Project Manager
CLIENT: State of California Department of Parks and Recreation Off-Highway Motor Vehicle Recreation Division and Riverside County Economic Development Authority
The areas of the SVRA that would be open to some level of OHV use would cover approximately 1,480 acres within the 2,640-acre Laborde Canyon site. EDAW was contracted to conduct environmental studies for the Laborde Canyon site, including a cultural resource records search and an intensive cultural resources pedestrian survey of the proposed OHV park. Two prehistoric sites and the Lockheed Facility (Beaumont Site No. 2) were recorded within the study area during the survey. A preliminary assessment of the complex at Beaumont Site No. 2 was made to determine eligibility for the California Register of Historical Resources.

Data Recovery for Goat Canyon Retention Basin Border Field State Park, San Diego County, CA
Cultural Resources Project Manager
CLIENT: State of California Department of Parks and Recreation
Conducted data recovery under stringent time constraints based on wildlife issues and construction schedule. Excavation of 50 units at CA-SDI-16,047 Locus B indicated that the site was a buried temporary camp whose occupants exploited littoral, near-shore, and terrestrial subsistence resources. Data recovery investigations successfully collected data important in local and regional prehistory. The identification of a single component locus dating to the Archaic-Late transition is an important contribution.

Fairbanks Country Villas, San Diego, CA
Project Manager
CLIENT: Del Mar Land Management Company
Prepared testing plan and implemented testing program for proposed residential development.

Inmate Reception Center, San Diego County, CA
Project Manager
CLIENT: County of San Diego
Responsible for testing and data recovery of half a city block in downtown San Diego.

343 Sansome Street, San Francisco County, CA
Project Archaeologist
CLIENT: Gerald D. Hines Interests
Participated in archaeological data recovery excavations at a Gold Rush-period site in downtown San Francisco.

North Las Vegas Land Transfer, Clark County, NV
Project Archaeologist
CLIENT: City of North Las Vegas
Directed cultural resource survey of 4,000-acre land transfer from the BLM to the City of North Las Vegas.

REBECCA MCCORKLE APPLE

Apex Industrial Park, Clark County, NV
Project Archaeologist
CLIENT: Kerr-McGee
Conducted archaeological survey and NRHP evaluations for BLM land transfer.

Walnut Hills Subdivision, San Diego County, CA
Archaeological Monitor
CLIENT: Fargo Industries
Conducted archaeological monitoring of site preparation and grading in San Marcos.

Alcoholism Service Center, San Diego County, CA
Project Archaeologist
CLIENT: Fellowship Center, Inc.
Conducted archaeological survey of proposed rehabilitation center adjacent to Mission San Luis Rey in Oceanside.

OTHER PROJECTS

Peñasquitos Park, San Diego County, CA
Archaeologist
CLIENT: County of San Diego
Participated in survey, including documentation of three adobes.

Old Town State Historic Park, San Diego County, CA
Archaeologist
CLIENT: California Department of Parks and Recreation/FIR
Participated in excavation before placement of underground utilities in San Diego.

Rancho Guajome Adobe, San Diego County, CA
Archaeologist
CLIENT: County of San Diego
Participated in excavation, cataloging, and analysis for work conducted before building stabilization efforts.

Anza Borrego Desert State Park, Riverside County, CA
Archaeologist
CLIENT: California Department of Parks and Recreation
Participated in resource inventory survey.

Glamis Imperial Project, Imperial County, CA
Archaeologist
CLIENT: Glamis Imperial Corporation
Conducted cultural resource survey for proposed gold mine.

Fort Cady Boric Acid Mining and Processing Facility, San Bernardino County, CA
Project Archaeologist
CLIENT: Fort Cady Minerals Corporation
Directed survey, testing, and evaluation of 24 sites in Newberry Springs.

Rialto-to-El Paso Fiber Optics Cable, San Bernardino and Riverside Counties, CA
Archaeologist
CLIENT: U.S. Sprint
Conducted cultural resource survey along western extent of project.

REBECCA MCCORKLE APPLE

SELECTED REPORTS

A View Across the Cultural Landscape of the Lower Colorado Desert: Cultural Resource Investigations for the North Baja Pipeline Project (with Jamie Cleland). Prepared for TetraTech and North Baja, LLC. EDAW, Inc., San Diego (2003).

Cultural Resources Evaluation for the North Baja Gas Pipeline (with C. Dolan, J. Underwood, and J.H. Cleland). Prepared for Foster Wheeler Environmental, Inc. EDAW, Inc., San Diego (2001).

Historical and Archeological Resources Protection Plan (HARP) for the Chocolate Mountain Aerial Gunnery Range, Imperial County, California (with J.H. Cleland). Prepared for U.S. Navy Southwest Division, Naval Facilities Engineering Command. EDAW, Inc., San Diego (2001).

Archaeological Resources Evaluation Report State Route 56 Between Coast and Foothill, City of San Diego, California (with J.H. Cleland, A. York, T. Wahoff, and D. James). Prepared for the City of San Diego. KEA Environmental, Inc., San Diego (1997).

Archeological Survey and Evaluation Program for the Salton Sea Test Base, Imperial County, California (with A. York, A. Pignolo, J.H. Cleland, and S. Van Wormer). Prepared for U.S. Navy, Southwest Division, Naval Facilities Engineering Command. KEA Environmental, Inc., San Diego (1997).

Two Sides of the River: Cultural Resources Technical Studies Undertaken as Part of Environmental Documentation for Military Use of the MCAS Yuma Training Range Complex in Arizona and California (with G. Woodall, L. Peterson, and J.S. Bruder). Prepared for the Southwest Division Naval Facilities Engineering Command and MCAS Yuma. Dames & Moore Intermountain Cultural Resource Services Research Paper No. 5, San Diego (1993).

Bank Stabilization at Lake Britton: Limited Data Recovery (with A. MacDougall). Prepared for Pacific Gas and Electric. Dames & Moore, San Diego (1990).

Kern River Pipeline Cultural Resource Survey Report (with J.H. Cleland, A.L. York, and P. Friedman). Submitted to the Federal Energy Regulatory Commission. Dames & Moore, San Diego (1990).

Sugarloaf Mountain in Prehistory: Archaeological Testing and Data Recovery for the Exploratory Drilling Program II and the Unit No. 1 Project (with J.H. Cleland and E. Nilsson). Prepared for the Los Angeles Department of Water and Power. Dames & Moore, San Diego (1990).

An Archaeological Research Design for the Evaluation of Cultural Resources in Pamo Valley, San Diego, California (with J.H. Cleland, J.R. Cook, and J. Schaefer). Wirth Environmental Services, a Division of Dames & Moore, San Diego (1985).

STACEY JORDAN, PhD
Senior Archaeologist

Dr. Stacey Jordan has been professionally involved in the fields of archaeology and history for over a decade. Her specialty in historical archaeology combines the use of material culture and the archival record in anthropologically driven analyses of cultural resources. Dr. Jordan was the recipient of the Excellence Fellowship at Rutgers University, as well as multiple research grants from the Wenner-Gren Foundation for Anthropological Research. She is the author of various publications as well as numerous papers that have been presented at national and international conferences. Dr. Jordan is particularly well versed in the analysis of historical ceramics and has taught courses in the method and theory of historical archaeology as well as in the identification and analysis of historical ceramics and glass. She has extensive experience in archival research and historical writing, and has worked on projects spanning from early colonial contact to the recent past. In addition, Dr. Jordan has served on a variety of prehistoric and historic excavations both in the United States and abroad. Supplementing her work in cultural resources management, she conducts research on ceramics, community development, and identity construction in colonial South Africa.

EDUCATION
Ph.D., Anthropology, Rutgers University, 2000

M.Phil., Anthropology, Rutgers University, New Brunswick, NJ, 1995

M.A., Anthropology, Rutgers University, 1994

B.A. with High Distinction, Anthropology
University of California, Berkeley, 1991

AFFILIATIONS
Society for American Archaeology

Register of Professional Archaeologists

CERTIFICATIONS AND APPROVALS
County of San Diego Approved Consultant List for Archaeological Resources

County of San Diego Approved Consultant List for Historic Resources

County of Riverside Approved Cultural Resources Consultant (No. 222)

AWARDS
2008 - San Diego AEP Outstanding Environmental Resource Document Finalist, *Boulder Oaks Open Space Preserve* (winner Honorable Mention at September 25 AEP Awards)

2008 - Riverside County Planning Department, *Certificate of Appreciation for the Cultural Resources Working Group*

2006 - City of San Diego Historical Resources Board Award of Excellence, *CCDC Downtown San Diego African-American Heritage Study*

2005 - California Preservation Foundation Preservation Design Award, *CCDC Downtown San Diego African-American Heritage Study*

2005 - AEP Outstanding Public Involvement/ Education Program, *CCDC Downtown San Diego African-American Heritage Study*

2005 - APA, San Diego Section Focused Issue Planning Award Honorable Mention, *CCDC Downtown San Diego African-American Heritage Study*

GRANTS AND FELLOWSHIPS
2003, Wenner-Gren Foundation for Anthropological Research Individual Research Grant Team Member: "Analysis and Interpretation of Archaeological Residues from Excavations at the Castle of Good Hope, Cape, South Africa'"

1996-1997, Wenner-Gren Foundation for Anthropological Research, Predoctoral Research Grant #6021

1994-1995, Wenner-Gren Foundation for Anthropological Research, Predoctoral Research Grant #5739

1992-1996, Rutgers University Excellence Fellowship

PROJECT EXPERIENCE

Bear Valley Parkway Cultural Resources Study
San Diego County, CA
Project Manager
CLIENT: County of San Diego Department of Public Works
Project Manager of ongoing cultural resources inventory and evaluation efforts for the proposed expansion of Bear Valley Parkway in unincorporated northern San Diego County. The project involves field survey for archaeological and architectural resources, Native American coordination and identified resource evaluation according to County RPO and California Register eligibility criteria.

San Nicolas Island Archaeological Evaluations, Ventura County, CA
Project Manager
CLIENT: NAVFAC Southwest
Project Manager for ongoing archaeological evaluation of prehistoric sites CA-SNI-316, 361 and 550 on San Nicolas Island in the Channel Islands of the California Bight. This project involves the significance testing and analysis of Middle and Late Holocene sites and synthesis of results with existing island-wide archaeological data.

Jefferson National Expansion Memorial Environmental Impact Study
Senior Archaeologist, St. Louis, MO
CLIENT: U.S. National Park Service
Co-author for prehistoric and historical archaeology background and impact analysis sections related to the proposed expansion of the Jefferson National Expansion Memorial (Gateway Arch) in St. Louis, Missouri and East St. Louis, Illinois.

Heber Dunes SVRA General Plan & Environmental Impact Report
Cultural Resources, Imperial County, CA
Cultural Resources Task Manager/Senior Archaeologist
CLIENT: California State Parks
Ongoing Cultural Resources Phase I Survey and Inventory of Heber Dunes State Vehicular Recreation Area. This project involves the analysis of existing cultural resources conditions, assessment of proposed facilities maintenance and development impacts, and recommendations for the treatment of cultural resources.

STACEY JORDAN, PhD

Emergency Storage Project Cultural Resources – Lake Hodges, San Diego County, CA
Senior Archaeologist
CLIENT: San Diego County Water Authority
Senior Archaeologist and report co-author for data recovery project at site CA-SDI-10,920 along Lake Hodges. The project involves integration of regional data to provide context for the analysis of CA-SDI-10,920 and examination of the Late Prehistoric occupation of the San Dieguito River Valley around present-day Lake Hodges.

Banning State Water Transmission Line, Riverside County, CA
Senior Archaeologist
CLIENT: City of Banning
Task Manager for cultural resources sensitivity analysis for the construction of an approximately 2.4-mile long pipeline within the rights-of-way of paved streets within the unincorporated area of the county. As part of this analysis a records search of the Eastern Information Center was conducted by EDAW archaeologists to identify cultural resources studies and identified resources within a one-mile radius of the Banning State Water Transmission Line's proposed alignment. EDAW also requested a sacred lands file search from the Native American Heritage Commission.

Old Town State Historic Park Jolly Boy Project, San Diego, CA
Senior Archaeologist
CLIENT: California State Parks
Contributor to the archaeological data recovery report for the Jolly Boy Saloon site in Old Town San Diego State Historic Park. Contributions to this project involve the synthesis of existing data on Old Town San Diego and development of an archaeological and historic context for the analysis and interpretation of recovered material.

Boulder Oaks, Sycamore/Goodan, El Capitan/Oakoasis/ El Monte/Steltzer Open Space Preserve and Regional Park Cultural Resources Inventories, San Diego County, CA
Project Director
CLIENT: County of San Diego Department of Parks and Recreation
Project director for Phase I pedestrian survey and cultural resource inventories of Open Space Preserves and Regional Parks in unincorporated central San Diego County. The projects involved the identification and documentation of prehistoric and historic resources, built environment features, and existing infrastructure to assist the Department of Parks and Recreation in resource management. Inventory reports included extensive archival research and historical narrative, an inventory of identified sites, and management guidelines for potentially significant cultural resources developed in consultation with Native Americans where appropriate. Work done before joining EDAW.

State Route 94 Operational Improvements Inventory and Evaluation, San Diego County, CA
Project Director
CLIENT: Parsons Brinkerhoff
Director of cultural resources efforts and Caltrans coordination for survey, documentation, and evaluation related to proposed operational improvements along an 18-mile stretch of State Route 94 in San Diego County. Development of Caltrans-format documentation for archaeological and built environment resources. Work done before joining EDAW.

Santa Rosa San Jacinto Mountains National Monument Trails Inventory, Riverside County, CA
Project Director
CLIENT: Bureau of Land Management

Directed cultural resources inventory of trail systems within the Santa Rosa San Jacinto Mountains National Monument, including documentation of prehistoric and historic routes and associated resources within trail corridors. Completed cultural resources inventory report for BLM, including BLM-format GIS database. Work done before joining EDAW.

Southern California Edison As-Needed Archaeological Services, Statewide
Project Director
CLIENT: Southern California Edison
Director of on-call survey, resource identification, documentation, testing, and evaluation efforts related to Southern California Edison infrastructure replacements and development throughout the state on both private and public lands, including BLM, USACE, and USFS. Product involves completion of State of California DPR forms, assessment of resource significance according to NRHP eligibility and CEQA significance criteria, and management recommendations. Work done before joining EDAW.

Hercules Gunpowder Point Historical Resources Evaluation, Chula Vista, CA
Project Director
CLIENT: U.S. Fish and Wildlife Service
Project director for the historical evaluation of the Hercules Powder Company Gunpowder Point facility in Chula Vista. Supervised archival and historical research, directed field survey and documentation efforts, and provided National Register eligibility evaluation for the site. Work done before joining EDAW.

Downtown San Diego African-American Heritage Study, San Diego, CA
Senior Historian
CLIENT: Centre City Development Corporation (CCDC)
Documented the development and growth of the African-American community in downtown San Diego through the 19th and 20th centuries. Archival information, oral histories, architectural evaluations, and recognition of potential archaeological sites were used to document the African-American community's economic, social, and political history in the downtown area, and to identify an African-American Thematic Historic District. Work done before joining EDAW.

Mannasse's Corral/Presidio Hills Golf Course, San Diego, CA
Project Manager
CLIENT: Presidio Hills Golf Course
Directed and managed archaeological excavation and interpretation of historic refuse and features related to Old Town San Diego located within the city-owned Presidio Hills Golf Course property. Conducted analysis of excavated material, researched and interpreted site history and use, and assessed resource significance, broadening the understanding of Old Town's archaeological signature and historic lifeways. Work done before joining EDAW.

Old Town San Diego State Historic Park Archaeological Excavations, San Diego, CA
Project Manager
CLIENT: Bazaar del Mundo LLC/California State Parks
Managed excavation and analysis of 19th-century deposits recovered from two locations within Old Town State Historic Park, representing roadbed flood wash and tavern refuse, respectively. Oversaw ceramic and glass cataloguing, and conducted historical research and interpretation on specific site uses and depositional processes. Prepared State of California DPR forms, and assessed resource significance according to NRHP eligibility criteria. Work done before joining EDAW.

Cole Road and Dogwood Road Widening Projects, Imperial County, CA

Project Director

CLIENT: City of El Centro

Project management of field survey and documentation efforts related to the widening of Dogwood Road and Cole Road in unincorporated Imperial County. Produced CEQA and Caltrans-format documentation related to identified resources and proposed project impacts. Work done before joining EDAW.

Blackwater West Cultural Resources Phase I and Phase II Studies, Potrero, CA

Project Director

CLIENT: Blackwater USA

Project director overseeing the survey of an approximately 850-acre area in eastern San Diego County and test excavation of identified prehistoric sites. Directed archaeological and built environment documentation, Extended Phase I testing, and Phase II testing efforts under the new County of San Diego Guidelines implemented September 2006. Work done before joining EDAW.

Vine/Carter Hotel Historical Assessment, San Diego, CA

Project Manager

CLIENT: Wakeland Housing

Conducted extensive archival research and historical assessment of the African-American-owned Vine/Carter Hotel building in San Diego's East Village. Conducted historical research on the building's ownership history and development; its historical uses, managers, and residents; and its place in San Diego's historical African-American community. Photographed and documented the building according to Office of Historic Preservation guidelines, prepared State of California DPR forms, and assessed the building's significance according to local, state, and federal significance criteria. As a result of the project, the Vine/Carter Hotel was nominated as a significant historical resource by the City of San Diego Historical Resources Board. Work done before joining EDAW.

Mission San Gabriel Gardens Excavation, Jump Start Project, San Gabriel, CA

Project Manager

CLIENT: Terry A. Hayes Associates

Conducted monitoring and excavation of Spanish colonial and American-era deposits associated with the construction of the original Mission San Gabriel and later 19th-century occupations. Documented the sites according to State Office of Historic Preservation guidelines, and assessed the resources according to NRHP and CEQA significance criteria. Work done before joining EDAW.

Lillian Grant Property Public Art Project, San Diego, CA

Project Manager

CLIENT: Wakeland Housing

Provided historical research services and written text incorporated into the public art commissioned for the redevelopment of the historical Lillian Grant Property in the East Village of San Diego. The public art, located at 14th and J streets at the Lillian Place affordable housing complex, commemorates the histories, experiences, and contributions of African-Americans to the development of San Diego and the East Village area in particular. Work done before joining EDAW.

Lillian Grant Property Historic American Building Survey (HABS), San Diego, CA

Project Manager

CLIENT: Wakeland Housing

Supervised HABS of the Lillian Grant properties in the East Village community of San Diego, submitted to the City of San Diego. Oversaw archival quality photographic documentation, and architectural line and plan drawings, as well

as completed required HABS historical narrative on the subject buildings. Work done before joining EDAW.

San Gabriel Mission Trench Excavation, San Gabriel, CA
Senior Archaeologist
CLIENT: Terry A. Hayes Associates
Conducted historical and archival research on the prehistory and history of the San Gabriel Mission and surrounding areas to assess potential impacts of proposed below-grade railway trench. Compiled historical narrative, identified potential subsurface features, and recommended appropriate mitigation strategies. Work done before joining EDAW.

Camp Seely National Register Evaluation, San Bernardino National Forest, San Bernardino County, CA
Senior Historian
CLIENT: City of Los Angeles Department of Recreation and Parks
Conducted NRHP evaluation of the early-20th-century Camp Seely recreational camp facility leased by the City of Los Angeles in the San Bernardino National Forest. Conducted historical and archival research on the Camp's history and development; its individual buildings; and its architects, including Sumner P. Hunt and Silas R. Burns. Photographed and documented the building according to Office of Historic Preservation guidelines, prepared State DPR forms, and assessed resource significance according to NRHP eligibility criteria. Work done before joining EDAW.

Camp Radford National Register Evaluation, San Bernardino National Forest, San Bernardino County, CA
Senior Historian
CLIENT: Michael Brandman Associates
Conducted NRHP evaluation of the early-20th-century Camp Radford recreational camp facility leased by the City of Los Angeles in the San Bernardino National Forest. Conducted historical and archival research on the Camp's history and development; its individual buildings; and its architects, Sumner P. Hunt and Silas R. Burns. Photographed and documented the building according to Office of Historic Preservation guidelines, prepared State DPR forms, and assessed resource significance according to NRHP eligibility criteria. Work done before joining EDAW.

High Winds Wind Farm Project, Solano County, CA
Senior Archaeologist
CLIENT: Environmental Services Associates (ESA)
Conducted archival and historical research on the settlement and development of southern Solano County. Evaluated nine historic resources and surrounding landscape significance according to CEQA criteria. Completed historical background and assessment report, photographically documented resources and landscape, and updated State DPR forms for previously identified resources. Work done before joining EDAW.

PUBLICATIONS

Books

Jordan, Stacey. In prep. Coarse Earthenware Collections at the Cape: "…diverse kinds of baked and glazed earthenware…" and European Stoneware at the Cape: Masks, medallions and merchandise. In: *The Material Culture of the Dutch East India Company at the Cape of Good Hope, 1652-1800*, Carmel Schrire (ed.). Left Coast Press, Walnut Creek, CA.

Jordan, Stacey. 2002. Classification and Typologies. In: *Encyclopedia of Historical Archaeology*, Charles E. Orser, Jr. (ed.). Routledge. London.

Jordan, Stacey and Carmel Schrire. 2002. Material Culture and the Roots of Colonial Society at the South African Cape of Good Hope. In: *The Archaeology of Colonialism*, Claire Lyons and John Papadopoulos (eds.). Getty Research Institute. Los Angeles.

Journal Articles

Jordan, Stacey C. 2000. Coarse Earthenware at the Dutch Colonial Cape of Good Hope, South Africa: A history of local production and typology of products. *International Journal of Historical Archaeology*, Vol. 4, No. 2.

Jordan, Stacey, Duncan Miller and Carmel Schrire. 1999. Petrographic Characterization of Locally Produced Pottery from the Dutch Colonial Cape of Good Hope, South Africa. *Journal of Archaeological Science*, Vol. 26.

Jordan, Stacey. 1994. Colonial Coarse Earthenware at the South African Cape of Good Hope, 1669-c.1900. *Crosscurrents*, Vol. VI.

PAPERS AND PRESENTATIONS

Dissertation: "The „Utility' of Coarse Earthenware: Potters, Pottery Production and Identity at the Dutch Colonial Cape of Good Hope South Africa (1652-1795)"

The Development of Colonial Culture at the South African Cape of Good Hope: Examining the many "functions" of utilitarian ceramics. Paper presented at the Archaeology of Colonialism Symposium, Archaeological Institute of America Annual Meetings, January 2001.

Urban Archaeology and the Focus of Memory: a study in the history and narrative of South Central Los Angeles. Paper Presented at the Society for American Archaeology Annual Meeting, March 2002.

Historical Archaeology as Anthropology: Artifacts, Identities, and Interpretations in the Study of the Recent Past. Presented at the World Archaeological Congress, January 2003.

Old Town Made New Again: The Archaeology of San Diego's First Settlement. Paper presented at the Society for California Archaeology Annual Meeting, April 2005.

Past as Present: Tourism and Archaeology in Old Town San Diego. Presented at the Society for Applied Anthropology Annual Meeting, April 2005.

The Face of Mercantilism at the South African Cape of Good Hope: Ceramics and the Hesitant Empire. Presented at the Society for Historical Archaeology Annual Meeting, January 2006.

A Patchwork History: Interweaving Archaeology, Narrative and Tourism in Old Town San Diego. Paper presented at the Society for American Archaeology Annual Meeting, March 2007.

Mannasse's Corral: The Life History of a Piece of Old Town. Presented to the Presidio Council, January 2008.

Making the Past Present: Archaeology, Heritage and Tourism in Old Town San Diego. Paper presented at the Society for California Archaeology Annual Meeting, April 2008.

CEQA and Historical Resources. Guest Lecturer, California Environmental Quality Act, UCSD Extension Course, August 2008.

JAMES CLELAND, PhD
Principal

SUMMARY
Principal for archaeological and historical studies
Thirty years of experience directing cultural resource programs
Section 106 compliance specialist
Expert testimony
Award winning projects
Extensive experience with gas transmission and other linear projects

EDUCATION
PhD, Anthropology, University of Virginia, 1977
MA, Anthropology, University of Virginia, 1974
BA, Anthropology, University of Michigan, 1969

AFFILIATIONS
Society for California Archaeology
American Anthropological Association
Society for American Archaeology

CERTIFICATIONS
Register of Professional Archaeologists
National Preservation Institute. Identification and management of traditional cultural places
National Preservation Institute – Section 106. Working with the revised regulations

Principal archaeologist for EDAW, Dr. James Cleland has more than 30 years of experience conducting archaeological, historical, and ethnographic studies. He is thoroughly familiar with regulations and guidelines implementing the NHPA, NEPA, and CEQA. He has authored the cultural resources sections of many EAs, EISs, and EIRs and has provided expert testimony before federal and state administrative agencies regarding the consideration of cultural resources in environmental review.

Dr. Cleland has directed cultural resources investigations throughout the United States and abroad. He manages the full spectrum of technical studies, including archaeological overviews and surveys, test excavations, historical research, historic structures surveys, Native American contact programs, cultural landscape investigations, evaluations of significance for NRHP eligibility, data recovery excavations, construction monitoring, long-term resource planning, and pure research. Spanning a broad spectrum of development and resource management projects, his work has included military activities, power plants, transmission lines, pipelines, oil and gas processing plants, water resource facilities, highways, timber sales, landfills, and commercial and residential developments. His project work has been recognized for excellence by the American Cultural Resources Association, the California Preservation Foundation, the Earth Sciences Research Institute, and the Association of Environmental Professionals.

Dr. Cleland has presented numerous professional papers on cultural resources management and archaeological research. Topics have included the siting and evaluation of large linear projects, approaches to the evaluation of archaeological significance, obsidian hydration and chronology building, hunter-gatherer cultural adaptation, cultural landscapes, and urban historical archaeology. He is a past-president of the Society for California Archaeology and served on the governor's Heritage Resource Task Force in California, helping to guide the formulation of archaeological and historic preservation policy at the state level.

LAND DEVELOPMENT PROJECTS

Hellman Ranch Specific Plan, Orange County, CA
Principal Investigator
CLIENT: City of Seal Beach
Responsible for archaeological evaluation and data recovery of 10 Native American sites in the coastal zone. Work included Native American consultation, burial repatriation and in situ preservation, and on- site cultural interpretation.

Ballpark Infrastructure and Remediation, San Diego, CA
Principal-in-Charge
CLIENT: Centre City Development Corporation
Responsible for the archaeological monitoring and data recovery in the downtown East Village area for the proposed ballpark. Required hazardous materials certification. Project received Award of Excellence for Archaeology from the City of San Diego Historical Resources Board.

West Bench Master Plan, Salt Lake County, UT
Cultural Resource Specialist
CLIENT: Kennecott Land Company
Conducted cultural resources assessment of a 93,000-acre master plan development. Senior review of the cultural resources element of the specific plan.

Bixby Ranch Old Town Center, Orange County, CA
Principal Investigator
CLIENT: City of Seal Beach
Responsible for cultural resources survey, monitoring, and data recovery of proposed commercial development.

101 California Project, San Diego County, CA
Principal Investigator
CLIENT: Catellus, Inc.
Responsible for archaeological testing and data recovery at the San Diego Barracks site (1850 through 1920) for this mid- to high-rise development project in downtown San Diego.

Inmate Reception Center, San Diego County, CA
Principal Investigator
CLIENT: County of San Diego, Department of Public Works
Responsible for major data recovery project at Victorian-Period urban site.

Leopalace Resort, Yona, Guam
Archaeologist and Peer Reviewer
CLIENT: Mayama Development, Inc.
Assisted in the Section 106 consultation with the territorial historic preservation officer, provided peer review of the archaeological data recovery fieldwork, and provided field support to help expedite completion of the archaeological mitigation. Work was performed prior to joining EDAW.

North Las Vegas Land Transfer, Clark County, NV
Principal Investigator
CLIENT: City of North Las Vegas
Responsible for cultural resource survey of 4,000-acre land transfer from the Bureau of Land Management to the City of North Las Vegas. Directed cultural resource component of the EIS, assisted Bureau of Land Management in Section 106 consultation, and conducted geoarchaeological testing of an early Holocene spring deposit. Work was performed prior to joining EDAW.

Apex Industrial Park, Clark County, NV
Principal Investigator
CLIENT: Kerr-McGee
Responsible for archaeological survey and NRHP evaluations for BLM land transfer. Work was performed prior to joining EDAW.

343 Sansome Street, San Francisco County, CA
Principal Investigator
CLIENT: Gerald D. Hines Interests
Directed archaeological test and data recovery excavations at a Gold Rush-Period site in downtown San Francisco. Work was performed prior to joining EDAW.

Sierra Vista Development, Cochise County, AZ
Archaeologist
CLIENT: Tenneco
Performed historical and archaeological assessment of a major housing and urban development-assisted project in Fort Huachuca. Work was performed prior to joining EDAW.

San Diego River Project, San Diego County, CA
Project Director
CLIENT: County of San Diego
Directed cultural resource investigations for a flood control, reclamation, and recreational development master plan. Work was performed prior to joining EDAW.

Marina/Columbia Redevelopment Project, San Diego County, CA
Principal Investigator
CLIENT: Centre City Development Corporation
Directed historical research, archaeological site identification, and archaeological test excavations for the 75-block redevelopment area in San Diego. Consulted in the development of a management plan for subsurface cultural resources. Work was performed prior to joining EDAW.

ENERGY AND TRANSMISSION PROJECTS

North Baja Pipeline, Ehrenberg, AZ, and Riverside and Imperial Counties, CA
Principal Investigator
CLIENT: Foster Wheeler Environmental
Cultural resources survey, evaluation, and mitigation for an 80-mile natural gas pipeline, under FERC and BLM guidelines.

Line 1903 All American Pipeline Conversion, Kern, San Bernardino, and Riverside Counties, CA
Principal Investigator
CLIENT: ENSR International and El Paso Natural Gas
Directed the cultural resources survey and NRHP evaluation of a 250-mile pipeline project, converting from petroleum to natural gas.

Palomar Energy Project, Escondido, CA
Principal Investigator
CLIENT: ENSR International and Sempra Energy
Directed cultural resources investigation for MW cogeneration plant with associated linear facilities in support of California Energy Commission Application for Certification.

Desert Crossing Pipeline, Clark County, NV, and Mohave County, AZ
Principal Investigator
CLIENT: Natural Resources Group
Directed the cultural resources research design for a natural gas pipeline project. Archaeology survey near Red Lake, Arizona, for gas storage facility.

Valley-Rainbow Transmission Project, Riverside and San Diego, Counties, CA
Principal Investigator
CLIENT: San Diego Gas and Electric Company
Directed cultural resources surveys for the evaluation of alternative transmission line corridors. Included Class I, Class II, and Class III surveys.

Lucerne-to-Big Bear Transmission Line, San Bernardino County, CA
Principal Investigator
CLIENT: USDA Forest Service and Southern California Edison Company
Responsible for cultural resources survey and NRHP evaluation of a 20-mile transmission line through San Bernardino National Forest, and EIR/EIS analysis. Traditional cultural property evaluation of the Gold Mountain-Baldwin Lake district.

Mead-Adelanto Transmission Line, Clark County, NV, and San Bernardino County, CA
Principal Investigator
CLIENT: Los Angeles Department of Water and Power
Responsible for cultural resource survey of a 180-mile interstate transmission line. Work was performed prior to joining EDAW.

Questar Southern Trails Pipeline, NM, UT, AZ, and CA
Discipline Manager
CLIENT: ENSR International and FERC
Responsible for cultural resource investigations for FERC third-party EIS addressing the conversion of an existing crude-oil pipeline to natural gas. The project runs from northeastern New Mexico to Long Beach, California.

Vector Pipeline EIS, IL, IN, and MI
Discipline Manager
CLIENT: RMI and FERC
Responsible for cultural resource investigations for FERC third-party EIS for a 325-mile corridor of a natural gas pipeline.

Viking Voyageur Pipeline Project, MN, WI, and IL
Discipline Manager
CLIENT: Entrix and FERC
Responsible for cultural resource investigations for FERC third-party EIS for a 770-mile corridor of Viking Voyageur gas transmission pipeline.

Tuscarora Pipeline Project, Klamath County, OR, to Washoe County, NV
Cultural Resource Coordinator
CLIENT: Tuscarora Gas Transmission Company
Responsible for a 229-mile natural gas pipeline from Malin, Oregon, to Reno, Nevada. Coordinated and managed survey, evaluation, and data recovery. Prepared nontechnical public report.

Los Padres National Forest Oil and Gas Leasing, Santa Barbara, Ventura, and Monterey Counties, CA
Principal Investigator
CLIENT: Los Padres National Forest
Responsible for cultural resource overview of potential lease areas (743,000 acres).

Boulder Line Historical Assessment, San Bernardino County, CA
Principal Investigator
CLIENT: Los Angeles Department of Water and Power
Responsible for NRHP evaluation of Boulder Lines 1 and 2.

Kern River Gas Transmission Project, WY, UT, NV, and CA
Principal Investigator
CLIENT: Kern River Gas Transmission Company
Responsible for cultural resources. Prepared the cultural resources component of the environmental report submitted to FERC, presented expert testimony at FERC licensing hearings, directed the intensive archaeological survey of the 680-mile route, managed the eligibility evaluation of over 250 sites for NRHP, developed and implemented a data recovery research design for 150 NRHP-eligible resources, directed monitoring of construction in sensitive areas, and coauthored survey and data recovery reports. Work was performed prior to joining EDAW.

Santa Ynez Unit Development, Santa Barbara County, CA
Principal Investigator
CLIENT: Exxon Corporation
Directed test excavations and significance evaluations of historic and prehistoric sites in oil and gas project area. Prepared historic properties treatment plan, approved by the ACOE, California Office of Historic Preservation, and Advisory Council on Historic Preservation. Work was performed prior to joining EDAW.

California-to-Oregon Transmission Project, OR and CA
Principal Investigator
CLIENT: Transmission Authority of Northern California
Directed archaeological, historic, and ethnographic survey of the 340-mile route; archaeological test excavations; and archaeological data recovery. Work was performed prior to joining EDAW.

Coso Known Geothermal Resource Area, Inyo County, CA
Principal Investigator
CLIENT: Los Angeles Department of Water and Power
Directed archaeological survey, evaluation, and data recovery at 12 geothermal well-pads located in the Sugarloaf Mountain Obsidian Source National Register District. Coauthored historic properties treatment plan, and evaluation and data recovery reports. Work was performed prior to joining EDAW.

Devers-Serrano-Villa Park Proposed 230-kV Transmission Line, Orange, Riverside, and San Bernardino Counties, CA
Principal Investigator
CLIENT: California Public Utilities Commission
Directed cultural resource investigations for the EIR/EIS for Southern California Edison's proposed 230-kV transmission line, including comparative assessment of the impact of alternative routes. Presented expert testimony at CPUC licensing hearings. Work was performed prior to joining EDAW.

BiCEP Transmission Line, South-Central CA
Discipline Manager
CLIENT: Southern California Edison
Directed cultural resource impact assessment of alternative routes for a proposed transmission line from the Big Creek Hydroelectric Project in the Sierra Mountains to the Los Angeles Basin. Work was performed prior to joining EDAW.

Argus Cogeneration Expansion, San Bernardino and Inyo Counties, CA
Discipline Manager
CLIENT: Kerr-McGee
Directed cultural resource survey of proposed cogeneration plant site, transmission line, water pipeline, and well-field. Prepared cultural resources sections of AFC for California Energy Commission. Work was performed prior to joining EDAW.

Geothermal Public Power Line Project, North-Central CA
Discipline Manager
CLIENT: Sacramento Municipal Utility District
Directed cultural resources investigations, including archaeology, history, and ethnography, for siting and licensing of a proposed transmission line from the Geysers Geothermal Area to Sacramento. Included preparation of cultural resource sections of the notice of intent and application for certification, and presentation of testimony for adjudicatory hearings held by the California Energy Commission. Work was performed prior to joining EDAW.

Potrero Unit No. 7, San Francisco County, CA
Principal Investigator
CLIENT: Pacific Gas & Electric Company
Conducted cultural resource inventory and evaluation for proposed combined cycle generating plant, underground 230-kV transmission line, and fuel-oil pipeline. Involved intensive historical documentation for an 8-mile-long study area along San Francisco's urban waterfront. Participated in California Energy Commission public workshop. Work was performed prior to joining EDAW.

JAMES CLELAND, PhD

MILITARY PROJECTS

Naval Air Weapons Station, China Lake, CA
Principal Investigator
CLIENT: U.S. Navy, Southwest Division
Directed archaeological survey of over 8,000 acres and NRHP evaluation of eight archaeological sites.

Naval Postgraduate School, Monterey, CA
Principal Investigator
CLIENT: U.S. Navy, Southwest Division
Directed archaeological survey and subsurface exploration of the 100-acre laboratory and recreation area.

Chocolate Mountains Aerial Gunnery Range, Imperial and Riverside Counties, California.
Principal Investigator
CLIENT: Naval Facilities Engineering Command, Southwest and Marine Corps Air Station, Yuma
Developed regional archaeological research design, including programmatic approaches to the evaluation of key resource types. Managed the preparation of a cultural affiliation study.

Naval Space Surveillance Field Stations, San Diego, CA, and Gila River, AZ
Principal Investigator
CLIENT: U.S. Navy, Southwest Division
Directed NRHP evaluation of three archaeological sites in San Diego County. Prepared integrated cultural resources management plan for NSSFS Gila River.

Archaeological Test Excavation, Naval Weapons Station, Seal Beach, CA
Principal Investigator
CLIENT: U.S. Navy, Southwest Division
Responsible for test excavations of three subsurface prehistoric shell middens. National register evaluations.

Air Combat Command Cold War-Era Facilities, Langley Air Force Base, Hampton City Region, VA
Senior Reviewer
CLIENT: U.S. Army Corps of Engineer, Ft. Worth District
Senior reviewer for nationwide historical context development for ACC bomber and fighter facilities.

Perimeter Vehicle Entry Phased Array Warning System National Register Nomination, Beale Air Force Base, Yuba County, CA
Senior Reviewer
CLIENT: Beale Air Force Base and Parsons Engineering Science
Senior reviewer to NRHP evaluation and nomination of a highly technical, Cold War-era radar facility.

Cultural Resource Inventory Survey at Salton Sea Test Base, Imperial County, CA
Principal Investigator
CLIENT: U.S. Navy, Southwest Division
Responsible for intensive cultural resource surveys of approximately 6,000 acres. Provided oversight for compliance with NHPA and the NAGPRA.

JAMES CLELAND, PhD

Evaluation of Six Sites Near the Missile Impact Range, Naval Auxiliary Landing Field, San Clemente Island, Los Angeles County, CA
Principal-in-Charge
CLIENT: U.S. Navy, North Island, Natural Resources Office
Responsible for the NRHP evaluation of six archaeological sites on the Central Plateau of San Clemente Island.

Long Beach Naval Shipyard/Naval Station Base Closure, Los Angeles County, CA
Discipline Manager
CLIENT: U.S. Navy, Southwest Division
Responsible for cultural resource analysis of alternative reuse plans, including development of adaptive reuse alternatives for the Roosevelt Historic District. Adaptive reuse plan won Cultural Resources Award from California Preservation Foundation.

MCAS Yuma Ordnance Storage Expansion, Yuma County, AZ
Principal Archaeologist
CLIENT: U.S. Navy, Southwest Division
Performed cultural resource analysis, including records search, oral history, and draft programmatic agreement.

MCAS El Toro Base Closure, Orange County, CA
Principal Investigator
CLIENT: U.S. Navy, Southwest Division
Responsible for cultural resource surveys and evaluation.

P-527 Effluent Treatment Project, Camp Pendleton, San Diego County, CA
Principal Investigator
CLIENT: U.S. Navy, Southwest Division
Responsible for archaeological survey, evaluation, and data recovery.

Pumped-Hydro Storage Wind/Energy System, Naval Auxiliary Air Field, San Clemente Island, Los Angeles County, CA
Principal-in-Charge
CLIENT: U.S. Navy, Southwest Division
Responsible for relocating and recording 76 archaeological sites in a proposed water storage and wind/energy development area. Prepared existing conditions report.

Historic and Archeological Resources Protection Plans for Various Locations in Southern CA
Principal Investigator
CLIENT: U.S. Navy, Southwest Division
Responsible for HARP Plans for six Naval installations: Morris Dam Test Facility, Azusa; Naval Air Facility, El Centro; Naval Shipyard, Long Beach; Point Loma Complex, San Diego; Naval Station, San Diego; and the Naval Radio Receiving Facility, Imperial Beach.

Space Launch Complex 2W, Vandenberg Air Force Base, San Luis Obispo County, CA
Principal Investigator
CLIENT: McDonnell-Douglas
Directed archaeological survey and historical assessment of the proposed upgrading of the complex to support the launching of Delta II vehicles. Historical assessment included NRHP evaluation of space launch facilities dating to the 1950s and 1960s. Work was performed prior to joining EDAW.

MCAS Yuma EIS, Imperial County, CA
Project Director for Cultural Resources
CLIENT: U.S. Navy, Southwest Division
Directed cultural resource inventories of areas in California potentially affected by operations at MCAS Yuma, Arizona. Work included archaeological sample survey of the Chocolate Mountains Gunnery Range, identification of traditional cultural properties in low-fly zones, and preparation of the EIS.

Sugarloaf Mountain Archaeological District Cultural Resource Management Plan, Inyo County, CA
Principal Author
CLIENT: U.S. Navy, Southwest Division
Authored management plan for the Sugarloaf Mountain Obsidian Source National Register District. Developed a framework for the survey, evaluation, and treatment of resources that may be affected by geothermal development of the Coso Known Geothermal Resource Area. Work was performed prior to joining EDAW.

National Training Center, Fort Irwin, San Bernardino County, CA
Project Manager
CLIENT: National Park Service, Interagency Archeological Services Branch
Managed large-scale archaeological survey, evaluation, and data recovery project in support of the development of the National Training Center. Performed intensive survey of 100,000 acres, NRHP evaluation of over 100 sites, and data recovery at 25 sites. Work was performed prior to joining EDAW.

Beale Air Force Base Cultural Resource Project, Yuba County, CA
Principal Investigator
CLIENT: National Park Service, Interagency Archeological Services Branch
Prepared cultural resource management plan for the entire base and directed archaeological survey of a 2,000-acre tract proposed for excessing. Work was performed prior to joining EDAW.

Defense Material Readiness Command (DARCOM) Archaeological Overviews, Lassen, San Joaquin, Sacramento, Stanislaus, and Napa Counties, CA, Umatilla County, OR, and Mineral County, NV
Principal Investigator
CLIENT: National Park Service, Interagency Archeological Services Branch
Prepared archaeological overviews and management plans for seven installations of DARCOM in the western region. Installations included Sierra Army Depot, Hawthorne Army Depot, Umatilla Activity, Sharpe Army Depot, Sacramento Army Depot, Riverbank Army Ammunition Plant, and Benecia Army Cemetery. Work was performed prior to joining EDAW.

WATER PROJECTS

Emergency Storage Project, San Diego County, CA
Principal Investigator
CLIENT: San Diego County Water Authority
Responsible for cultural resources evaluation, archaeological data recovery, and construction monitoring of major water projects involving construction of dams and associated pipelines.

Pit 3, 4, and 5 Hydroelectric Relicensing Project, Shasta County, CA
Principal Investigator
CLIENT: Pacific Gas & Electric Company
Responsible for the evaluation of 22 sites in the Lake Britton National Register District and for data recovery at seven sites affected by shoreline erosion and recreational facilities. Assisted in the development of the cultural resource

management plan and directed the data recovery plan, both of which were approved under FERC relicensing stipulations. Work was performed prior to joining EDAW.

P5EII Pipeline, San Diego County, CA
Principal Investigator
CLIENT: San Diego County Water Authority
Responsible for archaeological testing, data recovery, and construction monitoring.

Lake Hodges Environmental Impact Study, San Diego County, CA
Principal Archaeologist
CLIENT: City of San Diego
Performed cultural resource survey of existing shoreline to assess impacts of changed operations.

Pit 1 Hydroelectric Relicensing, Shasta County, CA
Principal Investigator
CLIENT: Pacific Gas & Electric Company
Directed archaeological and historical evaluation of the project area to support preparation of Exhibit E of the relicensing application. Performed archaeological survey, and limited test excavation and historical evaluation of the operating system. Work was performed prior to joining EDAW.

Mokelumne River Hydroelectric Relicensing, Alpine, Amador, and Calaveras Counties, CA
Principal Investigator
CLIENT: Pacific Gas & Electric Company
Conducted multiple phases of cultural resource investigations to support relicensing application to FERC. Prepared cultural resource survey, NRHP evaluations, Native American resources survey, data recovery research design, and cultural resource management plan. Performed archaeological test excavations. Work was performed prior to joining EDAW.

Elk Creek Dam, Douglas County, OR
Principal Investigator
CLIENT: U.S. Army Corps of Engineers
Responsible for the NRHP evaluation of 27 sites in the area of potential effect. Work was performed prior to joining EDAW.

Eastern Sierra Hydroelectric Relicensing, Mono and Inyo Counties, CA
Principal Investigator
CLIENT: Southern California Edison
Directed NRHP assessment of 22 sites within three hydroelectric project areas. Work was performed prior to joining EDAW.

Clark County Flood Control Master Plan, NV
Principal Investigator
CLIENT: Clark County Regional Flood Control District
Directed cultural resource investigations for the EIS. Master plan covered the entire county and had a 20-year team horizon. Work was performed prior to joining EDAW.

Gibraltar Dam Upgrade, Santa Barbara County, CA
Principal Investigator
CLIENT: City of Santa Barbara
Directed cultural resource survey and historical assessment of the existing facilities for proposed strengthening and raising of Gibraltar Dam. Work was performed prior to joining EDAW.

JAMES CLELAND, PhD

Pamo Dam and Reservoir, San Diego County, CA
Principal Investigator
CLIENT: San Diego County Water Authority
Responsible for cultural resources. Prepared a research design for testing and evaluating 100 sites in the proposed project area, assisted in the Section 106 consultation with the ACOE and the state historic preservation officer, directed the drafting of a programmatic MOA under 36CFR800, and supervised archaeological monitoring of geotechnical investigations. Work was performed prior to joining EDAW.

Douglasdale Road Wastewater Treatment Plant, Richmond City Region, VA
Archaeologist
CLIENT: U.S. Army Corps of Engineers, Norfolk District
Conducted archaeological survey and historical assessment of proposed wastewater treatment plant on the James River and Kanawha Canal in Richmond. Work was performed prior to joining EDAW.

TRANSPORTATION PROJECTS

Southern Nevada Supplemental Airport EIS, Clark County, NV
Co-Principal Investigator for Cultural Resources
CLIENT: Federal Aviation Administration, Bureau of Land Management, and Clark County Division of Aviation
Developed cultural context report and research design. Oversaw Class III survey of 17,000 acres in eastern Mojave Desert.

Guadalupe Corridor, State Route 87, Santa Clara County, CA
Senior Reviewer
CLIENT: Caltrans District 4
Responsible for development and implementation of historical properties treatment plan for SR-87 freeway in San Jose. Investigated buried prehistoric and historic archaeological sites, including one of San Jose's China Towns.

Sorrento Overhead, Del Mar, CA
Project Manager
CLIENT: City of Del Mar
Managed Caltrans HPSR for seismic retrofit of a National Register-eligible railroad overpass. Provided City of Del Mar consultation regarding Section 4(f) evaluation of project alternatives.

Palomar Street Widening, Chula Vista, CA
Principal Investigator
CLIENT: City of Chula Vista
Responsible for cultural resources surveys of Caltrans local assistance project. Preparation of negative archaeological survey report, historical architectural survey report, and historic properties survey report.

SR-56 Middle Segment EIR, San Diego County, CA
Principal Investigator
CLIENT: City of San Diego
Responsible for cultural resource survey and evaluation conducted under Caltrans guidelines.

La Costa Avenue Interchange, Carlsbad, CA
Principal Investigator
CLIENT: City of Carlsbad
Responsible for I-5 interchange improvement project. Prepared archaeological survey report, extended phase I report, and historic properties survey report under Caltrans guidelines.

Cole Grade Road, San Diego County, CA
Principal Investigator
CLIENT: County of San Diego
Responsible for archaeological testing under CEQA.

SA-680 Freeway, San Diego County, CA
Principal Investigator
CLIENT: County of San Diego
Responsible for archaeological testing of four sites in the area of potential effect of proposed freeway.

SR-41 South, Fresno County, CA
Principal Investigator
CLIENT: Fresno County Transportation Authority and Caltrans District 6
Responsible for archaeological and historical assessment of the widening and possible realignment of Route 41 south of Fresno. Prepared reports to Caltrans' standards, including the archaeological survey report, the historical architectural survey report, and the historic properties survey report. Work was performed prior to joining EDAW.

Interstate 77, Wythe County, VA
Field Director
CLIENT: Virginia Historical Landmarks Commission
Directed data recovery fieldwork at Fort Chiswell historic site. Work was performed prior to joining EDAW.

HAZARDOUS WASTE-RELATED AND PROJECTS

Topock Compressor Station Corrective Measures Study EIR
San Bernardino County, CA
Cultural Resource Team Leader
CLIENT: California Department of Toxic Substances Control
Investigated potential impacts to cultural resources of groundwater and soils remediation alternatives, including potential to the Topock Maze traditional cultural property.

Station A Remediation, San Diego, CA
Principal Investigator
CLIENT: Sempra Energy
Responsible for the archaeological monitoring of the remediation of SDG&E's historic Station A. Required hazardous materials certification.

Kettner and Cedar Remediation, San Diego County, CA
Principal Investigator
CLIENT: County of San Diego
Performed cultural resource monitoring of hazardous waste remediation in San Diego.

Edwards Air Force Base Installation Restoration Program, Kern County, CA
Principal Investigator
CLIENT: Jacobs Engineering
Directed cultural resource surveys and evaluations of well closures and PRLs. Assisted in the Section 106 consultation. Work was performed prior to joining EDAW.

Elsmere Canyon Landfill, Los Angeles County, CA
Discipline Manager
CLIENT: Elsmere Corporation
Directed cultural resource assessment for the EIR/EIS. Work was performed prior to joining EDAW.

Weldon Canyon Landfill, Ventura County, CA
Senior Archaeologist
CLIENT: Waste Management, Inc.
Conducted cultural resource surveys of proposed landfill site. Work was performed prior to joining EDAW.

Eagle Mine Remediation, Lake County, CO
Discipline Manager
CLIENT: Gulf+Western
Directed historical research of land use at the Eagle Mine Superfund Site in Leadville. Work was performed prior to joining EDAW.

OTHER PROJECTS

Imperial Dunes Cultural Landscape Report, Imperial County, CA
Principal Investigator
CLIENT: Bureau of Land Management
Responsible for ethnographic assessment to the Imperial Dunes as a Native American Cultural Landscape.

San Diego Presidio, Conditions Assessment Report, San Diego County, CA
Principal Investigator
CLIENT: City of San Diego, Park and Recreation Department
Responsible for preparation of conditions assessment report, focusing on current condition and recommendations for preservation of adobe foundations and associated cultural materials.

Glamis Imperial Project, Imperial County, CA
Principal Archaeologist
CLIENT: Glamis Imperial Corporation
Performed cultural resource survey and NRHP evaluation for proposed open pit gold mine. Traditional cultural property evaluation of the Indian Pass-Running Man district.

Zhongshan Mountain National Park, Nanjing China
Cultural Resource Specialist
CLIENT: City of Nanjing Planning Department
Assisted in the development of a master plan for a nationally significant Ming Dynasty cultural landscape.

JAMES CLELAND, PhD

Outer Continental Shelf Cultural Resource Sensitivity Assessment, CA, OR, and WA
Principal Investigator
CLIENT: Minerals Management Service
Directed archaeological records search, literature review, and geological investigations to assess the potential for submerged prehistoric sites from Morro Bay to the Canadian border. Compiled data on over 2,700 sites in the onshore coastal zone and identification of offshore areas with archaeological potential. Work was performed prior to joining EDAW.

Crump Memorial Park, Henrico County, VA
Principal Investigator
CLIENT: Henrico County
Conducted test excavation of early Woodland-Period site in the County park. Work was performed prior to joining EDAW.

Ellerson's Millrace, Richmond City Region, VA
Field Director
CLIENT: National Park Service
Directed test excavation of historic millrace in Richmond National Battlefield Park in Richmond. Work was performed prior to joining EDAW.

Pakistan Lithics Project, Indus Valley, Pakistan
Archaeologist
CLIENT: American Institute of Pakistan Studies
Performed comparative analysis of pre-Harappan, early Harappan, and mature Harappan stone tool industries. Work was performed prior to joining EDAW.

Cultural Resource Overview of Shenandoah National Park, Page County, VA
Archaeologist
CLIENT: National Park Service
Conducted literature review and authored archaeological portion of the overview. Work was performed prior to joining EDAW.

Allahdino Expedition, Karachi, Pakistan
Archaeologist
CLIENT: American Museum of Natural History
Analyzed flaked stone tools from a Harappan-Period site. Work was performed prior to joining EDAW.

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JAMES CLELAND, PhD

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ATTACHMENT 4
RECORDS SEARCH

This information is Confidential
and will be provided
to the CEC under separate cover

ATTACHMENT 5
CONTACT PROGRAM

This information is Confidential
and will be provided
to the CEC under separate cover

ATTACHMENT 6
PROJECT MAPS

This information is Confidential
and will be provided
to the CEC under separate cover

ATTACHMENT 7
DPR SITE FORMS

This information is Confidential
and will be provided
to the CEC under separate cover

ATTACHMENT 8
ARCHITECTURAL RESOURCES TECHNICAL REPORT

HISTORIC ARCHITECTURE FIELD SURVEY REPORT FOR THE PROPOSED RIDGECREST SOLAR POWER PROJECT KERN COUNTY, CALIFORNIA

Prepared for:

AECOM Environment
1220 Avenida Acaso
Camarillo, CA 93012
and
Solar Millennium, LLC
and
California Energy Commission
and
U.S. Department of the Interior, Bureau of Land Management

Prepared by:

EDAW AECOM
1420 Kettner Boulevard, Suite 500
San Diego, California 92101
(619) 233-1454

August 2009

USGS Quadrangle: Inyokern SE, Ridgecrest South 7.5"

Keywords: Ridgecrest, Indian Wells Valley, Architectural Survey, Kern County, Bureau of Land Management, California Energy Commission, NEPA, CEQA

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EXECUTIVE SUMMARY

Solar Millennium, LLC, proposes to develop the Ridgecrest Solar Power Project (Project), a concentrated solar electrical generating facility, near Ridgecrest in Kern County, California. The Project area is located on land that is managed by the Bureau of Land Management (BLM) and is subject to federal review under the National Environmental Policy Act (NEPA). The proposed Project also falls under the jurisdiction of the California Energy Commission (CEC) and is subject to State review under the California Environmental Quality Act (CEQA). EDAW AECOM was retained to conduct cultural resources studies, including archaeological and architectural surveys, in support of the Application for Certification (AFC) to be submitted to CEC. A historic architecture field survey was conducted for the Project disturbance area and a 0.5-mile buffer area as specified by the CEC (Architectural Area of Potential Effects [AAPE]). The survey was conducted under BLM Cultural Use Permit (CA-06-21) and Fieldwork Authorization dated April 3, 2009. The current investigation was undertaken to identify potential historic architectural resources that may be affected by the proposed Project.

Prior to field work, archival research was conducted, including a records search to determine if there were any previously recorded sites present within a 1-mile radius of the Project area. Research also included a review of historic maps and literature pertaining to the proposed Project area and its vicinity. In addition, local historical societies were contacted regarding information and concerns about historic architectural resources in the area. The archival research resulted in one previously recorded historic architectural resource, a segment of the Southern Pacific Mojave-Owenyo Railroad.

EDAW AECOM conducted the historic architecture field survey on May 8, 2009. Resources located in the study area that would be 45 or more years old at the completion of the Project (built before 1967) were identified and documented. The survey of the built environment identified 13 built resources in the AAPE, including 12 homestead/residential buildings and the segment of the Southern Pacific Mojave-Owenyo Railroad that had been previously recorded. Subsequent to the field survey conducted on May 8, 2009, modification of the disturbance area boundary has altered the quantity of resources identified in the survey that fall within the updated AAPE. Evaluations of these resources based on archival research and the field survey found that none of the resources were eligible for the California Register of Historical Resources or the National Register of Historic Places (Table ES-1). Therefore, there are no historical resources for the purposes of CEQA or historic properties for the purposes of NEPA within the study area.

Table ES-1. Summary of Historic Architecture Field Survey Results

Name/Temporary Number	Description	Date	Location	Significance Potential	Project Impact
RS-BE-341-130-16	Homestead building	Mid-20th century	Outside buffer	Not significant; does not meet NRHP or CRHR criteria	No impact
RS-BE-341-130-17	Homestead building	Mid-20th century	Outside buffer	Not significant; does not meet NRHP or	No impact

Name/Temporary Number	Description	Date	Location	Significance Potential	Project Impact
				CRHR criteria	
RS-BE-341-130-19	**Residence**	**Mid-20th century**	**Buffer (08/2009)**	Not significant; does not meet NRHP or CRHR criteria	**No impact**
RS-BE-341-140-30	**Concrete block outbuilding/garage**	**Mid-20th century**	**Buffer (08/2009)**	Not significant; does not meet NRHP or CRHR criteria	**No impact**
RS-BE-511-051-05	Residence	1959	Outside buffer	Not significant; does not meet NRHP or CRHR criteria	No impact
RS-BE-511-051-07	Homestead building	Early to mid-20th century	Outside buffer	Not significant; does not meet NRHP or CRHR criteria	No impact
RS-BE-511-051-10	Homestead building	Early to mid-20th century	Outside buffer	Not significant; does not meet NRHP or CRHR criteria	No impact
RS-BE-511-051-11	Homestead building	Mid- to late 20th century	Outside buffer	Not significant; does not meet NRHP or CRHR criteria	No impact
RS-BE-511-051-13	Homestead building	Mid-20th century	Outside buffer	Not significant; does not meet NRHP or CRHR criteria	No impact
RS-BE-511-051-19	Homestead building	Early to mid-20th century	Outside buffer	Not significant; does not meet NRHP or CRHR criteria	No impact
RS-BE-511-051-21	Homestead building	Early 20th century	Outside buffer	Not significant; does not meet NRHP or CRHR criteria	No impact
RS-BE-511-051-25	Homestead building	Mid- to late 20th century	Outside buffer	Not significant; does not meet NRHP or CRHR criteria	No impact
P-15-003366/CA-KER-3366H	**Segment of the Southern Pacific Mojave-Owenyo Railroad Line alignment (CA-INY-4608H)**	**Early 20th century**	**Buffer (08/2009)**	**Not significant; does not meet NRHP or CRHR criteria**	**No impact**

INTRODUCTION

Solar Millennium, LLC (Applicant) is proposing to develop the Ridgecrest Solar Power Project (Project), a solar thermal power generating facility with a capacity of 500 megawatts (MW) in eastern Kern County, California (Figures 1, 2 North, and 2 South). EDAW AECOM (EDAW) has been retained to conduct cultural resources studies, including archaeological and architectural surveys for the Project. As a thermal power plant over 50 MW proposed on public lands managed by the Bureau of Land Management (BLM), the project is undergoing review by both the California Energy Commission (CEC) and BLM, and the two agencies are conducting a combined review. Thus, this report is intended to support compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA).

A historic architecture field survey was conducted for the Project disturbance area and a 0.5-mile buffer area, or the Architectural Area of Potential Effects (AAPE), as specified by CEC. The survey was conducted under BLM Cultural Use Permit (CA-06-21) and Fieldwork Authorization dated April 3, 2009. The current investigation was undertaken to identify potential historic architectural resources that may be affected by the Project. Subsequent to the field survey conducted on May 8, 2009, modification of the Project disturbance area altered the AAPE and the quantity of resources identified in the survey that fall within the updated AAPE.

PROJECT DESCRIPTION

The Project is a solar electric generating facility proposed on approximately 1,400 acres in Kern County, California. The town of Ridgecrest is located approximately 6.4 kilometers to the northeast. The Project plant site and its general environs are essentially undeveloped. The site is relatively flat, with elevations ranging from approximately 2,620 feet above mean sea level (amsl) in the north to 2,800 feet amsl in the south.

The Project will use parabolic trough solar thermal technology to concentrate the sun's energy on a linear receiver located at the center point of each parabolic solar subarray. Energy collected in the array is used to generate steam, driving a turbine that generates electricity. The Project's electrical generation facilities (i.e., solar array and power block) would be located on approximately 1,400 acres currently managed by BLM. Linear facilities associated with the solar array and power block include a site access road, telecommunication line, and transmission line. A proposed water line running within the Kern County right-of-way west of South China Lake Boulevard is still in the planning stage and has not been subject to cultural resources survey.

Map Location

1 inch = 40 miles

0 40 80 Miles

Source: ESRI; AECOM 2009

Class III Cultural Resources Report for the Ridgecrest Solar Power Project

Figure 1
Regional Map

Solar Millennium

AECOM

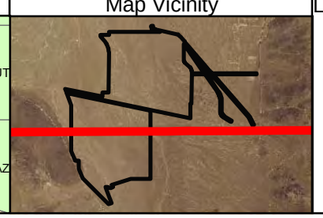
Date: August 2009

Path: P:\2009\09080080 Sol Mil Ridgecrest\6.0 GIS\6.3 Layout\Reports\ClassIIIArchyReport\Fig1_RSPP_RegionalLocation.mxd, 08/05/09, SteinB

MATCH LINE

Map Location

Map Vicinity



Legend

- Footprint
- Built Environment Buffer

Source: NAIP, 2005; USGS; AECOM 2009;

N
W
E
S

1 inch = 2,000 feet

0 2,000 4,000 Feet

Ridgecrest Solar Power Project
Historic Architecture Field Survey Report

Figure 2
Facility Footprint North

Solar Millennium

AECOM

Date: August 2009

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MATCH LINE

MOUNTAINS

Map Location

Map Vicinity

Legend

Footprint

Built Environment Buffer

Source: NAIP, 2005; USGS; AECOM 2009;

N
W
E
S

1 inch = 2,000 feet

0 2,000 4,000 Feet

Ridgecrest Solar Power Project
Historic Architecture Field Survey Report

Figure 2
Facility Footprint South

Solar Millennium

AECOM

Date: August 2009

Path: P:\2009\09080080 Sol Mil Ridgecrest\6.0 GIS\6.3 Layout\Reports\HistoricArchitectureFieldSurveyReport\Fig2_RSPP_FacilityFootprint.mxd, 08/04/09, LeeJ

PROJECT PERSONNEL

M.K. Meiser, M.A., conducted the archival research, field survey, and evaluation of architectural resources, and is the primary author of this report. Jason Jones, M.A., contributed to the research and survey efforts. Rebecca Apple, M.A., R.P.A., is the Principal Investigator of the Project cultural resources study. Stacey Jordan, Ph.D., R.P.A., provided senior review for this report. Resumes of key personnel are provided in Attachment 1.

This report documents the research methods conducted for the current study, including results from records searches conducted at the Southern San Joaquin Valley Information Center (SSJVIC) at California State University, Bakersfield, and the BLM Ridgecrest Field Office. A summary of EDAW's contact program with local historical societies and museums is included. The determination of the AAPE, field methods, results, and evaluation based on eligibility criteria for the California Register of Historic Resources (CRHR) and the National Register of Historic Resources (NRHP) are discussed, as well as the impact assessment for historic architectural resources in the AAPE. Finally, a summary and management considerations for the Project are provided.

PROJECT SETTING

The Project setting involves the background regulatory, physical, and cultural setting of the Project. The regulatory setting description below includes summaries of Federal, State, and local laws, ordinances, regulations, and standards that affect the treatment of cultural resources, specifically, historic architectural resources. A description of the physical setting including the climate, hydrology, geology, flora, and fauna in the Project area, and the expanded historical setting that includes a narrative history of the Project area and vicinity is included in the *Class III Report for the Proposed Ridgecrest Solar Power Project, Kern County, California* (Jordan 2009), to which this report is a supplemental attachment. The historical setting for the Project area specifically focused on a 5-mile radius of the Project area in order to provide a historical context for any identified historic architectural resources in the AAPE.

REGULATORY SETTING

Laws, Ordinances, Regulations, and Standards

Numerous laws, ordinances, regulations, and standards (LORS) on Federal, State, and local levels seek to protect and target the management of historical resources. The Project will comply with applicable LORS throughout construction and operation. CEC Siting Regulations provide direction for Project environmental compliance, and projects licensed by the CEC are reviewed for compliance with applicable laws. The applicable Federal, State, and local LORS are summarized in Table 1 and briefly discussed below.

Federal LORS

Antiquities Act of 1906, Title 16, United States Code, Sections 431, 432, and 433.
This Act establishes criminal penalties for unauthorized destruction or appropriation of "any historic or prehistoric ruin or monument, or any object of antiquity" on Federal land.

National Historic Preservation Act, Title 16, United States Code Section 470x-6.
The National Historic Preservation Act (NHPA) sets in place a program for the preservation of historic properties. Section 106 of the NHPA requires Federal agencies to take in to account the effects of projects on historic properties (resources included in or eligible for the NRHP). It also gives the Advisory Council on Historic Preservation and State Historic Preservation Offices (SHPO) an opportunity to consult. Federal agencies issuing permits for the Project would be required to comply with NHPA requirements.

Executive Order 11593 of May 13, 1971, 36 Federal Register, 8921.
This Executive Order focuses on the protection and enhancement of the cultural environment. It outlines responsibilities of the Federal agencies and Secretary of the Interior with regard to cultural resources.

Table 1. LORS Applicable to Historic Architectural Resources

Laws	Applicability
Antiquities Act of 1906, Title 16, United States Code, Sections 431, 432, and 433	Federal legislation for protection of cultural resources on Federal land.
National Historic Preservation Act (NHPA), Title 16, United States Code Section 470x-6	Establishes national policy of historic preservation; requires that Federal agencies consider significant cultural resources prior to undertakings.
Executive Order 11593 of May 13, 1971, 36 Federal Register, 8921	Provides for protection and enhancement of the cultural environment.
California Environmental Quality Act (CEQA), Public Resources Code Section 21083.2	Requires public agencies to evaluate impacts to cultural resources; provides guidance for evaluating and mitigating impacts.
CEQA Guidelines, California Code of Regulations Title 14, Section 15064.5	Provides guidelines for assessing potential impacts and treatments to historical resources.
Public Resources Code 5020.1 (h) and 5024.1	Defines a "historic district" as a geographical unit that possesses a significant concentration, linkages, or continuity of sites, or other cultural resources associated historically or aesthetically by plan to physical development. Establishes the California Register of Historical Resources.
Kern County General Plan, Section 1.10.3, Policy 25	Provides that the County will promote the preservation of cultural and historic resources.
Kern County Code of Building Regulations Section 17.48.060	Provides historic structure definition as any structure listed in the NRHP or a State inventory approved by the Secretary of the Interior.
Kern County Code of Building Regulations Section 17.48.370	Provides direction on issuance of variances for the repair or rehabilitation of historic structures.

State LORS

California Environmental Quality Act (CEQA), Public Resources Code Section 21083.2.
Under CEQA, the lead agency is responsible for determining whether a project may have a significant effect on historical and archaeological resources. Section 21083.2 of the code states that if the lead agency determines that the project may have a significant effect on "unique" archaeological resources, an environmental impact report shall address these resources. A unique archaeological resource is an 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 one of the following criteria: 1) contains information needed to answer important 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 or best example of its type; or 3) is directly associated with a scientifically recognized important prehistoric or historic event or person.

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require that reasonable efforts be taken to preserve these resources in place or provide mitigation measures. CEC licensing is a CEQA-equivalent process.

CEQA Guidelines, California Code of Regulations Title 14, Section 15064.5.
State CEQA Guidelines define a "historical resource" to include more than one category of resources. The first is a "resource(s) [is] listed or eligible for listing on the CRHR [California Register of Historical Resources]" (California Code of Regulations [CCR] Section 15064.5, subd. [a][1]; see also Public Resources Code [PRC] Sections 5024.1, 21084.1).

In addition, a resource is presumed to constitute a "historical resource" if it is included either in the National Register of Historic Places or in a "local register of historical resources" unless "the preponderance of evidence demonstrates that it is not historically or culturally significant" (CCR Section 15064.5, sub d. [a][2]).

Another category of "historical resources" are those "deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1." Subdivision (g) provides that "[a] resource identified as significant in an historical survey may be listed in the CRHR if the survey meets all of the following criteria:

1. The survey has been or will be included in the State Historic Resources Inventory.

2. The survey and the survey documentation were prepared in accordance with…procedures and requirements [of the (California) Office of Historic Preservation].

3. The resource is evaluated and determined [by the Office of Historic Preservation] to have a significance rating of Category 1 to 5 on [the Department of Parks and Recreation Historic Resources Inventory Form].

4. If the survey is 5 years or more old at the time of its nomination for inclusion in the California Register, the survey is updated to identify historic resources which have become eligible or ineligible due to changed circumstances or further documentation and those which have been demolished or altered in a manner that substantially diminished the significance of the resource."

Resources identified by such surveys are presumed to be historically or culturally significant unless the preponderance of evidence demonstrates otherwise.

The final category of "historical resources" is an optional one, which a lead agency may or may not opt to consider. According to State CEQA Guidelines Section 15064.5(a)(3):

> 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, education, social, political, military, or cultural annals of California may be considered to be an

historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record.

Public Resources Code 5020.1 (h).
This section defines a historic district. A "historic district" means a definable unified geographic entity that possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.

Public Resources Code 5024.1.
This section establishes the CRHR. A resource may be listed as a historical resource in the CRHR if it meets NRHP criteria or the following state criteria: 1) is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage; 2) is associated with the lives of persons important in our past; 3) embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or 4) has yielded, or may be likely to yield, information important in prehistory or history.

Local LORS

Kern County General Plan, Section 1.10.3, Policy 25
This portion of the General Plan provides that the County of Kern will promote the preservation of cultural and historic resources that provide ties with the past and constitute a heritage value to residents and visitors. There are five implementing measures (K through O). Included in these is a measure that states that the County Planning Department will evaluate the necessity for the involvement of a qualified Native American monitor for grading and other construction activities on CEQA projects.

Kern County Code of Building Regulations Section 17.48.060
Item 45 provides a definition of a historic structure as any structure that is on the National Register of Historic Places or on a State inventory in a State with a historic preservation plan approved by the Secretary of Interior.

Kern County Code of Building Regulations Section 17.48.370
Subsection (B) provides that the County floodplain administrator is empowered to grant variances for the repair or rehabilitation of Historic Structures upon determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character of the structure.

RESEARCH METHODS

Archival research was conducted for the Project to encompass the areas required under CEC citing regulations. Various sources were consulted, including records on file at the Southern San Joaquin Valley Information Center (SSJVIC) at California State University, Bakersfield, historic maps and photographs, historical literature, and other archival collections.

RECORDS SEARCH

A records search conducted at the SSJVIC was received on April 20, 2009. Information regarding previously conducted studies and previously recorded sites was obtained for an area that was defined by a 1-mile radius around the Project area.

Previous Surveys

The records and literature search results indicated that 15 previous investigations had been conducted within a 1-mile radius of the Project area (Table 2). Of the 15 previous surveys identified by the records search, eight (KE-00289, KE-02553, KE-00572, KE-02188, KE-02016, KE-003497, KE-02862, and KE-00948) were conducted within portions of the Project study area. KE-02188 and KE-02553 consist, respectively, of an original linear survey and a resurvey of sections of the Lone Pine Branch of the Mojave-Owenyo rail alignment, a portion of which runs through the western edge of the Project. Besides these, none of the previous surveys within the historic architecture field survey area identified potential historic architectural resources.

Previously Recorded Sites

The records search identified several previously recorded archaeological resources (see Jordan 2009), and it identified one previously recorded historic architectural resource, the section of the Lone Pine Branch of the Mojave-Owenyo rail alignment, within the 1-mile radius of the Project area.

Table 2. Summary of Previous Surveys within Records Search Limits

Report Number	Author	Title
KE-00289	Berg	A Technical Report of a Cultural Resources Survey and Inventory for the Mojave Pipeline/Coso Lateral.
KE-02553	Burke	Re-Examination of Previously Documented Cultural Resources on the Union Pacific Railroad Lone Pine Branch, M.P. 4300.00 Series to M.P. 519.34 Near Lone Pine, on Public Lands Administered by the Bureau of Land Management, Ridgecrest Field Office.
KE-00572	Caltrans	Negative Archaeological Survey Report U.S. 395 P.M. 15.0/29.3.
KE-02188	Hall	Cultural Resources Survey of a Portion of the Former Southern Pacific Mojave-Owenyo Branch Railroad, Inyo and Kern Counties, California.
KE-00538	Jensen	Archaeological Inventory Survey, Ridgecrest Solid Waste Landfill Site c. 120 ac at Ridgecrest, Eastern Kern County, California.
KE-00541	Jensen	Archaeological Inventory Survey Buffer Zone Study Area at the Ridgecrest Solid Waste Landfill, Indian Wells Valley, Eastern Kern County, California.
KE-02403	LSA Associates, Inc.	Cultural Resource Assessment for Pacific Bell Mobile Services Facility LA-973-04, in the County of Kern, California.
KE-00795	No Author	Environmental Impact Statement for Archaeological Values Prepared for Various Projected Facilities of the IWVCWD.
KE-01868	Oxendine	Cultural Resources Report for the Contel Fiber Optic Cable Ridgecrest Resource Area.
KE-01094	Pruett	Environmental Impact Evaluation: Archaeological Evaluation for 80 Acres South of Inyokern, Kern County.
KE-00948	Pruett	Archaeological Evaluation for a Road Right-of-Way across BLM and South of Inyokern, Kern County.

ADDITIONAL RESEARCH

Archival research yielded information on regional history for the historical context and more specific information on the history of the Project area and its immediate 5-mile radius.

Historic Maps

Historic topographic maps (including U.S. Geological Survey [USGS] quadrangle maps) of the Project area and the vicinity were reviewed to identify locations of historic structures (Table 3). Historic maps on file at California State University Chico and the University of Alabama were accessed online.

Table 3. Historic Maps

Map Name/Year	Scale	Source	Built Resources in Project Area
Searles Lake 1915	1:125,000	University of Alabama	None
Inyokern 1943	1:62,500	University of Alabama	None
Ridgecrest 1953	1:62,500	University of Alabama	None

Historic maps of the Project area indicated that there were standing structures that predate 1953 within the historic architecture field survey study area. These included structures in Section 19.

Museums and Historical Societies

The Historical Society of the Upper Mojave Desert in Ridgecrest was visited on May 8, 2009. The museum yielded limited information about development related to the Project area in the form of exhibits and interpretive narratives. The museum's reference library was unavailable for research; the historical society had released a brief, but informative publication, *Indian Wells Valley – How It Grew* (Weals 2001).

The Maturango Museum in Ridgecrest was visited on May 8, 2009. The museum offered limited information on regional history.

BLM Archives

The BLM Field Office in Ridgecrest was visited on May 8, 2009. BLM references include General Land Office (GLO) plat maps of the Project area, desert land entries, and various survey reports. BLM provided information based on previous surveys and maps.

CONTACT PROGRAM

Historical Resources Contact Program

Local historical societies were contacted regarding the Project (Table 4). A letter was sent to various local historical societies, museums, and research institutions on June 1, 2009, requesting information on any part of the Project area or surrounding area. Follow-up telephone calls to the

remainder of the organizations were completed on July 17, 2009. To date, no responses, comments, or concerns have been received.

Table 4. Historical Resources Contact Program

Historical Society/Museum	Dates of Initial Contact	Response
Clan Diggers Genealogical Society	6/1/2009	None to date
Historical Society of the Upper Mojave Desert	6/1/2009	None to date
Kern County Museum	6/1/2009	None to date
Kern River Valley Historical Society and Kern Valley Museum	6/1/2009	None to date
Maturango Museum	6/1/2009	None to date

SURVEY METHODS AND RESULTS

BLM and CEC provide guidelines for the inventory and documentation of historic architectural resources within the Project area. For the purposes of this report, this would include the identification and inventory of historic architectural resources that would be at least 45 years old by the Project completion date.

PERMIT

EDAW filed a Field Work Authorization Request under a statewide BLM permit (CA-06-21). The request indicated areas to be surveyed, supervisory personnel, and survey dates. Maps of the survey areas accompanied the request. A Field Work Authorization was issued dated April 3, 2009.

ARCHITECTURAL AREA OF POTENTIAL EFFECTS

Following CEC guidelines, new historic architecture field surveys in rural areas are conducted inclusive of the project site and the project linear facility routes, extending no less than 0.5 mile out from the proposed plant site and from the routes of all above-ground linear facilities. Accordingly, the Project historic architecture field survey area included all proposed Project disturbance areas and a 0.5-mile buffer in the AAPE. Subsequently, the proposed Project disturbance area has been modified into an area smaller than the original disturbance area for which the survey was conducted. This report reflects the results of the historic architecture field survey conducted on May 8, 2009, and indicates which resources are in the current (August 2009) AAPE.

SURVEY METHODOLOGY

A reconnaissance survey of the study area was conducted on May 8, 2009, to identify, inventory, and characterize structures and districts that appear to be older than 45 years or that are exceptionally significant, whatever their age. The survey utilized both the USGS 7.5-minute Inyokern SE and Ridgecrest South topographical map and larger scale aerial photographs. Resources within the study area were observed, located on maps, photographed, and evaluated for characteristics, materials, and condition. Historic architectural resources, defined as standing buildings, structures, or objects over 45 years old, were assessed for eligibility for inclusion to the California Register of Historical Resources (CRHR) and the National Register of Historical Places (NRHP), and recorded on appropriate DPR 523 forms (see Appendix B).

For listing in the CRHR, a historical resource must be significant at the local, state, or national level under one or more of the following criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;

2. It is associated with the lives of persons important to local, California, or national history;

3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or

4. It has yielded or has the potential to yield information important to the prehistory or history of the local area, California, or the nation.

For listing in the NRHP, a historical resource must be significant at the local, state, or national level under one or more of the following criteria:

A. It is associated with events that have made a significant contribution to the broad patterns of our history;

B. It is associated with the lives of persons significant in our past;

C. It embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. It has yielded or may be likely to yield, information important in prehistory or history.

All resources nominated for listing must have integrity, which is the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. Resources, therefore, must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association. It must also be judged with reference to the particular criteria under which a resource is proposed for nomination.

During the site visit, no buildings or structures were identified in the Project disturbance area. However, a segment of the Southern Pacific Mojave-Owenyo Railroad Line alignment is present within the CEC-required buffer area adjacent to the southwestern boundary of the Project site, and several buildings and structures were observed within the original AAPE. Two areas of development adjacent to the project site contain several buildings that may be 45 or more years old.

One area is located outside of the Project area, just west of the northwest corner of the Project disturbance area in Section 22 of Township 27 South, Range 39 East of the Mount Diablo Meridian. The buildings in this area are primarily associated with two or three small-scale farming and ranching complexes. Based on field observations and the review of historic maps, the buildings and structures date to the mid- to late 20th century, with land transaction primarily

occurring circa 1960. Many buildings are now abandoned and severely deteriorated, while a few appear to be inhabited.

The second area is located outside of the disturbance area, to the east of State Highway 395 in Section 19 of Township 27 South, Range 40 East of the Mount Diablo Meridian. This section has more dense development on approximately 5-acre lots. The majority of the land transactions in this section occurred circa 1959, and many buildings appear to date from that era, although many are abandoned and in poor condition. The earliest building in this section appears on the 1953 USGS Ridgecrest 15-minute topographical map. The limited activities in this section appear to relate to small-scale farming and animal husbandry. There are newly constructed buildings in this section, as well.

No previously recorded historic architectural resources, with the exception of the segment of the Southern Pacific Mojave-Owenyo Railroad Line, were identified through archival research. No standing buildings, structures, or objects, were identified within the Project disturbance area. Twelve additional built resources were identified within the original AAPE (Figure 3). Subsequent to the field survey conducted on May 8, 2009, modification of the Project disturbance area altered the AAPE and the quantity of resources identified in the survey that fall within the updated AAPE. Two resources are located within the 0.5-mile buffer in the current AAPE. The 13 resources evaluated in this study are listed in Table 5.

Table 5. Built Resources

Name/Temporary Number	Description	Date	Location
RS-BE-341-130-16	Homestead building	Mid-20th century	Outside of buffer
RS-BE-341-130-17	Homestead building	Mid-20th century	Outside of buffer
RS-BE-341-130-19	**Residence**	**Mid-20th century**	**Buffer (08/2009)**
RS-BE-341-140-30	**Concrete block outbuilding/garage**	**Mid-20th century**	**Buffer (08/2009)**
RS-BE-511-051-05	Residence	1959	Outside of buffer
RS-BE-511-051-07	Homestead building	Early to mid-20th century	Outside of buffer
RS-BE-511-051-10	Homestead building	Early to mid-20th century	Outside of buffer
RS-BE-511-051-11	Homestead building	Late 20th century	Outside of buffer
RS-BE-511-051-13	Homestead building	Mid-20th century	Outside of buffer
RS-BE-511-051-19	Homestead building	Early to mid-20th century	Outside of buffer
RS-BE-511-051-21	Homestead building	Early 20th century	Outside of buffer
RS-BE-511-051-25	Homestead building	Mid- to late 20th century	Outside of buffer
P-15-003366/CA-KER-3366H	**Segment of the Southern Pacific Mojave-Owenyo Railroad Line alignment (CA-INY-4608H)**	**Early 20th century**	**Buffer (08/2009)**

RS-BE-341-130-16
RS-BE-341-130-17
RS-BE-341-130-19
RS-BE-341-140-30
RS-BE-511-051-19
RS-BE-511-051-21
RS-BE-511-051-05
RS-BE-511-051-13
RS-BE-511-051-07
RS-BE-511-051-10
RS-BE-511-051-25
RS-BE-511-051-11
P-15-003366

Map Location

Legend

- Architectural Resources within the Updated CEC 0.5-mile Buffer
- Architectural Resources within the Historic Architecture Field Survey Area
- Historic Linear Resource
- Disturbance Limits
- Updated CEC 0.5-mile Buffer
- Historic Architecture Field Survey Area

Source: USGS; AECOM 2009

N
W
E
S

1 inch = 2,750 feet

0 2,750 5,500 Feet

Ridgecrest Solar Power Project
Historic Architecture Field Survey Report

Figure 3
Survey Results

Solar Millennium

AECOM

Date: August 2009

Path: P:\2009\09080080 Sol Mil Ridgecrest\6.0 GIS\6.3 Layout\Reports\HistoricArchitectureFieldSurveyReport\Fig3_RSPP_HistSurvResults.mxd, 08/26/09, Sorensen

RS-BE-341-130-16

This building, located in Section 22, appears to be a prefabricated structure that functioned as a bunkhouse or workers' cabin related to homestead farming in the mid- to late 20th century. It is a simple frame structure with a rectangular plan and a shed roof (Plate 1). The flat shed roof has a moderate overhang and enclosed eaves. Vinyl siding and windows have been applied to the structure that has few other defining characteristics.

The construction date of this building is unknown, but the building first appears on the 1973 USGS 7.5-minute Inyokern SE topographical map. This building is located outside of the current 0.5-mile buffer around the updated Project area. It is possible that this building is over 45 years old, and it has associations with the thematic development of agricultural and rural life in the Indian Wells Valley, but it does not possess the characteristics or integrity to make it eligible for the NRHP or CRHR. It is not considered a historical resource for the purposes of CEQA or a historic property for the purposes of NEPA.

Plate 1. RS-BE-341-130-16

RS-BE-341-130-17

Similar to the nearby resource RS-BE-341-130-26, this building appears to have been used as a bunkhouse or workers' cabin related to homestead farming. The building has a rectangular plan, frame construction, and a flat shed roof with a moderate overhang (Plate 2). The exterior walls consist of plywood and battens. The few windows appear to be vinyl. A single door provides access into this building.

The construction date of this building is unknown, but the building first appears on the 1973 USGS 7.5-minute Inyokern SE topographical map. This building is located outside of the current 0.5-mile buffer around the updated Project area. It is possible that this building is over 45 years old, but it does not possess the characteristics or integrity to make it eligible for the NRHP or CRHR. It is not considered a historical resource for the purposes of CEQA or a historic property for the purposes of NEPA.

Plate 2. RS-BE-341-130-17

RS-BE-341-130-19

Located in Section 22, this house is an amalgam of a gabled frame house and several additional sheds (Plate 3). Built at an unknown date, although most likely in the mid-20th century, the original characteristics of this house are difficult to discern. The low-pitched gabled roof has a narrow overhang, the exterior walls are at least partially covered in clapboard, and the windows are replacement aluminum horizontal sliding windows.

The building appears over 45 years old, but does not possess any apparent characteristics to make it eligible for the NRHP or CRHR. Although it has associations with the thematic development of agricultural and rural life in the Indian Wells Valley, it does not possess the characteristics or integrity to make it eligible for the NRHP or CRHR. It is not considered a historical resource for the purposes of CEQA or a historic property for the purposes of NEPA. This building is located outside of the current 0.5-mile buffer around the updated Project area.

Plate 3. RS-BE-341-130-19

RS-BE-341-140-30

Also in Section 22, this concrete block structure (Plate 4) most likely dates to the mid- to late 20th century. The building has a poured concrete foundation, concrete block walls, and a low-pitched roof. The building also has a wide-access/garage door in the northern wall, man-door access in both the eastern and western walls, and regularly spaced fenestration. Currently, it has no interior or exterior finishes, and is missing all windows and doors.

The building appears over 45 years old, but does not possess any apparent characteristics to make it eligible for the NRHP or CRHR. Although it has associations with the thematic development of agricultural and rural life in the Indian Wells Valley, it does not possess the characteristics or integrity to make it eligible for the NRHP or CRHR. It is not considered a historical resource for the purposes of CEQA or a historic property for the purposes of NEPA. This building is located outside of the current 0.5-mile buffer around the updated Project area.

Plate 4. RS-BE-341-140-30

RS-BE-511-051-05

Located in Section 19 at 2165 W. Lund Street, this building was built in 1959. The two-story frame building (Plate 5) is of modern construction. It has a very low-pitched gabled roof with a wide overhang, exterior walls covered in boards, and aluminum sliding glass doors and windows, including a large octagonal window in the second story. There are several sheds and objects adjacent to the building.

The building is over 45 years old, but does not possess any apparent characteristics to make it eligible for the NRHP or CRHR. Although it has associations with the thematic development of more recent agricultural and rural life in the Indian Wells Valley, it does not possess the characteristics to make it eligible for the NRHP or CRHR. It is not considered a historical resource for the purposes of CEQA or a historic property for the purposes of NEPA. This building is located outside of the current 0.5-mile buffer around the updated Project area.

Plate 5. RS-BE-511-051-05

RS-BE-511-051-07

This building appears to be a prefabricated stick-frame construction worker's cabin. It is a frame structure with a rectangular plan, clapboard/board exterior walls, and a shed roof with a moderate overhang (Plate 6). Remnants of the interior and exterior finishes are scattered around the building.

The building appears over 45 years old, but does not retain sufficient integrity to make it eligible for the NRHP or CRHR. It is not considered a historical resource for the purposes of CEQA or a historic property for the purposes of NEPA. This building is located outside of the current 0.5-mile buffer around the updated Project area.

Plate 6. RS-BE-511-051-07

RS-BE-511-051-10

Although its construction date is undetermined, this building is potentially the earliest of the currently standing structures in the study area, appearing on the 1953 USGS Ridgecrest 15-minute topographical map. This resource is a frame structure on a poured concrete foundation with a masonry veneer foundation wall and board shear walls that were once potentially covered in clapboard but are now stripped away (Plate 7). The building has a medium-pitched gable roof with a narrow overhang. Window openings and doors are now vacant, but regularly spaced in each elevation. Adjacent to the main structure is the remains of a pen that had a masonry kneewall and framing with net wiring enclosing it. The building has partially collapsed on the western side, and the remaining portions appear unsound.

Built in the early 20th century (before 1953), this homestead building has associations with the thematic development of early agricultural and rural life in the Indian Wells Valley, but it is not sufficiently significant to make it eligible for the NRHP or CRHR. Moreover, it does not retain sufficient integrity to represent its historical theme. It is not considered a historical resource for the purposes of CEQA or a historic property for the purposes of NEPA. This building is located outside of the current 0.5-mile buffer around the updated Project area.

Plate 7. RS-BE-511-051-10

RS-BE-511-051-11

This one-story frame building (Plate 8) is of modern construction, built in the late 20th century. It has a low-pitched gabled roof with a wide overhang, exterior board and batten walls, and aluminum sliding windows. It appears to be a residence or bunkhouse, but currently it is partially boarded and it is unclear whether it is inhabited.

The building is potentially over 45 years old, but does not possess any apparent characteristics to make it eligible for the NRHP or CRHR. Although it relates to more recent rural life developments in the Indian Wells Valley, it does not possess the characteristics to make it eligible for the NRHP or CRHR. It is not considered a historical resource for the purposes of CEQA or a historic property for the purposes of NEPA. This building is located outside of the current 0.5-mile buffer around the updated Project area.

Plate 8. RS-BE-511-051-11

RS-BE-511-051-13

Located in Section 19, this building appears to be a prefabricated stick-frame construction worker's cabin built in the mid-20th century. It is a frame structure with a rectangular plan, clapboard/board exterior walls, and a shed roof with a moderate overhang and unenclosed eaves (Plate 9). The windows are currently boarded. Remnants of the interior and exterior finishes are visible, including drywall and insulation.

The construction date of this building is unknown, but it is potentially over 45 years old. A homestead building, it potentially functioned as a residence or a worker's cabin. Although associated with the development of early agricultural and rural life in the area, particularly with the rise of development in this section in the mid-20th century, it does not appear to possess adequate significance nor retain sufficient integrity to make it eligible for the NRHP or CRHR. It is not considered a historical resource for the purposes of CEQA or a historic property for the purposes of NEPA. This building is located outside of the current 0.5-mile buffer around the updated Project area.

Plate 9. RS-BE-511-051-13

RS-BE-511-051-19

This building appears to be a prefabricated stick-frame construction worker's cabin, built in the early to mid-20th century. It is a frame structure with a rectangular plan, clapboard/board exterior walls, and a shed roof with a moderate overhang (Plate 10). The windows are multi-light casements, but currently do not contain any panes of glass. This homestead building appears abandoned.

This building is potentially over 45 years old (early to mid-20th century), although an exact date of construction is undetermined. It potentially functioned as a homestead residence or a worker's cabin. Dating from an era of early agricultural and rural life in the area, it does not appear to possess adequate significance nor retain sufficient integrity to make it eligible for the NRHP or CRHR. It is not considered a historical resource for the purposes of CEQA or a historic property for the purposes of NEPA. This building is located outside of the current 0.5-mile buffer around the updated Project area.

Plate 10. RS-BE-511-051-19

RS-BE-511-051-21

This small shed appears to have been used for storage or perhaps as a worker's cabin, and was potentially built as early as 1900 (First American Corporation 2009). Built in the early 20th century, it is a frame structure on a concrete foundation with a rectangular plan, board-sided exterior walls, and a flat roof consisting of open rafters with a composition surface above (Plate 11).

This building is over 45 years old, is potentially the oldest building in the study area, and dates from an early era of rural life development in Section 19, but it does not appear to possess adequate significance or associated features to make it eligible for the NRHP or CRHR. It is not considered a historical resource for the purposes of CEQA or a historic property for the purposes of NEPA. This building is located outside of the current 0.5-mile buffer around the updated Project area.

Plate 11. RS-BE-511-051-21

RS-BE-511-051-25

This one-story frame building (Plate 12) appears modern, built in the late 20th century. It has a low-pitched gabled roof with an overhang that extends over a porch, exterior board or stucco walls, and replacement vinyl windows and doors. It is a residence with many objects and debris in the surrounding lot.

The building is potentially over 45 years old, but does not possess any apparent characteristics to make it eligible for the NRHP or CRHR. Although it relates to more recent rural life developments in the Indian Wells Valley, it does not possess significance to make it eligible for the NRHP or CRHR. It is not considered a historical resource for the purposes of CEQA or a historic property for the purposes of NEPA. This building is located outside of the current 0.5-mile buffer around the updated Project area.

Plate 12. RS-BE-511-051-25

P-15-003366

The railroad line from Mojave to the Owens Valley was planned by the City of Los Angeles and built between 1908 and 1913 by the Southern Pacific Railroad for the Los Angeles Aqueduct water diversion project. Construction of the aqueduct required the movement of laborers, machinery, cement, supplies, and large amounts of related equipment to distant areas along its route in the remote Owens Valley. By October 1910, the railroad reached the small Quaker settlement of Owenyo on the shore of Owens Lake, which would subsequently be drained by diversion of its water to Los Angeles via the new aqueduct. While a segment of the railroad between Mojave and Searles Junction (south of the segment surveyed for this study) is still in use, the portion of the railroad between Searles Junction and the Owens Valley was abandoned in 1982 after a fire made the Searles tunnel impassable. The tracks, ties, and other related features were removed in 1998 (Plate 13).

This segment of the resource that is located within the current 0.5-mile buffer around the Project area was relocated and evaluated. The railroad tracks were removed, and while some elements of the original resource remain, it does not retain sufficient integrity for eligibility for the NRHP or CRHR. It is not considered a historical resource for the purposes of CEQA or a historic property for the purposes of NEPA.

Plate 13. Portion of P-15-003366 in AAPE

SUMMARY

The historic architecture field survey initially identified 12 standing built resources, only two of which are situated within the current 0.5-mile buffer surrounding the Project area. No resources were located within the Project area. The remaining 10 buildings are located outside of the current 0.5-mile buffer. None of these resources are eligible for the NRHP or CRHR. There are no significant historic architectural resources within the study area; therefore, the Project will have no impacts on historic architectural resources (Table 6).

Table 6. Summary of Historic Architecture Field Survey Results

Name/Temporary Number	Description	Date	Location	Significance Potential	Project Impact
RS-BE-341-130-16	Homestead building	Mid-20th century	Outside buffer	Not significant; does not meet NRHP or CRHR criteria	No impact
RS-BE-341-130-17	Homestead building	Mid-20th century	Outside buffer	Not significant; does not meet NRHP or CRHR criteria	No impact
RS-BE-341-130-19	**Residence**	**Mid-20th century**	**Buffer (08/2009)**	Not significant; does not meet NRHP or CRHR criteria	**No impact**
RS-BE-341-140-30	**Concrete block outbuilding/garage**	**Mid-20th century**	**Buffer (08/2009)**	Not significant; does not meet NRHP or CRHR criteria	**No impact**
RS-BE-511-051-05	Residence	1959	Outside buffer	Not significant; does not meet NRHP or CRHR criteria	No impact
RS-BE-511-051-07	Homestead building	Early to mid-20th century	Outside buffer	Not significant; does not meet NRHP or CRHR criteria	No impact
RS-BE-511-051-10	Homestead building	Early to mid-20th century	Outside buffer	Not significant; does not meet NRHP or CRHR criteria	No impact
RS-BE-511-051-11	Homestead building	Late 20th century	Outside buffer	Not significant; does not meet NRHP or CRHR criteria	No impact
RS-BE-511-051-13	Homestead building	Mid-20th century	Outside buffer	Not significant; does not meet NRHP or CRHR criteria	No impact
RS-BE-511-051-19	Homestead building	Early to mid-20th century	Outside buffer	Not significant; does not meet NRHP or CRHR criteria	No impact
RS-BE-511-051-21	Homestead building	Early 20th century	Outside buffer	Not significant; does not meet NRHP or CRHR criteria	No impact

Name/Temporary Number	Description	Date	Location	Significance Potential	Project Impact
RS-BE-511-051-25	Homestead building	Mid- to late 20th century	Outside buffer	Not significant; does not meet NRHP or CRHR criteria	No impact
P-15-003366/CA-KER-3366H	**Segment of the Southern Pacific Mojave-Owenyo Railroad Line alignment (CA-INY-4608H)**	**Early 20th century**	**Buffer (08/2009)**	**Not significant; does not meet NRHP or CRHR criteria**	**No impact**

REFERENCES

Bureau of Land Management (BLM)

2007 Property Records. Available online at blm.ca.gov.

California Department of Transportation (Caltrans)

2007 *A Historical Context and Archaeological Research Design for Agricultural Properties in California*. Division of Environmental Analysis, California Department of Transportation, Sacramento, California.

Jordan, Stacey

2009 *Class III Report for the Proposed Ridgecrest Solar Power Project, Riverside County, California*. Prepared for Solar Millennium, LLC and Chevron Energy Solutions.

First American Corporation

2009 FastWeb Property Profiles.
Available by subscription at https://fwprodweb1.firstam.com/fastweb/fwlogin.asp.

U.S. Geological Survey (USGS)

1915 Searles Lake, CA 30-minute Topographical Quadrangle Map.
Available at http://alabamamaps.ua.edu/historicalmaps/index.html.

1943 Inyokern, CA 15-minute Topographical Quadrangle Map.
Available at http://alabamamaps.ua.edu/historicalmaps/index.html.

1953 Ridgecrest, CA 15-minute Topographical Quadrangle Map.
Available at http://alabamamaps.ua.edu/historicalmaps/index.html.

1972 Inyokern SE, CA 7.5-minute Topographical Quadrangle Map.
Available at usgs.gov.

1973 Ridgecrest South, CA 7.5-minute Topographical Quadrangle Map.
Available at usgs.gov.

1983 Ridgecrest 7.5-minute Topographical Quadrangle Map.
Available at usgs.gov.

Weals, F.H.

2001 *Indian Wells Valley — How It Grew: A Brief Review of California Land History Followed by a Description of Land Division, Early land Ownership, Tract Development and Street naming in Indian Wells Valley*. Published by and available at the Historical Society of the Upper Mojave Desert.

Wickstrom, Brian

2006 *Historic Property Survey Report for the Inyokern Four Lane Project, Kern County, California*. Prepared for California Department of Transportation. On file at the Southern San Joaquin Valley Information Center at California State University, Bakersfield, in Bakersfield, California.

ATTACHMENT 1

RESUME

TRINA MEISER
Architectural Historian

SUMMARY
Historic preservation specialist and architectural historian

EDUCATION
MA, Historic Preservation Planning, Cornell University, 2003

BA, History, Kenyon College, 1998

AFFILIATIONS
National Trust for Historic Preservation

Society of Architectural Historians

California Preservation Foundation

Trina Meiser is a historic preservation specialist and an architectural historian with 6 years of experience in surveying, documenting, evaluating, and planning for historic structures, districts, sites, and cultural resources. Her background is based on a solid knowledge of architectural history, architectural styles and terminology, building materials conservation, and historic preservation theory. She has led seminars on architectural styles and the history of historic preservation, charrettes for the design treatments of historic districts, as well as workshops in materials conservation. She has completed cultural resource technical reports, National Register of Historic Places nominations, historic structures reports, and Federal Rehabilitation Tax Credit applications. She has consulted on a variety of historic structure rehabilitation plans with clients, architects, engineers, and agency representatives for regulatory review. Her experience in historic preservation planning provides a strong understanding of federal, state, and local historic preservation laws. She has a thorough knowledge of the *Secretary of the Interior's Standards for the Treatment of Historic Properties* and their functions in historic preservation planning.

Ms. Meiser's areas of interest include urban and landscape preservation planning and design, building restoration, archaeology, international heritage sites, and historic district and neighborhood revitalization projects. She is a member of the Society of Architectural Historians, the California Preservation Foundation, the National Trust for Historic Preservation, and several regional historical societies and preservation organizations.

HISTORIC PRESERVATION PROJECTS

National Register Eligibility Assessment for Naval Base Ventura County, Port Hueneme, California
Architectural Historian
CLIENT: U.S. Navy, Southwest Division
Recorded and evaluated 18 buildings at the Naval Construction Training Center at Port Hueneme for eligibility to the National Register. Conducted research on the Disaster Recovery Training School for incorporation into the historical context. Completed DPR forms and incorporated findings in a Historic Resources Evaluation Report.

Ramona Air Center Environmental Impact Report, Ramona, California
Architectural Historian
CLIENT: TCR Properties
Conducted a survey and historical research of structures more than 50 years old to evaluate and document historic resources. Results were recorded on DPR forms and summarized for inclusion in the project Environmental Impact Report.

Exposition Light Rail Transit Phase 2, Los Angeles County, California
Architectural Historian
CLIENT: Exposition Light Rail Authority/AECOM Transportation
Conducted fieldwork to record and evaluate historic resources along the Exposition Corridor ROW. Completed a Historical Resources Evaluation Report for the evaluation of historical resources for eligibility to the National Register of Historic Places and the California Register of Historical Resources. Provided cultural resources portion of Environmental Impact Statement, including mitigation measures for the treatment of evaluated historical resources.

TRINA MEISER

SR-76 Mission to I-15 Historical Resources Evaluation Report, San Diego, California
Architectural Historian
CLIENT: San Diego Association of Governments/Caltrans
Conducted fieldwork to record and evaluate ranching buildings and residences. Completed a Historical Resources Evaluation Report per Caltrans standards for the evaluation of historical resources for eligibility to the National Register of Historic Places and the California Register of Historical Resources.

Main Street Bridge Replacement Project, Temecula, California
Architectural Historian
CLIENT: City of Temecula
Conducted a survey and historical research of historic resources in Old Town Temecula adjacent to the Main Street Bridge. Results were recorded on DPR forms and in a Historical Resources Survey Report per Caltrans guidelines.

301 University Avenue Historical Evaluation and Technical Report, San Diego, California
Architectural Historian
CLIENT: Allen, Matkins, Leck, Gamble, Mallory & Matsis, LLP
Evaluated the condition and integrity of the former supermarket building dating from 1942. Prepared Historic Resources Evaluation Report and survey forms. Summarized findings for inclusion in the 301 University Uptown Environmental Impact Report.

SFVAMC Environmental Assessment of Seismic Upgrades, San Francisco, California
Architectural Historian
CLIENT: Department of Veterans Affairs
Consulted with architects and designers for the rehabilitation and seismic retrofit of the 1930s-era Art Deco San Francisco Veterans Affairs Medical Center buildings. Reviewed plans and rehabilitation standards to evaluate design of new additions and alterations. Engaged in consultation with the State Historic Preservation Office.

North Torrey Pines Bridge "Sorrento Overpass" Restoration, Del Mar, California
Historic Preservation Specialist
CLIENT: City of Del Mar
Consulted with engineers for the restoration of the 1933 North Torrey Pines Bridge to resolve significant impacts to the National Register-eligible resource. Assessed the deterioration of the bridge and established the historic character-defining features to be preserved. Evaluated restoration plans to suggest mitigation measures for its treatment in compliance with the Secretary of Interior Standards for Restoration.

Jefferson National Expansion Memorial, St. Louis, Missouri
Architectural Historian
CLIENT: National Park Service
Contributed to the cultural resources section of the GMP/EIS. Provided historical context for the Native American occupation, the French colonial establishment, and the 19th century development of the built environment in St. Louis, Missouri.

Fort Totten Conservation Work Weekend, New York, New York
Historic Preservation Specialist
CLIENT: New York City Department of Parks and Recreation
Organized a historic preservation event to perform restoration work on Officers' Quarters at retired military site along New York's East River. Oversaw the conservation of historic exterior woodwork elements. This conservation project was completed prior to joining EDAW.

TRINA MEISER

Hurricane Katrina Recovery, Disaster 1604-DR-MS, Biloxi, Mississippi
Architectural Historian
CLIENT: Federal Emergency Management Agency, Region VI
Recorded the condition and integrity of multiple properties affected by Hurricane Katrina and performed photo documentation. Determined if structures were eligible for National Register designation. Results were summarized in a report and through a series of maps generated in GIS. This conservation work was performed prior to joining EDAW.

Hurricane Katrina Recovery, Disaster 1604-DR-MS, Biloxi, Mississippi
Historic Preservation Specialist
CLIENT: Federal Emergency Management Agency, Region VI
Completed Section 106 review and coordinated with the State Historic Preservation Office to ensure that all projects funded by FEMA complied with federal regulations and the National Historic Preservation Act. Evaluated restoration projects for National Register eligibility in compliance with Secretary of Interior's Standards for Restoration and Rehabilitation under Programmatic Agreement. This historic preservation work was performed prior to joining EDAW.

Ithaca Downtown Commercial Historic District National Register Eligibility Nomination, Ithaca, New York
Historic Preservation Planner
CLIENT: City of Ithaca
Completed research and documentation of downtown commercial buildings dating from the 1830s to the 1930s. Document included architectural descriptions of each building. Successful nomination to the National Register. This historic preservation planning project was completed prior to joining EDAW.

University Avenue Historic District National Register Eligibility Assessment, Ithaca, New York
Historic Preservation Planner
CLIENT: City of Ithaca
Completed documentation included in the survey and nomination of this residential historic district with resources dating from the 1860s to the 1950s. This historic preservation planning project was completed prior to joining EDAW.

Historic Ithaca's State Theatre Restoration Project, Ithaca, New York
Historic Preservation Specialist
CLIENT: Historic Ithaca, Inc.
Evaluated restoration designs for compatibility with the historic character of the resource and for compatibility with the *Secretary of the Interior's Standards for Rehabilitation*. Performed conservation of textiles, decorative fixtures, plaster, and windows. Managed construction projects relating to aesthetic and ADA accessibility modifications. This restoration work was completed prior to joining EDAW.

The Clinton House, Ithaca, New York
Historic Preservation Planner/Specialist
CLIENT: Historic Ithaca, Inc.
Evaluated designs for compatibility with the historic character of the resource and for compatibility with the *Secretary of the Interior's Standards for Rehabilitation*. Compiled and prepared Part 1 of the Federal Rehabilitation Tax Credit Application. Oversaw construction management for aesthetic modifications to historic elements. This planning and conservation project was completed prior to joining EDAW.

TRINA MEISER

The Delaware, Lackawanna and Western Train Station National Register Eligibility Nomination, Ithaca, New York
Historic Preservation Specialist
CLIENT: City of Ithaca
Composed historic context statement and architectural description for historic train station. Photodocumented building and submitted the application to the State Office of Historic Preservation. This historic preservation planning project was completed prior to joining EDAW.

Athens Exchange Hotel Stagecoach Livery Historic Structures Report, Athens, Pennsylvania
Preservation Planner
CLIENT: Town of Athens, Pennsylvania
Conducted comprehensive assessment of exterior and interior spaces of 1860s livery structure. Identified character-defining features and compiled historic context statement. Photodocumented building and developed recommendations for treatment and maintenance of deteriorated historic features. This conservation project was completed prior to joining EDAW.

REBECCA MCCORKLE APPLE, RPA
Principal/Manager, Cultural Resources Group/
Senior Archaeologist

SUMMARY
Expertise with CEQA/NEPA requirements

Experience with Section 106 compliance and mitigation programs

Over 20 years experience in cultural resource management

EDUCATION
MA, Anthropology, San Diego State University, 1990

BA, Anthropology, San Diego State University, 1978

AFFILIATIONS
Society for American Archaeology

Society for California Archaeology

CERTIFICATIONS
Register of Professional Archaeologists

Certified Archaeology Consultant, County of San Diego

ACADEMIC AWARDS AND SCHOLARSHIPS
Phi Kappa Phi

Phi Beta Kappa

University Scholar, 1987 and 1988

PAPERS AND PUBLICATIONS
Setting the Scene: Interpretive Planning and Implementation in Old Town Historic State Park. Paper presented at the 42nd Annual Meeting for the Society of California Archaeology, Burbank, California (2008).

Mapping and Managing Pathway to the Past. Paper presented at the 22nd Annual ESRI International User Conference, San Diego, California (2002).

Introduction to Recent Archeological Investigations at the Salton Sea Test Base, Imperial County California. Proceedings of the Society for California Archaeology, Volume 12. Fresno, California (1999).

Introduction to Recent Archaeological Investigations at Salton Sea Test Base, Imperial County, California. Paper presented at the 32nd Annual Meeting for Society for California Archaeology, San Diego (1998).

A Lake Mojave Period Site Near Silver Lake, California (with A. York). Presented at the 26th Annual Meeting of the Society for California Archaeology, Pasadena (1992).

Recent Archaeological Investigations in the North Las Vegas Valley (with J.H. Cleland and M.S. Kelly). In Crossing the Borders: Quaternary Studies in Eastern California and Southwestern Nevada. San Bernardino County Museum Association Special Publication (1991).

Rebecca Apple has over 20 years of experience in cultural resource management and serves as senior archaeologist for EDAW. Her experience includes managing cultural resources compliance efforts for large complex projects. She is knowledgeable in the procedures and guidelines associated with implementation of NHPA and CEQA. She has managed numerous cultural resource projects, including prehistoric, historic, and ethnographic studies. She has directed inventories, evaluations, data recovery efforts, and monitoring programs. She has also prepared management plans and conducted feasibility studies. Her work frequently includes consultation with municipal, state, and federal agencies, as well as Native American representatives and the public. As part of interdisciplinary teams, she has managed cultural resources investigations and authored cultural resource sections for ISs, EAs, EIRs, and EISs. Her experience includes cultural resource investigations for pipelines, transmission lines, power plants, highways, landfills, water resource facilities, military installations, and commercial and residential development.

ENERGY AND TRANSMISSION PROJECTS

CONFIDENTIAL PROJECT
Task Manager
CLIENT: CONFIDENTIAL CLIENT
Responsible for oversight of archaeological and architectural surveys, technical reports, coordination with CEC staff, and preparation of AFC sections for a 2,000–acre solar project.

Yuma Lateral Pipeline Project, Yuma, AZ
Project Manager
CLIENT: North Baja LLC (TransCanada)
Responsible for cultural services, conducting records searches, archival research, Native American consultation, and survey of the preferred alignment. Identified resources included the Yuma Valley Railroad, a National Register-eligible property.

Harper Lake Cultural Resources Constraints Study, San Bernardino County, CA
Task Manager
CLIENT: ENSR/Harper Lake, LLC
Responsible for field reconnaissance and constraints analysis for a proposed 3,300-acre specific plan area. Potential development included a diary and energy park.

North Baja Pipeline Project, Ehrenberg, Arizona to Mexican Border
Project Manager
CLIENT: Foster Wheeler
Responsible for cultural services, conducting records searches, archival research, Native American consultation, survey of the preferred alignment and alternatives, site evaluation, and data recovery.

DeAnza Pipeline Constraints and Permitting Analysis, Ehrenberg, AZ to Calexico, CA
Resource Manager
CLIENT: AEP
Responsible for cultural services, providing information on distribution of natural and cultural resources along the proposed pipeline corridor in report

format, with accompanying maps showing these resources and other constraints.

SEMPRA On-call Cultural Services, CA
Resource Manager
CLIENT: SEMPRA
Resource manager for cultural resource task orders. Most recent task order dealt with artifact curation for a City project.

Imperial Irrigation District Cultural Survey, Imperial County, CA
Project Manager
CLIENT: Imperial Irrigation District
Responsible for cultural resources component of two transmission line studies. Survey and testing were conducted in conjunction with pole replacement along the R and L transmission lines.

Mead-Adelanto Transmission Line, Clark County, NV, and San Bernardino County, CA
Resource Manager
CLIENT: Los Angeles Department of Water and Power
Cultural resource survey.

Sycamore Canyon Substation to Rancho Carmel Substation 69-kV Transmission Line Project, San Diego County, CA
Project Manager
CLIENT: San Diego Gas & Electric
Responsible for cultural resources component of a PEA document for submittal to the CPUC that evaluated the potential environmental impacts of a proposed 69-kV transmission line.

Coso Known Geothermal Resource Area, Inyo County, CA
Resource Manager
CLIENT: Los Angeles Department of Water and Power
Responsible for data recovery investigations at two geothermal well-pads located in the Sugarloaf Mountain Obsidian Source National Register District.

Santa Ynez Unit Development, Santa Barbara County, CA
Field Director
CLIENT: Exxon Corporation
Supervised data recovery excavations of a prehistoric coastal site.

Big Creek Expansion Project Transmission Line, South Central, CA
Data Manager
CLIENT: Southern California Edison
Responsible for cultural resource impact assessment of alternative routes for a proposed transmission line from the Big Creek Hydroelectric Project in the Sierras to the Los Angeles Basin.

Kern River Gas Transmission Project, WY, UT, NV, and CA
Task and Resource Manager
CLIENT: Kern River Gas Transmission Company
Inventory, evaluation, data recovery, and construction monitoring for California portion of this Class I overview.

Argus Cogeneration Expansion, San Bernardino and Inyo Counties, CA
Project Archaeologist
CLIENT: Kerr-McGee
Supervised cultural resource survey and documentation for a water pipeline.

REBECCA MCCORKLE APPLE

Geothermal Public Power Line Project, North Central CA
Resource Manager
CLIENT: Sacramento Municipal Utility District
Responsible for cultural resource surveys for a proposed transmission line from the Geysers Geothermal Area to Sacramento.

Southwest Powerlink 500-kV Transmission Line EIR/EIS, Imperial and San Diego Counties, CA
Resource Manager
CLIENT: San Diego Gas & Electric
Participated in Section 106 compliance activities, including data recovery, analysis, and report preparation.

MILITARY PROJECTS

Integrated Cultural Resources Management Plan and Cultural Affiliation Study, Chocolate Mountains Aerial Gunnery Range, Marine Corps Air Station Yuma, Riverside, and Imperial Counties, CA
Co-Principal Investigator
CLIENT: U.S. Navy, Naval Facilities Engineering Command, Southwest and MCAS Yuma
Preparing an ICRMP for CMAGR to guide cultural resources compliance efforts to facilitate CMAGR mission. ICRMP will summarize existing inventory and provide a process to streamline the inventory and evaluation process. Components of the ICRMP are a Regional Archaeological Research Design and a Cultural Affiliation Study.

Archaeological Evaluation of Sites on San Clemente Island, Los Angeles County, CA
Principal Investigator
CLIENT: U.S. Navy Southwest Division and Navy Region Southwest
Responsible for National Register of Historic Places Evaluation of four archaeological sites on San Clemente Island.

Cultural Resources Survey and Evaluation for Spring Hill and Associated Access Roads, Riverside County, CA
Principal Investigator
CLIENT: U.S. Navy, Naval Facilities Engineering Command, Southwest and MCAS Yuma
Directed archaeological resource survey of proposed facility to improve communications for aircraft and vehicles with the Chocolate Mountain Aerial Gunnery Range (CMAGR). Two sites were evaluated for eligibility to the National Register of Historic Places. One site appeared to contain very limited information potential and did not qualify for the NRHP. Site CA-RIV-8236 appeared to possess information relevant to addressing regional research issues and was recommended eligible for the NRHP.

Integrated Cultural Resources Management Plan Naval Base Point Loma, San Diego, CA
Project Manager
CLIENT: U.S. Navy, Naval Facilities Engineering Command and Naval Base Point Loma
Preparing an ICRMP for CMAGR to guide cultural resources compliance efforts to facilitate CMAGR mission. ICRMP will summarize existing inventory and provide a process to streamline the inventory and evaluation process. Components of the ICRMP are a Regional Archaeological Research Design and a Cultural Affiliation Study.

REBECCA MCCORKLE APPLE

Archaeological Survey for the Chocolate Mountains Aerial Gunnery Range Central Training Area, Marine Corps Air Station Yuma, Imperial County, CA
Resource Manager
CLIENT: U.S. Navy, Southwest Division and MCAS Yuma
Responsible for cultural resource survey of proposed central training area on CMAGR. The 1,580-acre survey identified fours sites on R-2507S and four on R-2507 N. One of the sites on the South Range (the remains of a ranch complex) and three of the sites on the North Range (rock art, ceramics scatter, and a rock ring) were identified as potentially eligible for the National Register of Historic Places.

Chocolate Mountains Aerial Gunnery Range: Cultural Resources Survey of 12 Targets and Monitoring of 14 Archaeological Sites, Riverside and Imperial Counties, CA
Principal Investigator
CLIENT: U.S. Navy, Southwest Division and MCAS Yuma
Directed cultural resource survey of 1,523 acres and site monitoring program on CMAGR. Inventoried site types were lithic scatters, trail segments, pot-drops, rock features, and a mining area. Monitoring program included lithic scatters, rock art, cleared circles, mining complexes, and a segment of historic road.

Cultural Resources Survey of Six Areas on the Chocolate Mountains Aerial Gunnery Range, Imperial County, CA
Principal Investigator
CLIENT: U.S. Navy, Southwest Division and MCAS Yuma
Directed cultural resource survey of proposed Forward Air Reporting Position, range access, and target areas.

Evaluation of 24 Sites at the Chocolate Mountains Aerial Gunnery Range, Imperial County, CA
Principal Investigator
CLIENT: U.S. Navy, Southwest Division and MCAS Yuma
Responsible for National Register of Historic Places evaluation of 24 sites in the Chocolate Mountains.

Historic and Archaeological Resources Protection Plan, Chocolate Mountain Aerial Gunnery Range, Imperial and Riverside Counties, CA
Project Manager
CLIENT: U.S. Navy, Southwest Division and MCAS Yuma
Directed archival archaeological research and field visit for the Chocolate Mountain Aerial Gunnery Range. Prepared HARP Plan for the installation.

Evaluation of Two Sites, MCAS Yuma, AZ
Project Manager
CLIENT: U.S. Navy, Southwest Division and MCAS Yuma
Evaluation of two archaeological sites near the MCAS Yuma airfield.

San Clemente Island Operations Management Plan EIS, Naval Auxiliary Air Field, San Clemente Island, Los Angeles County, CA
Resource Manager
CLIENT: U.S. Navy, Southwest Division and SRS Technologies
Assessed current cultural resource inventory and supplemented in specific areas. Project involved preparation of technical report documenting inventory efforts, including shipwreck study. Impact analysis conducted for existing and proposed military operations on San Clemente Island.

REBECCA MCCORKLE APPLE

Indefinite Quantity Contract for Cultural Resource Services, CA and AZ
Project Manager
CLIENT: U.S. Navy, Southwest Division
Contract manager for multiple task orders on a variety of projects involving archaeological surveys and archaeological evaluations throughout California and Arizona. Tasks include managing budget, overseeing staff, acting as point of contact, and preparation of final reports.

Archaeological Support for Environmental Assessment of Wind Farm Project, Naval Auxiliary Landing Field, San Clemente Island, Los Angeles County, CA
Resource Manager
CLIENT: U.S. Navy, Southwest Division
Prepared cultural resource portion of the EA and placed protective signs at nine archaeological sites near or adjacent to the Wind Farm construction area.

Special Warfare Training and Range Survey, Naval Auxiliary Landing Field, San Clemente Island, Los Angeles County, CA
Senior Archaeologist
CLIENT: U.S. Navy, Southwest Division
Performed cultural resource survey of proposed training ranges on San Clemente Island. Prepared technical report in support of an EA.

Evaluation of Six Sites near the Missile Impact Range, Naval Auxiliary Landing Field, San Clemente Island, Los Angeles County, CA
Project Manager
CLIENT: U.S. Navy, North Island, Natural Resources Office
Provided technical assistance for the NRHP evaluation of six archaeological sites on the Central Plateau of San Clemente Island.

Historic and Archaeological Resources Protection Plan, MCAS Yuma, AZ
Project Manager
CLIENT: U.S. Navy, Southwest Division and MCAS Yuma
Directed archival archaeological research and building inventory for MCAS Yuma. Lead author on Historic and Archeological Resources Protection Plan for the installation.

Pumped-Hydro Storage Wind/Energy System, Naval Auxiliary Air Field, San Clemente Island, Los Angeles County, CA
Resource Manager
CLIENT: U.S. Navy, Southwest Division
Relocated and recorded 76 archaeological sites in proposed water storage and wind/energy development area. Prepared existing conditions report.

Tactical Aircrew Combat Training System Range Upgrade, MCAS Yuma, AZ
Project Manager
CLIENT: U.S. Navy, Southwest Division
Performed cultural resource survey of proposed transmission line and 17 threat emitter stations. Prepared testing plan.

Cultural Resource Inventory Survey at Salton Sea Test Base, Imperial County, CA
Project Archaeologist
CLIENT: U.S. Navy, Southwest Division
Conducted intensive cultural resource survey for approximately 6,000 acres and evaluation program for 170 sites. Survey and test excavations were conducted in compliance with the NHPA, NAGPRA, and other federal regulations.

REBECCA MCCORKLE APPLE

Historic and Archeological Resources Protection Plans, Los Angeles, Imperial, and San Diego Counties, CA
Resource Manager
CLIENT: U.S. Navy, Southwest Division
Prepared HARP Plans for the following six Naval installations: Morris Dam Test Facility, Azusa; Naval Air Facility, El Centro; Naval Shipyard, Long Beach; Point Loma Complex, San Diego; Naval Station, San Diego; and the Naval Radio Receiving Facility, Imperial Beach.

Cultural Resources Technical Studies, MCAS Yuma, Yuma Training Range Complex, AZ and CA
Project Archaeologist
CLIENT: U.S. Navy, Southwest Division
Directed cultural resource sample survey in the Chocolate Mountains Gunnery Range.

Mission Trails Regional Park Explosive Ordnance Demolition Environmental Assessment, San Diego County, CA
Project Manager
CLIENT: U.S. Army Corps of Engineers
Directed cultural resource survey in support of an environmental assessment addressing the removal of ordnance from the former location of Camp Elliott.

Archeological Survey of Sierra I Impact Area, MCB Camp Pendleton, San Diego County, CA
Resource Manager
CLIENT: U.S. Marine Corps
Performed cultural resource survey of approximately 2,500 acres on the northern portion of MCB Camp Pendleton.

WATER PROJECTS

Emergency Storage Project, San Diego County, CA
Resource Manager
CLIENT: San Diego County Water Authority
Responsible for the cultural Resources Evaluation Program and Treatment Program. Assisted SDCWA with Native American consultation, implementation of a programmatic agreement, and coordination with ACOE. Project involved evaluation of over 20 cultural resources including San Vicente Dam. Under a Historic Properties Treatment Plan prepared by EDAW, research designs were prepared and carried out for prehistoric and historic period resources. Treatment measures included data recovery, site stabilization, and preparation of Historic American Engineering Record documentation for San Vicente Dam. Prepared Public Interpretive Plan.

North City Water Treatment Plant, San Diego, CA
Resource Manager
CLIENT: City of San Diego Water Department
Managed cultural resource component of the North City Water Treatment Plant EIR. Project included survey and limited testing.

Balboa Park Wastewater Treatment, San Diego County, CA
Archaeologist
CLIENT: City of San Diego
Participated in cultural resource documentation for a facility siting study.

Mission Valley Water Reclamation Plant, San Diego County, CA
Resource Manager
CLIENT: City of San Diego
Responsible for archaeological testing and monitoring program in an area of potential archaeological sensitivity.

REBECCA MCCORKLE APPLE

North Metro Interceptor Sewer, San Diego County, CA
Resource Manager
CLIENT: City of San Diego
Responsible for cultural resource investigations for constraints analysis of proposed sewer alignments.

Freeman Junction, Kern County, CA
Resource Manager
CLIENT: Los Angeles Department of Water and Power
Responsible for the survey of portions of 1st Los Angeles Aqueduct for cap strengthening project.

Eastern Sierra Hydroelectric Relicensing, Mono and Inyo Counties, CA
Field Director
CLIENT: Southern California Edison
Participated in assessment of 22 sites within three hydroelectric project areas.

Pit 3, 4, and 5 Hydroelectric Relicensing Project, Shasta County, CA
Project Archaeologist
CLIENT: Pacific Gas and Electric Company
Directed limited data recovery efforts at six archaeological sites threatened by shoreline erosion prior to stabilization.

Rose Canyon Trunk Sewer EIR, San Diego County, CA
Archaeologist
CLIENT: City of San Diego
Conducted windshield reconnaissance and records search and prepared overview for proposed sewer.

Pamo Dam and Reservoir, San Diego County, CA
Archaeologist
CLIENT: San Diego County Water Authority
Assisted in preparation of research design and conducted archaeological monitoring of geotechnical investigations.

Reservoir 657-2, San Diego County, CA
Archaeologist
CLIENT: Otay Water District
Supervised survey and report preparation of proposed covered reservoir site in Spring Valley.

Mokelumne River Hydroelectric Relicensing, Alpine, Amador, and Calaveras Counties, CA
Crew Chief
CLIENT: Pacific Gas and Electric Company
Participated in archaeological test excavations and NRHP evaluations.

TRANSPORTATION PROJECTS

Southern Nevada Supplemental Airport EIS, Clark County, NV
Co-Principal Investigator
CLIENT: ENSR, VHB, and Clark County Department of Aviation
Responsible for cultural resource inventory of over 17,000 acres for a BLM and transfer. Class III survey also included Radar and Navaid facilities and retention basins. Class I studies for multiple alternatives. Project involved consultation with BLM, USFS, FAA, SHPO, Native American groups, and 106 other interested parties.

REBECCA MCCORKLE APPLE

SR-76 East, San Diego County, CA
Principal Investigator
CLIENT: Caltrans and SANDAG
Responsible for the cultural resource inventory and evaluation program for the SR-76 East widening project. Oversaw the survey of three alternative routes for archaeological and architectural resources, along with Extend Phase I excavations, ASR, HRER, and HPSR.

SR-56, San Diego County, CA
Resource Manager
CLIENT: City of San Diego
Responsible for the cultural resource evaluation program for the SR-56 EIR. Evaluated 16 sites along two alternative freeway alignments.

La Costa Avenue/I-5 Interchange, San Diego County, CA
Project Archaeologist
CLIENT: Caltrans
Directed an archaeological survey of proposed interchange improvements in the City of Carlsbad. The project requires close coordination with City and Caltrans staff.

SA 680/SF 728 Roadway Project Environmental Studies/EIR, San Diego County, CA
Project Archaeologist
CLIENT: County of San Diego
Directed the test excavation and NRHP evaluation of four sites on the proposed project alignment. These investigations addressed the potential association of the sites with the Harris Site Complex.

SR-79, Riverside County, CA
Resource Manager
CLIENT: Riverside County Transportation Commission
Responsible for cultural resource investigations for widening and realigning two highway segments. Prepared cultural resource sections for ISs and coordinated archaeological survey reports, historic architectural survey reports, and historic study report.

Victorville La Mesa/Nisqually Road Overpass, San Bernardino County, CA
Project Archaeologist
CLIENT: City of Victorville
Supervised survey and prepared positive archaeological survey report and historic property survey report.

LANDFILL AND WASTE-RELATED PROJECTS

Elsmere Canyon Landfill, Los Angeles County, CA
Project Archaeologist
CLIENT: Elsmere Corporation
Directed cultural resource assessment for the EIR/EIS.

Southwest San Diego Landfill Siting Study, San Diego County, CA
Resource Manager
CLIENT: County of San Diego
Responsible for cultural resource assessments of potential landfill sites throughout the southwestern quadrant of San Diego County. Ranked the relative sensitivity of each potential site.

REBECCA MCCORKLE APPLE

LAND DEVELOPMENT PROJECTS

Heber Dunes Off-Highway Vehicle Park, Imperial County, CA
Cultural Resources Project Manager
CLIENT: State of California Department of Parks and Recreation Off-Highway Motor Vehicle Recreation Division
State Parks recently acquired Heber Dunes and is in the process of preparing a General Plan and EIR for the Park. As part of these efforts approximately 350 acres were inventoried for cultural resources.

Laborde Canyon Off-Highway Vehicle Park, Riverside County, CA
Cultural Resources Project Manager
CLIENT: State of California Department of Parks and Recreation Off-Highway Motor Vehicle Recreation Division and Riverside County Economic Development Authority
The areas of the SVRA that would be open to some level of OHV use would cover approximately 1,480 acres within the 2,640-acre Laborde Canyon site. EDAW was contracted to conduct environmental studies for the Laborde Canyon site, including a cultural resource records search and an intensive cultural resources pedestrian survey of the proposed OHV park. Two prehistoric sites and the Lockheed Facility (Beaumont Site No. 2) were recorded within the study area during the survey. A preliminary assessment of the complex at Beaumont Site No. 2 was made to determine eligibility for the California Register of Historical Resources.

Data Recovery for Goat Canyon Retention Basin Border Field State Park, San Diego County, CA
Cultural Resources Project Manager
CLIENT: State of California Department of Parks and Recreation
Conducted data recovery under stringent time constraints based on wildlife issues and construction schedule. Excavation of 50 units at CA-SDI-16,047 Locus B indicated that the site was a buried temporary camp whose occupants exploited littoral, near-shore, and terrestrial subsistence resources. Data recovery investigations successfully collected data important in local and regional prehistory. The identification of a single component locus dating to the Archaic-Late transition is an important contribution.

Fairbanks Country Villas, San Diego, CA
Project Manager
CLIENT: Del Mar Land Management Company
Prepared testing plan and implemented testing program for proposed residential development.

Inmate Reception Center, San Diego County, CA
Project Manager
CLIENT: County of San Diego
Responsible for testing and data recovery of half a city block in downtown San Diego.

343 Sansome Street, San Francisco County, CA
Project Archaeologist
CLIENT: Gerald D. Hines Interests
Participated in archaeological data recovery excavations at a Gold Rush-period site in downtown San Francisco.

North Las Vegas Land Transfer, Clark County, NV
Project Archaeologist
CLIENT: City of North Las Vegas
Directed cultural resource survey of 4,000-acre land transfer from the BLM to the City of North Las Vegas.

REBECCA MCCORKLE APPLE

Apex Industrial Park, Clark County, NV
Project Archaeologist
CLIENT: Kerr-McGee
Conducted archaeological survey and NRHP evaluations for BLM land transfer.

Walnut Hills Subdivision, San Diego County, CA
Archaeological Monitor
CLIENT: Fargo Industries
Conducted archaeological monitoring of site preparation and grading in San Marcos.

Alcoholism Service Center, San Diego County, CA
Project Archaeologist
CLIENT: Fellowship Center, Inc.
Conducted archaeological survey of proposed rehabilitation center adjacent to Mission San Luis Rey in Oceanside.

OTHER PROJECTS

Peñasquitos Park, San Diego County, CA
Archaeologist
CLIENT: County of San Diego
Participated in survey, including documentation of three adobes.

Old Town State Historic Park, San Diego County, CA
Archaeologist
CLIENT: California Department of Parks and Recreation/FIR
Participated in excavation before placement of underground utilities in San Diego.

Rancho Guajome Adobe, San Diego County, CA
Archaeologist
CLIENT: County of San Diego
Participated in excavation, cataloging, and analysis for work conducted before building stabilization efforts.

Anza Borrego Desert State Park, Riverside County, CA
Archaeologist
CLIENT: California Department of Parks and Recreation
Participated in resource inventory survey.

Glamis Imperial Project, Imperial County, CA
Archaeologist
CLIENT: Glamis Imperial Corporation
Conducted cultural resource survey for proposed gold mine.

Fort Cady Boric Acid Mining and Processing Facility, San Bernardino County, CA
Project Archaeologist
CLIENT: Fort Cady Minerals Corporation
Directed survey, testing, and evaluation of 24 sites in Newberry Springs.

Rialto-to-El Paso Fiber Optics Cable, San Bernardino and Riverside Counties, CA
Archaeologist
CLIENT: U.S. Sprint
Conducted cultural resource survey along western extent of project.

REBECCA MCCORKLE APPLE

SELECTED REPORTS

A View Across the Cultural Landscape of the Lower Colorado Desert: Cultural Resource Investigations for the North Baja Pipeline Project (with Jamie Cleland). Prepared for TetraTech and North Baja, LLC. EDAW, Inc., San Diego (2003).

Cultural Resources Evaluation for the North Baja Gas Pipeline (with C. Dolan, J. Underwood, and J.H. Cleland). Prepared for Foster Wheeler Environmental, Inc. EDAW, Inc., San Diego (2001).

Historical and Archeological Resources Protection Plan (HARP) for the Chocolate Mountain Aerial Gunnery Range, Imperial County, California (with J.H. Cleland). Prepared for U.S. Navy Southwest Division, Naval Facilities Engineering Command. EDAW, Inc., San Diego (2001).

Archaeological Resources Evaluation Report State Route 56 Between Coast and Foothill, City of San Diego, California (with J.H. Cleland, A. York, T. Wahoff, and D. James). Prepared for the City of San Diego. KEA Environmental, Inc., San Diego (1997).

Archeological Survey and Evaluation Program for the Salton Sea Test Base, Imperial County, California (with A. York, A. Pignolo, J.H. Cleland, and S. Van Wormer). Prepared for U.S. Navy, Southwest Division, Naval Facilities Engineering Command. KEA Environmental, Inc., San Diego (1997).

Two Sides of the River: Cultural Resources Technical Studies Undertaken as Part of Environmental Documentation for Military Use of the MCAS Yuma Training Range Complex in Arizona and California (with G. Woodall, L. Peterson, and J.S. Bruder). Prepared for the Southwest Division Naval Facilities Engineering Command and MCAS Yuma. Dames & Moore Intermountain Cultural Resource Services Research Paper No. 5, San Diego (1993).

Bank Stabilization at Lake Britton: Limited Data Recovery (with A. MacDougall). Prepared for Pacific Gas and Electric. Dames & Moore, San Diego (1990).

Kern River Pipeline Cultural Resource Survey Report (with J.H. Cleland, A.L. York, and P. Friedman). Submitted to the Federal Energy Regulatory Commission. Dames & Moore, San Diego (1990).

Sugarloaf Mountain in Prehistory: Archaeological Testing and Data Recovery for the Exploratory Drilling Program II and the Unit No. 1 Project (with J.H. Cleland and E. Nilsson). Prepared for the Los Angeles Department of Water and Power. Dames & Moore, San Diego (1990).

An Archaeological Research Design for the Evaluation of Cultural Resources in Pamo Valley, San Diego, California (with J.H. Cleland, J.R. Cook, and J. Schaefer). Wirth Environmental Services, a Division of Dames & Moore, San Diego (1985).

ATTACHMENT 2
DPR 523 Forms

***P3a. Description: (continued)**
This form serves to update the primary record (P-15-003366) for the Southern Pacific Railroad's (SPRR) Lake Minerals Railway, originally constructed in 1908 between Mojave and the Owens Valley. A survey of segment of the aforementioned resource conducted on 08 May, 2009 showed that the track and major railroad features had been removed from the segment surveyed since it was originally recorded by J. Costello, J. Marvin and C. Brownson in 1993.

The railroad line from Mojave to the Owens Valley was planned by the City of Los Angeles and built between 1908 and 1913 by the SPRR for the Los Angeles Aqueduct water diversion project. Construction of the aqueduct required the movement of men, machinery, cement, supplies and large amounts of related equipment to distant areas along its route in the remote Owens Valley. By October of 1910 the railroad reached the small Quaker settlement of Owenyo on the shore of Owens Lake, which would subsequently be drained by diversion of its water to Los Angeles via the new aqueduct. While a segment of the railroad between Mojave and Searles Junction (south of the segment surveyed for this update) is still in use, the portion of the railroad between Searles Junction and the Owens Valley was abandoned in 1982 after a fire made the Searles tunnel impassable. T he tracks, ties and other related features were removed in 1998.

P6a. Date constructed and resources
Constructed 1908-1913
Abandoned 1982
Tracks, ties salvaged 1998

Resources:

Costello, J and Marvin, J. *Supplemental Archaeological Survey Report and Historic Study Report for the Mojave Bypass, 09-KER-58; P.M. 107.7/118.0;* EA243400; Contract No. 09HO77; Foothill Resources, Mokelumne Hill, CA, 1994

Wright, D. *Railroad Grade Scrapped by BLM*.
Accessed online at http://www.ghosttowns.com/news/news6.html, 20 May, 2009

Wright, D. *Lone Pine Branch of the Southern Pacific Railroad Update.*
Accessed online at http://www.ghosttowns.com/news/news8.html, 20 May, 2009

P5a. Photo

P5b. Description of Photo:
Former railbed,
view facing southwest,
4.2 Inventory and Survey Data\ Cultural\TM Architectural photos \Ridgecrest, DSCN9099, MKM 05-08-2009

P-15-003366 (update)

ARCHAEOLOGICAL SITE RECORD

Permanent Trinomial: CA-INY-4607-H
and CA-KER-3366-H
Historic Name: SPRR Grade Addendum

1. County: Kern

2. USGS Quad: Mojave, 7.5 minute 1973; Sanborn, 7.5 minute, 1973; Mojave NE, 7.5 minute, 1973; Cinco, 7.5 minute, 1972; Cantil, 7.5 minute, 1967; Garlock, 7.5 minute, 1967; Saltdale SE, 7.5 minute, 1967; El Paso, 7.5 minute, 1967.

3. UTM Coordinates:
West point = Zone 11, 392820 m easting 3880000 m northing
East point = Zone 11, 442420 m easting 3926620 m northing

4. Legal Description: The Southern Pacific Railroad grade from Mojave to Searles Junction passes through the following:
Sections 8, 5, 4, 3 (T11N R12W, SBBM)
Sections 34, 35 (T12N R12W, SBBM)
Sections 32, 33, 27, 26 (T32S R36E, MDBM)
Sections 23, 14, 13, 12, 1, 6 (T32S R37E, MDBM)
Sections 31, 30, 19, 20, 17, 8, 5 (T31S R37E, MDBM)
Sections 32, 33, 28, 27, 26m 23, 24, 13 (T30S R37E, MDBM)
Sections 18, 17, 8, 9, 4, 3 (T30S R38E, MDBM)
Sections 34, 35, 36, 25 (T29S R38E, MDBM)
Sections 30, 29, 28, 21, 22, 15, 14, 13 (T29S R39E, MDBM)
Sections 18, 7, 8, 9, 10, 11, 12, 1 (T29S R40E, MDBM)
Section 6 (T29S R41E, MDBM)
Sections 36, 35, 24, 26, 33 (T28S R41E, MDBM)

5. Map Coordinates:
West point = 310 mm south 280 mm east
East point = 77 mm south 437 mm east

6. Elevation: from 2781 ft. AMSL at Mojave to 3243 ft. AMSL at Searles Junction

7. Location: This segment of the Southern Pacific Railroad Line stretches northeast from Mojave Station to Searles Junction for approximately 50 miles.

8. Time Period: Historic.
Temporal Periods Represented:
___ **Pre-Colonization (1500-1769**
___ **Spanish Mexican (1769-1848)**
___ **Early American (1848-1880)**
_X_ **Turn of the Century (1880-WWI)**
_X_ **Early Twentieth Century (WWI-1945)**
___ **Post WWII (1945-present)**
Estimated Specific Dates; explain: 1908 when the railroad was first constructed to the present

P-15-003366

9. Site Description: The site stretches from Owens Lake to Mojave. The northern two-thirds from Owens Lake to Searles Junction has previously been recorded. This addendum consists of the Southern Pacific Railroad Line from Mojave to Searles Junction as depicted on USGS maps, 1915-present. Only one small segment, about 3 miles northeast of Mojave at Cambio Siding, was surveyed for this recording. Other segments should be added as additional site supplements as they are enountered.

10. Area: The railroad grade is 50 miles in length and approximately 23 feet in width for an average area of 6,072,000 square feet (564,088 square meters).

11. Depth: N/A

12. Features: This site is comprised of three features. Feature 1 is the railroad tracks, Feature 2 is three historic refuse deposits, and Feature 3 is the siding.

Feature 1, Railroad Tracks and Bed: This section of the Southern Pacific Railroad extends from Mojave to Searles Junction. The rails and gravel bed measure approximately 23 feet wide with an additional 16 1/2 feet of cleared space on each side.

Feature 2, Artifact Concentrations: Three refuse deposits are included in this feature, which measures a total of 259 feet in length along the northwest side of the tracks and between 91 feet and 131 feet wide in the center.

> *Concentration A:* This is a small concentration of glass at north end, which measures 10 feet in diameter. This is mostly clear in color and appears to post-date 1920.
>
> *Concentration B:* This consists predominantly of metal cans, and is located 104 feet SW of Concentration A, and measures 43 feet long by 13 feet wide. The cans appear to date to the 1908 construction of this segment of the railroad.
>
> *Concentration C:* This appears to be a privy pit, which measures approximately 4 x 3 feet and has been vandalized by bottle hunters. It contains mostly cans and some glass. The glass is spread out on one side for about 25 feet. The estimated age of the site, based on the artifact inventory, is between 1920 and 1934.

Feature 3, Cambio Siding: This is located in Section 34 & 35 (T12N R12W, SBBM) and Sections 32 & 33 (T32S R36E, MDBM) and extends in a SW-NE direction for 3015 feet. It is distinguished by a slightly higher elevation than the SE/non-siding side, although it has been abandoned and re-contoured over the years.

13. Artifacts: None

14. Non-Artifactual Constituents and Faunal Remains: None

15. Date Recorded: 3 Nov 1993

16. Recorded by: J. Costello, J. Marvin, C. Brownson

17. Affiliation and Address: Foothill Resources, Ltd., PO Box 288, Mokelumne Hill, California 95245.

18. Human Remains: None

19. Site Disturbance: Sidings and stations were removed; Feature 2, Concentration C refuse deposit has been disturbed by bottle hunters.

20. Nearest Water: Cache Creek, one mile to north

21. Vegetation Community: Shade-scale and creosote

22. Vegetation on Site: Same

23. Site Soil: Sandy, gravelly, light brown loam

24. Surrounding Soil: Same

25. Geology: Basin and Range

26. Landform: Alluvial plain

27. Slope: Level

28. Exposure: Open

29. Landowner and Address: Southern Pacific Company

30. Historical Information: The railroad line from Mojave to the Owens Valley was planned by the City of Los Angeles and built in 1908-1910 by the Southern Pacific Company for the Los Angeles Aqueduct project. Started in 1908 and completed in 1913, construction of the aqueduct required the movement of men, machinery, cement, supplies, and large amounts of equipment to distant areas along its route through the Owens Valley. By May of 1908, Mojave was a booming base camp for the completion of the railroad line, with 400 men and 900 head of stock employed (Marvin and Costello 1992:15). Sidings were located every four and one-half miles, several of which grew into desert settlements. Along the first segment north from Mojave were Chaffee, Cambio, Neuralia, and Cinco (Burmeister 1973).

By October 1910, the line reached Owenyo, a Quaker colony on the shores of Owens Lake, and connection was made with the narrow gauge Carson & Colorado (C&C), thus completing the 143 mile "Jawbone Line." Although there was considerable discussion about converting the C&C lines to broad gauge, thus eliminating the need to transfer passenger and freight at Owenyo, the new track was never constructed (Myrick 1963:205-209). However, a major connection was made to the mines and supply centers in the Owens Valley and eventually to western Nevada, thus providing transportation of freight and travelers between Los Angeles and Mina.

The section of the line between Searles Junction and the Owens Valley was abandoned in 1982, but the section between Searles Junction and Mojave that serves the profitable Trona line is still in use.

31. References:

Burmeister, Eugene
1973 "Early Days in Kern." *Lamont Reporter*, March 21, March 28, and April 4, 1973.

Hall, M. C., *et al.*
1992 *Cultural Resources Survey of a Portion of the Former Southern Pacific Mojave-Owenyo Branch Railroad, Inyo and Kern Counties, California.* Far Western Anthropological Research Group, Inc., Davis, for MHA, San Mateo, on Behalf of Owens Lake Soda Ash Company.

Marvin, Judith, and Julia G. Costello
1992 *Supplemental Archaeological Survey Report and Historic Study Report for the Highway 395, Alabama Gates Four Lane Project, Inyo County, California.* Foothill Resources, Ltd., Mokelumne Hill. Submitted to Caltrans District 9, INY 395 P.M. 58.8/66/5, Contract No. 09H078.

Myrick, David F.
1963 *Railroads of Nevada and Eastern California.* Howell-North Books, Berkeley. Reprinted by University of Nevada Press, 1991, 1992.

32. Name of Project: Supplemental Archaeological Survey Report and Historic Study Report for the Mojave By-Pass; 09-KER-58; P.M. 107.7/118.0; EA243400; Contract No: 09H077. By Judith Marvin and Julia G. Costello. Prepared by Foothill Resources, Ltd., Mokelumne Hill, Ca. for Caltrans District 9. 1994.

33. Type of Investigation: Supplemental archaeological survey and historic study report.

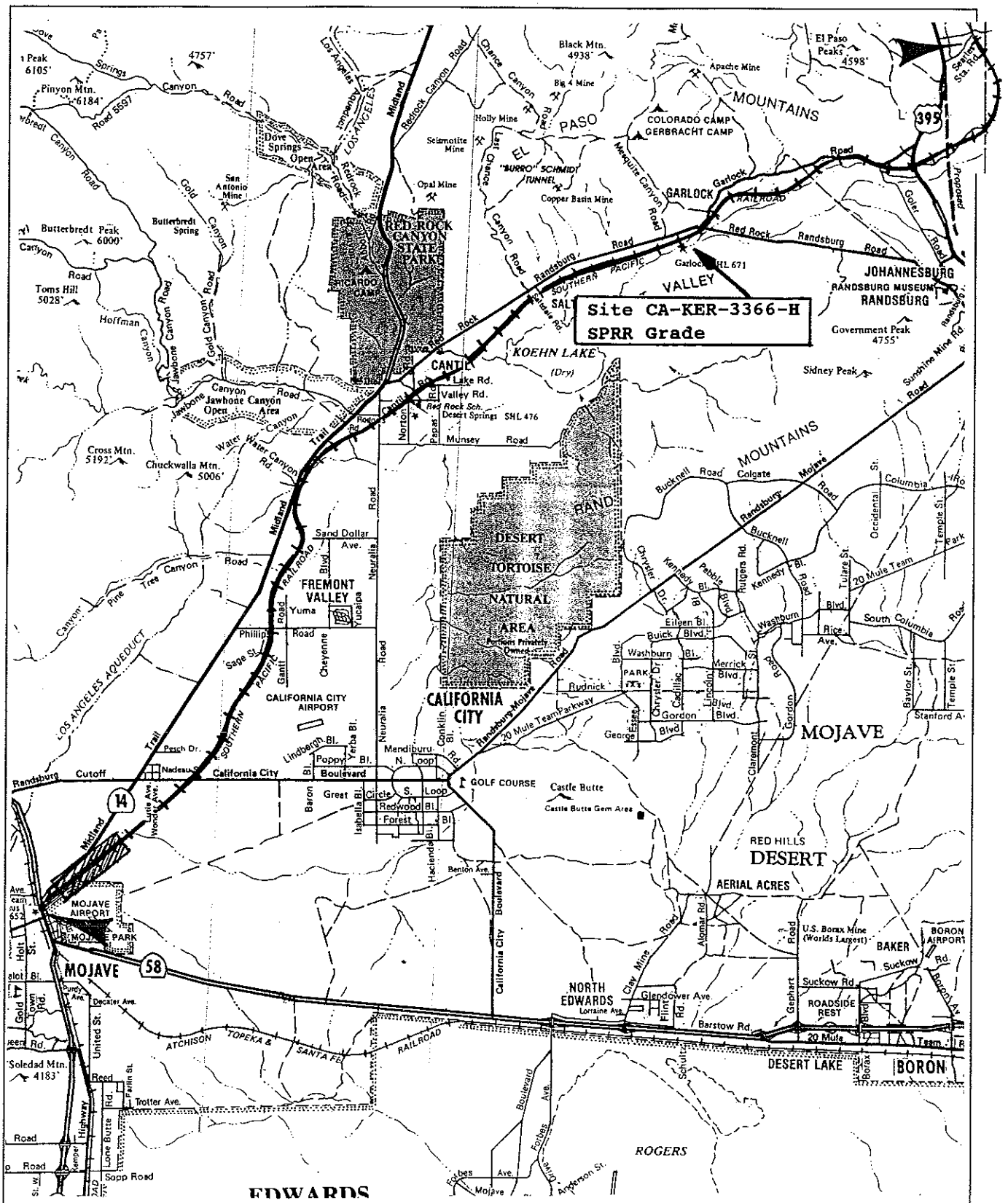
34. Site Accession Number: None

35. Photos: Black and white, 35 mm; on file at Foothill Resources, Ltd., Mokelumne Hill, CA.

P-15-003366

SITE LOCATION MAP
1 of 1

Permanent Trinomial: CA-KER-3366-H
Temporary Number:
Historic Name: SPRR Grade Addendum



SPRR Grade, CA-KER-3366-H;
showing portion recorded from Mojave to Searles Junction

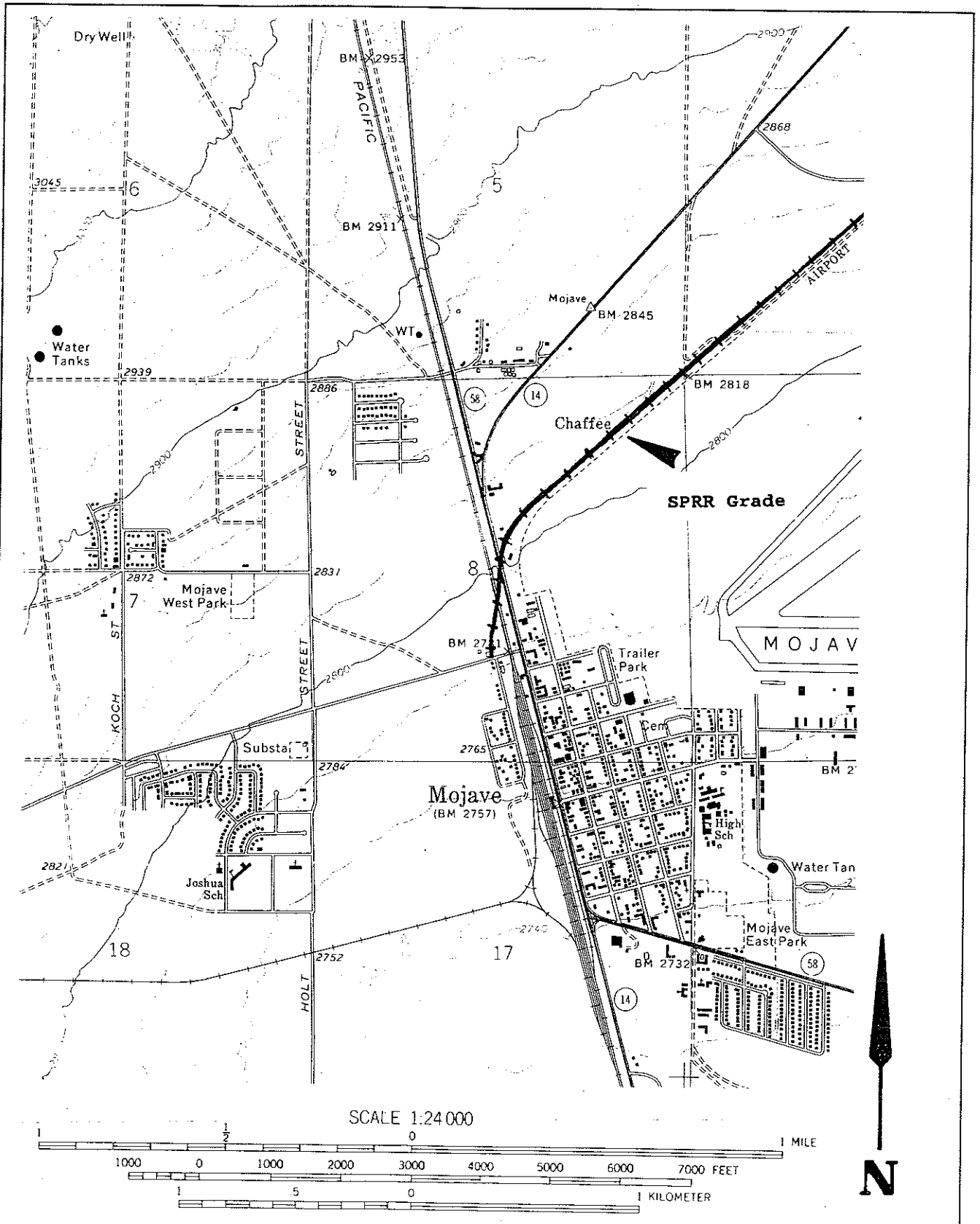
P-15-003366

SITE LOCATION MAP

1 of 19

Permanent Trinomial: CA-INY-4607-H
and CA-KER-3366-H

Historic Name: SPRR Grade Addendum



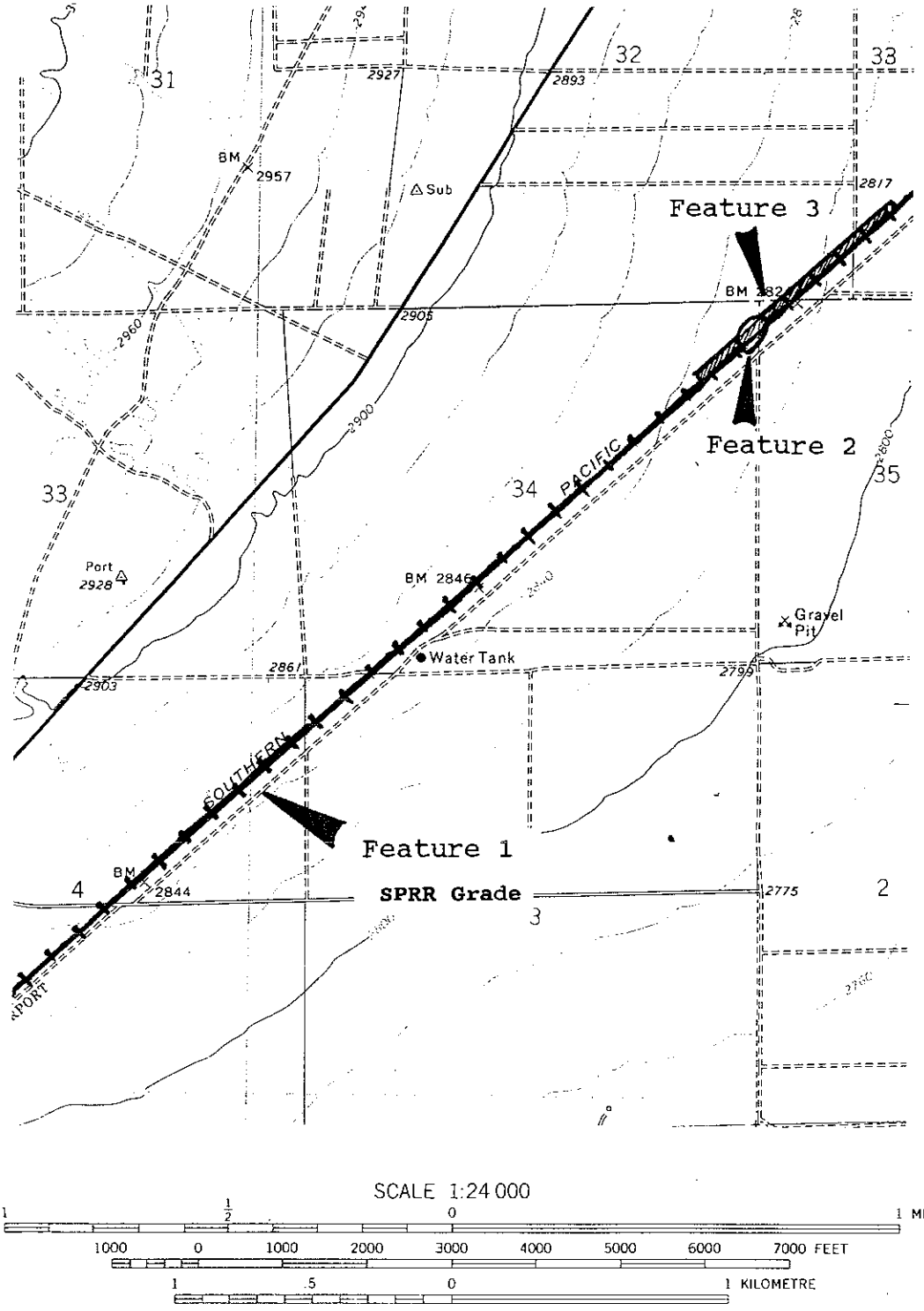
Portion of Mojave Quadrangle, 7.5 minute, 1973

P-15-003366

SITE LOCATION MAP

2 of 19

Permanent Trinomial: CA-INY-4607-H
and CA-KER-3366-H
Historic Name: SPRR Grade Addendum



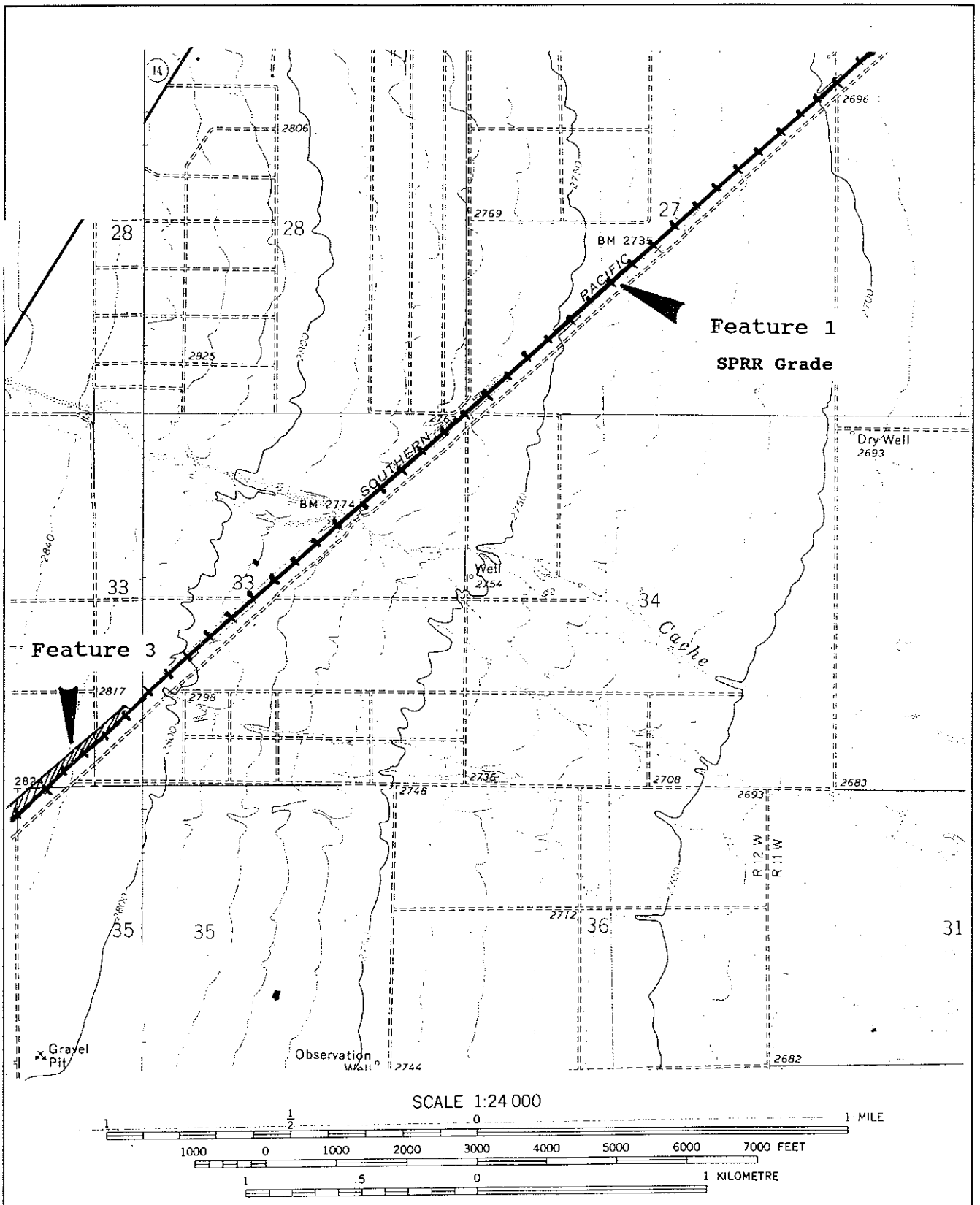
Portion of Mojave Quadrangle, 7.5 minute, 1973

P-15-003366

SITE LOCATION MAP

3 of 19

Permanent Trinomial: CA-INY-4607-H
and CA-KER-3366-H
Historic Name: SPRR Grade Addendum

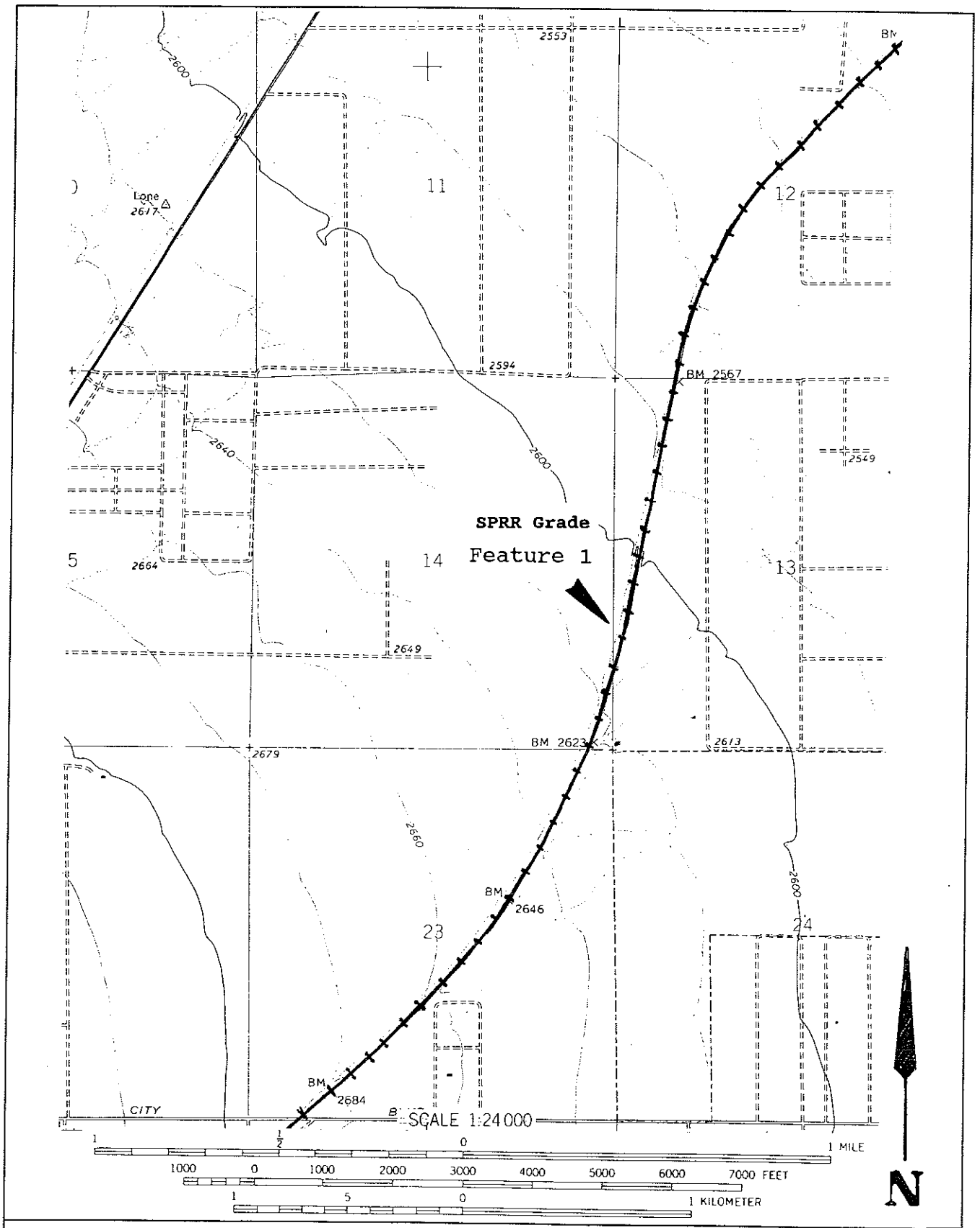


Portions of Mojave & Sanborn Quadrangles, 7.5 minute, 1973

P-15-003366

SITE LOCATION MAP
4 of 19

Permanent Trinomial: CA-INY-4607-H
and CA-KER-3366-H
Historic Name: SPRR Grade Addendum

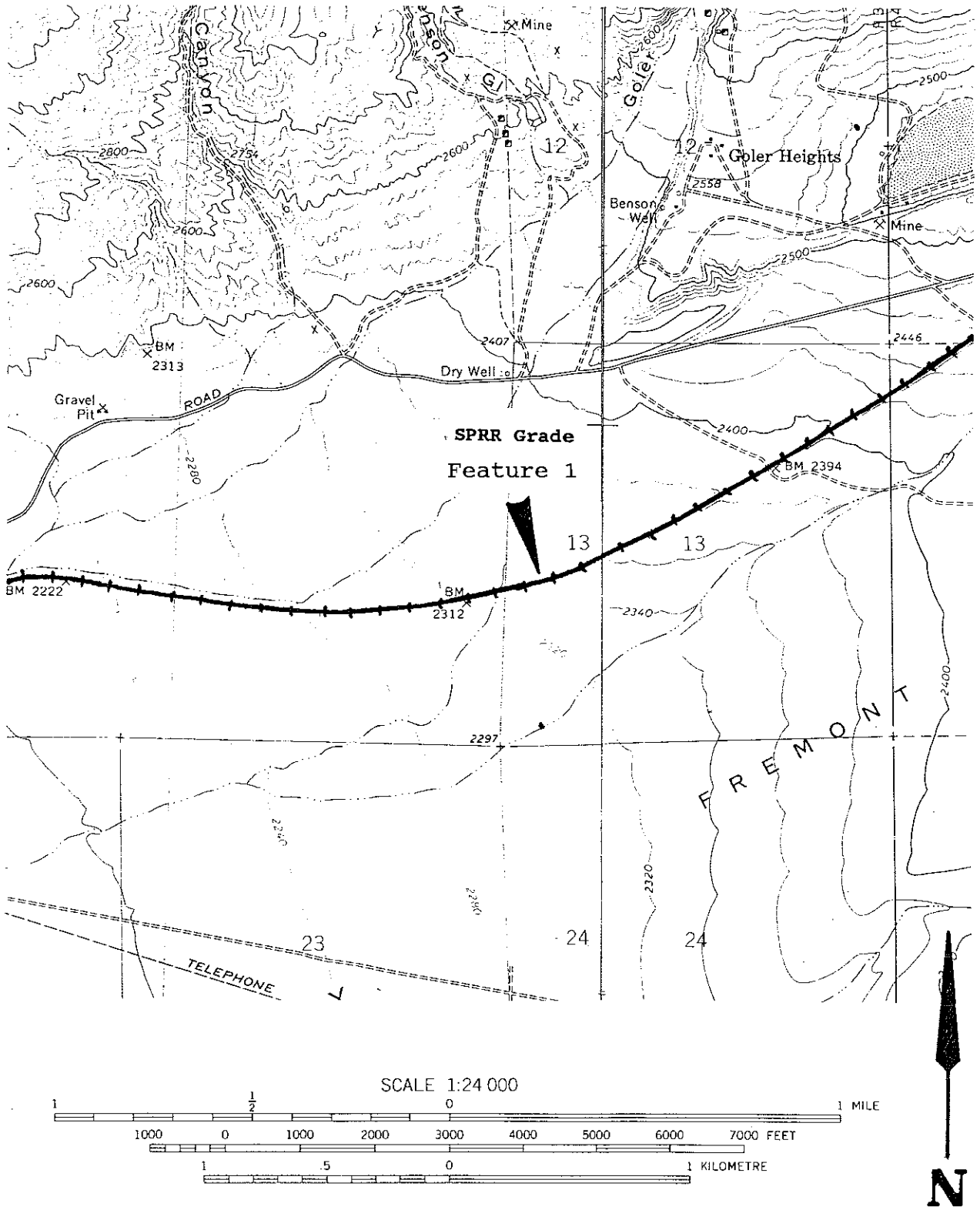


Portion of Mojave NE Quadrangle, 7.5 minute, 1973

P-15-003366

SITE LOCATION MAP
14 of 19

Permanent Trinomial: CA-INY-4607-H
and CA-KER-3366-H
Historic Name: SPRR Grade Addendum

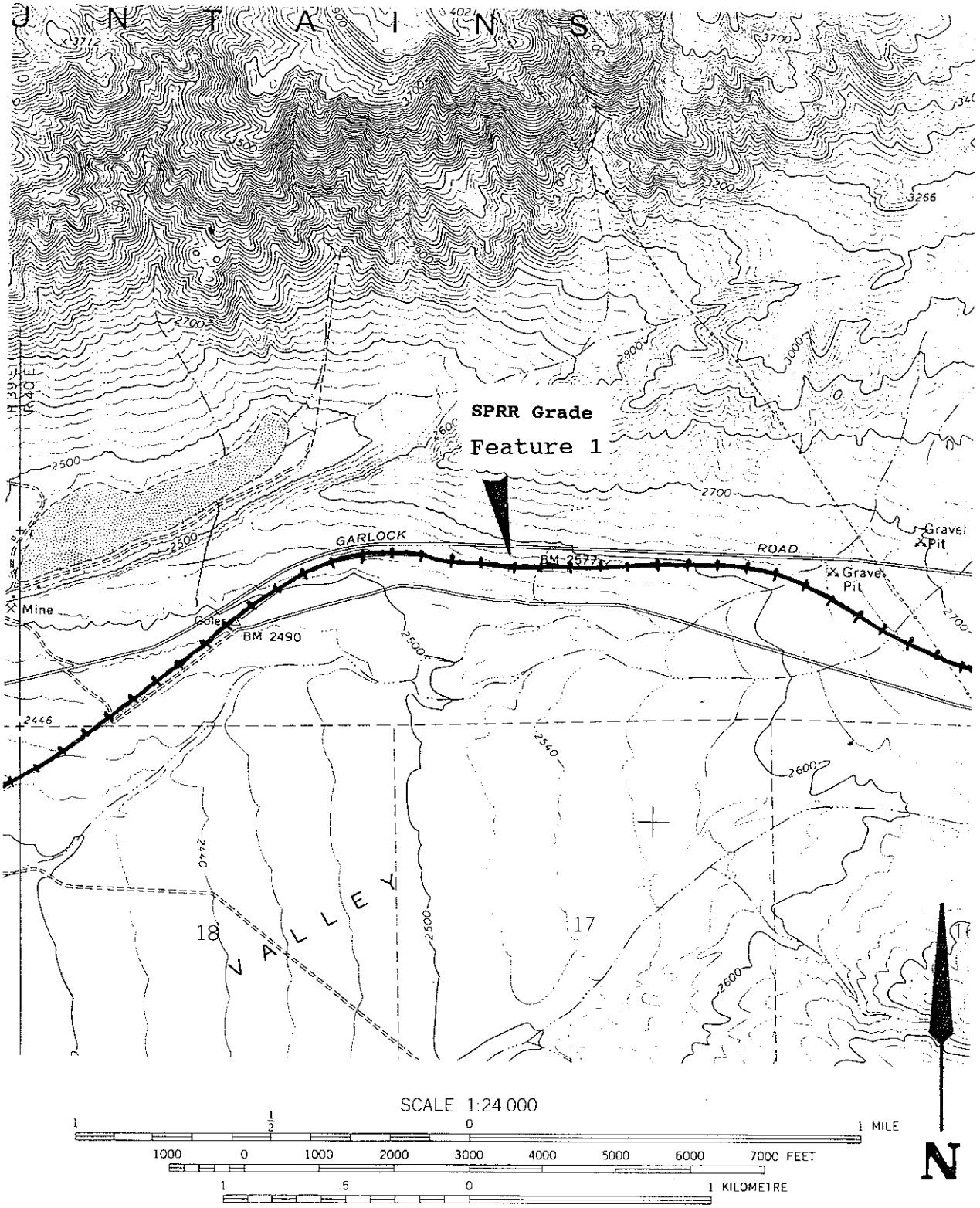


Portions of Garlock and El Paso Quadrangles, 7.5 minute, 1967

P-15-003366

SITE LOCATION MAP
15 of 19

Permanent Trinomial: CA-INY-4607-H
and CA-KER-3366-H
Historic Name: SPRR Grade Addendum



Portion of El Paso Quadrangle, 7.5 minute, 1967

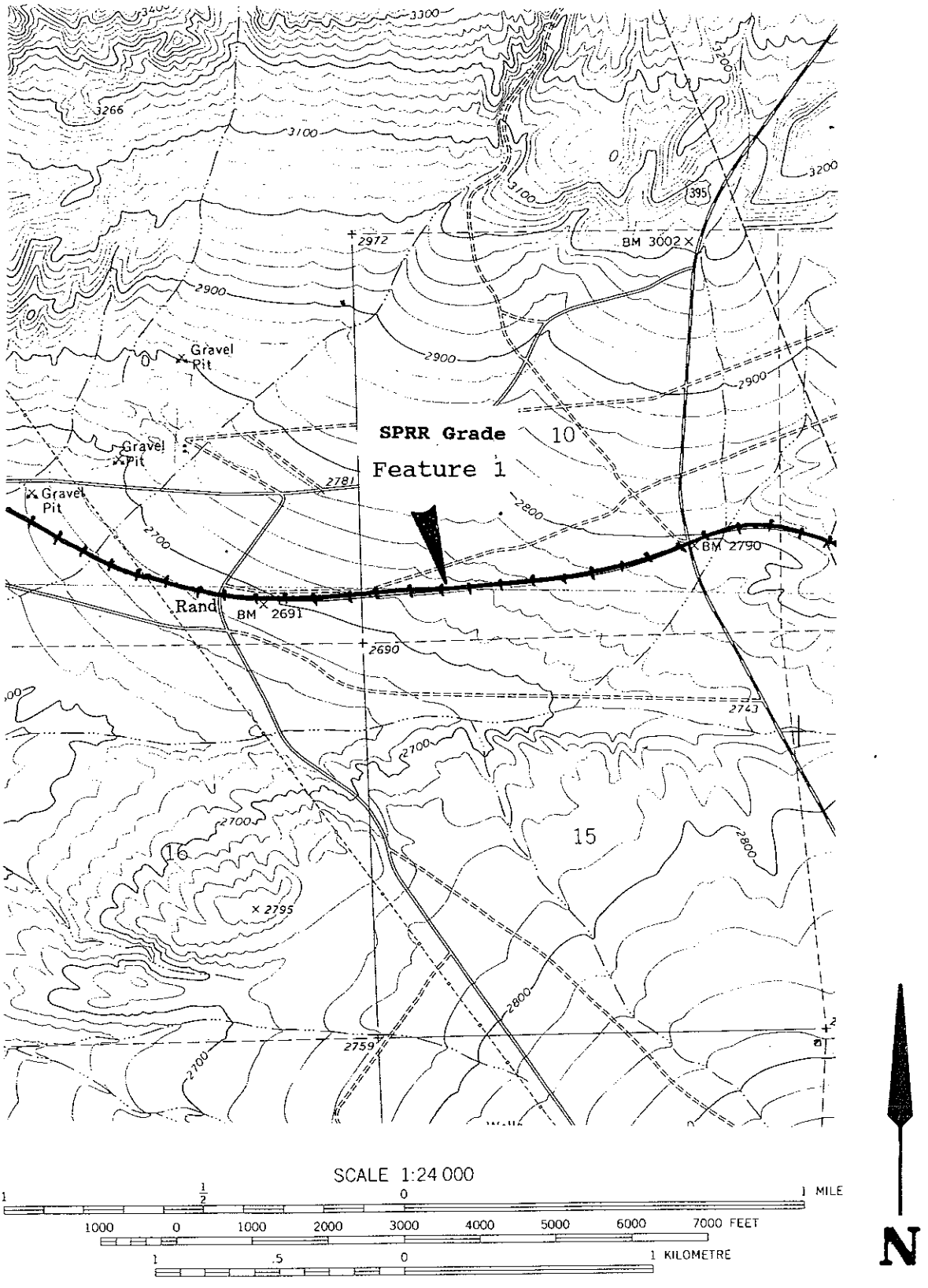
P-15-003366

SITE LOCATION MAP

16 of 19

Permanent Trinomial: CA-INY-4607-H
and CA-KER-3366-H

Historic Name: SPRR Grade Addendum

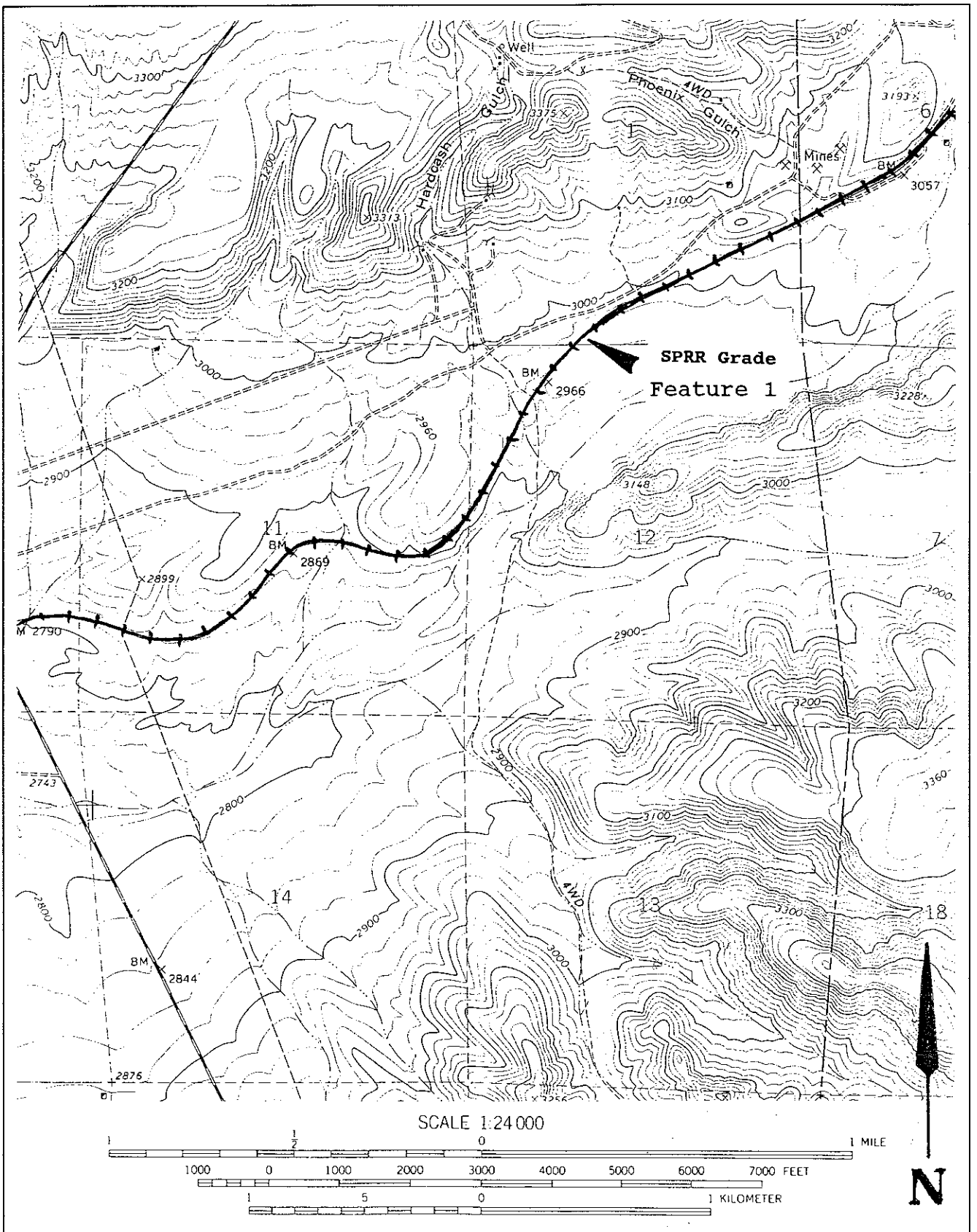


Portion of El Paso Quadrangle, 7.5 minute, 1967

P-15-003366

SITE LOCATION MAP
17 of 19

Permanent Trinomial: CA-INY-4607-H
and CA-KER-3366-H
Historic Name: SPRR Grade Addendum



Portion of El Paso Quadrangle, 7.5 minute, 1967

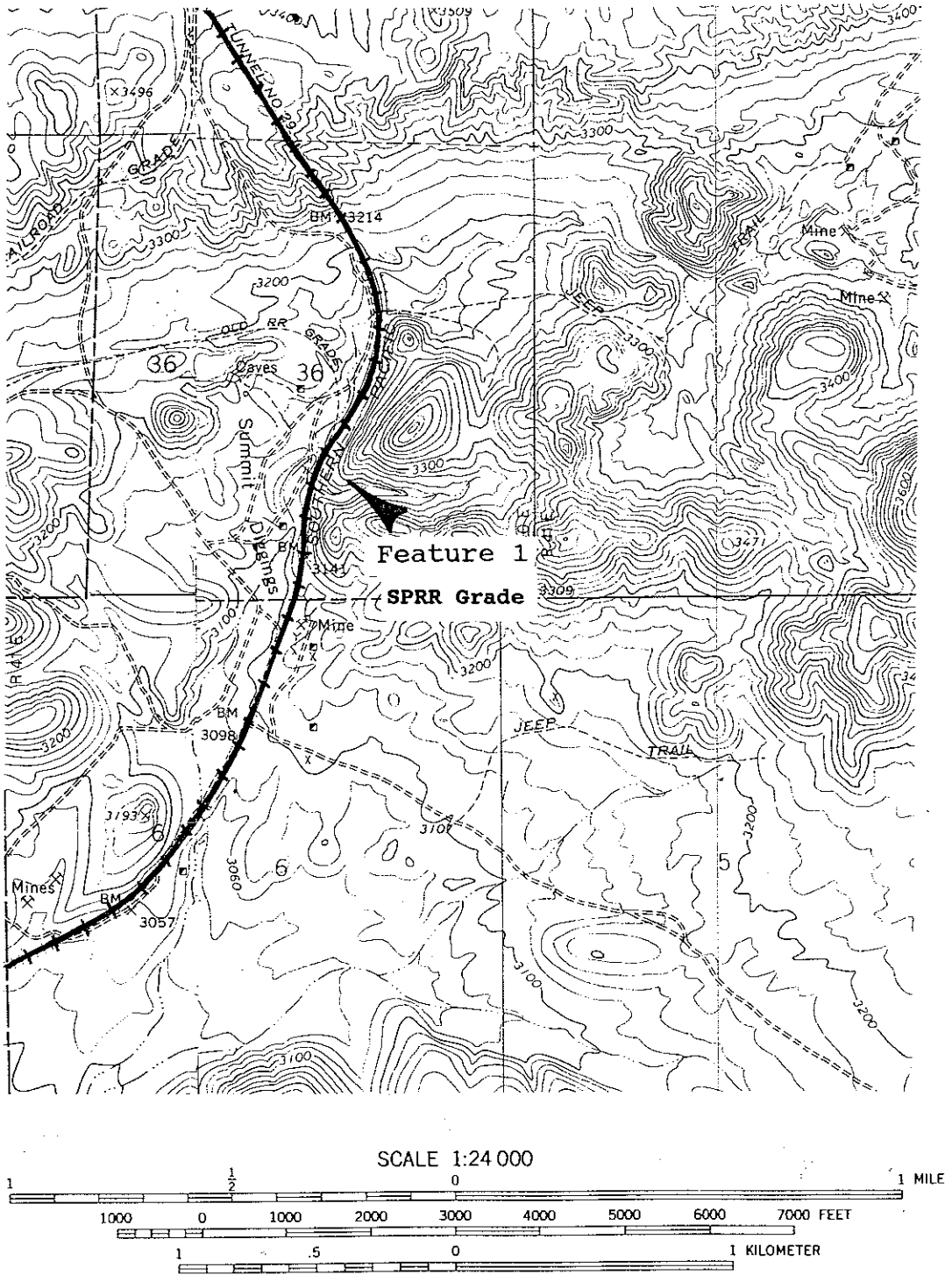
P-15-003366

SITE LOCATION MAP

18 of 19

Permanent Trinomial: CA-INY-4607-H
and CA-KER-3366-H

Historic Name: SPRR Grade Addendum



Portion of Klinker Mountain Quadrangle, 7.5 minute,

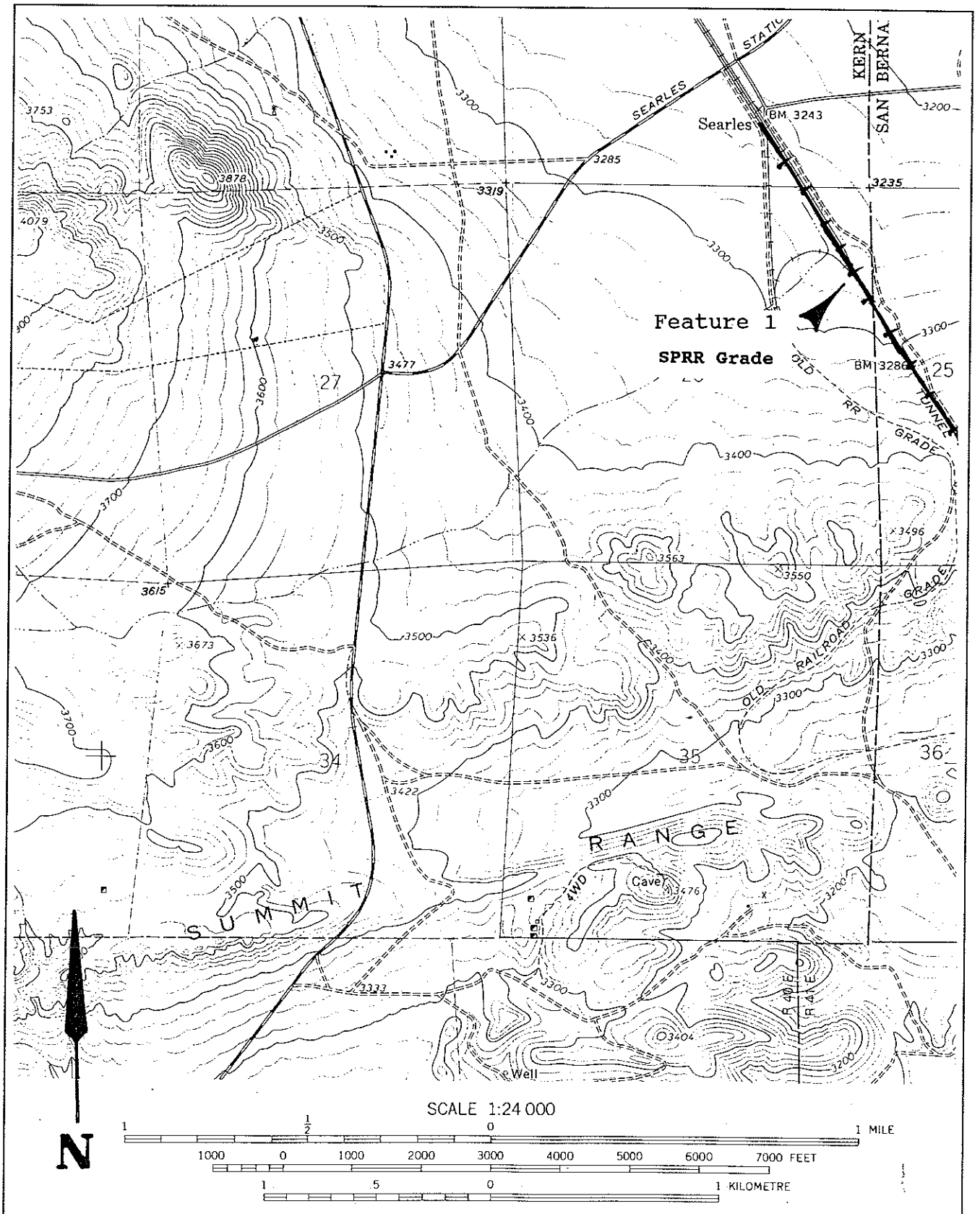
P-15-003366

SITE LOCATION MAP

19 of 19.

Permanent Trinomial: CA-INY-4607-H
and CA-KER-3366-H

Historic Name: SPRR Grade Addendum

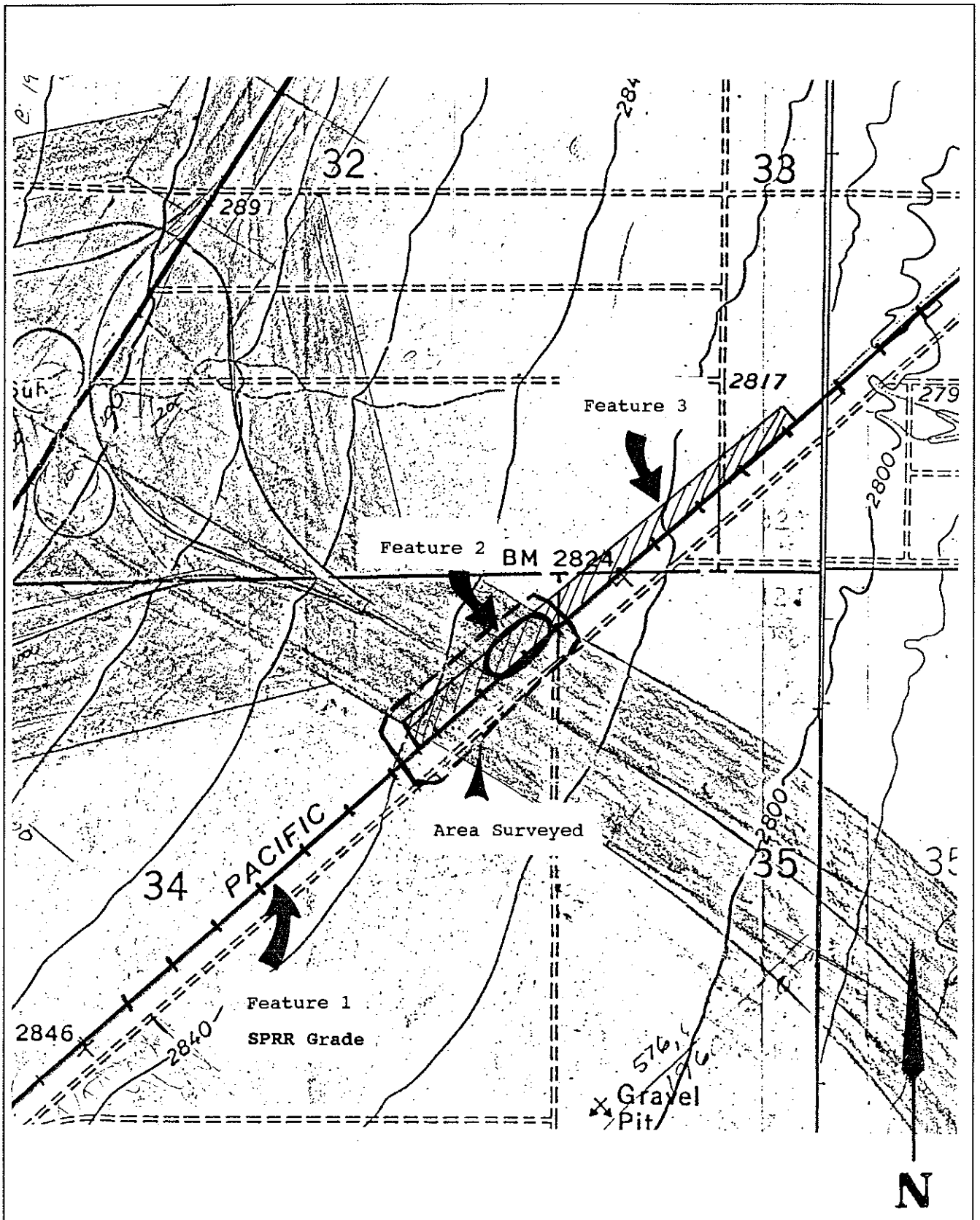


Portion of El Paso Quadrangle, 7.5 minute, 1967

10-15-003366

ARCHAEOLOGICAL SITE MAP

Permanent Trinomial: CA-INY-4607-H
and CA-KER-3366-H
Historic Name: SPRR Grade Addendum



Portion of Mojave Quadrangle, Scale 1 inch = 1000 feet, 1973;
shaded area shows proposed bypass alternatives

P-15-003366

CERAMIC RECORDING FORM

Recorder: Costello **Site:** SPRR Grade

Date: November 2, 1993 **Feature:** 2; Locus C

Type of Recording: Complete Inventory

O[1]	K/T[2]	Ware	Form	Dec. type	Description	Pcs	Items
Feature 2C							
	✓	IWE	Handle	Sliped	Black; cup or small service vessel		1
Scattered Outside Loci							
	✓		Plate	Molded/decal	Polychrome	6	1

1 Other
2 Kitchen or table

GLASS RECORDING FORM

Recorder: Brownson **Site:** SPRR Grade

Date: November 2, 1993 **Feature:** 2; Loci A, B, C

Type of Recording: Complete Inventory **Page:** 1 of 2

O[1]	B/J[2]	Type/Shape	Color	Description	Pcs	Items
Feature 2A						
	✓	Jar/round	Clear	Large, side seam, with seam around base	10+	1
	✓	Oval jar	Clear	No suction marks, appears modern;	4+	1
	✓	oval base	Clear	suction mark; embossed "D189/64-9"	1	1
	✓	Whiskey bottle		"HALF PINT" outside, "LOR.../STIL..." on side fragment;		
	✓	L & P bottle	Aqua	Lea & Perrins Worcestershire sauce, "WORC..." embossed, seam up neck	5	1
	✓	Bottle	Clear	Neck with seam, and base with seam	2	1
	✓	Liquor bottle	Clear	ABM, seam around base of neck below everted rim; evidence of fine scratches circumscribing inside and outside of neck		1
	✓	Crown-cap bottle	Clear	ABM	15+	1
Feature 2B						
	✓	Pharmacy stopper	Aqua	Stopper 1" diam., 1 1/2" long	3	1
Feature 2C						
	✓	Bottle	Brown			1
	✓	Octagonal jar	Clear	"O-2029/ R /6" on base, ABM		1
	✓	Round	Clear	Raised markings		1
	✓	Round	Clear	Thicker than above		1
	✓	Bottle	Clear	Side panel for label		1
	✓	Round body	Green	Small opening; white decorative lines	2	1
	✓	Rectangular	Clear	Vertical ridged pattern on 3 sides; leaf pattern on unridged side	3	1
	✓	Screw-top jar	Clear	2 1/2" opening; rings around neck		1

P-15-003366

GLASS RECORDING FORM

Recorder: Brownson **Site:** SPRR Grade

Date: November 2, 1993 **Feature:** 2; Loci A, B, C

Type of Recording: Complete Inventory **Page:** 2 of 2

O[1]	B/J[2]	Type/Shape	Color	Description	Pcs	Items
Feature 2C continued						
✓		Oval flask	Clear	Embossed "HALF PINT"	2	1
	✓	Food jar	Clear	Valve mark off center, "TABLE PRODUCTS INC./ LOS ANGELES"; 5/8 diam., " 3/3694/REG. CAL." on base	1	1
✓		1 gal. jug	Clear	Small handle on neck, screw top; metal cap still in place' "ON..." embossed on shoulder		1
	✓	Liquor	Lt. Brn	Seam thru neck on both sides, ABM; "D525/101 1 8"	2	1
Outer Area of Loci						
	✓	Bottle/jar	Amethyst			1
	✓	Milk bottle	Clear	2 1/4" diameter neck ABM rounded; "..EY FARM DAIRY/1820"	10+	1
	✓	Bottle/jar	Purple tint	Circular, suction base scar; everted rim on upper body	5	1
	✓	Bottle/jar	Clear	Fire affected pieces	2	1
	✓	Bottle/jar	Aqua	Fire affected pieces		1
	✓	Bottle/jar	Amethyst			1
	✓	Rounded	Brown	Dotted pattern 1/4" wide "R" mark (in circle) above pattern		1
	✓	Bottle/jar	Aqua	Desert patina		1
	✓	Bottle/jar	Amethyst		2	1
	✓	Bottle/jar	Aqua			1
	✓	Bottle/jar	Amethyst	Side panels, ring around base of neck, seam up neck	4	1
	✓	Oval	Brown	Screw on cap, seam thru neck	5	1
	✓	Bottle/jar	Aqua	Embossed "476/H" on base		1
	✓	L & P Sauce	Aqua	"LEA..." on side	4	1
	✓	Jar/round	Clear	"BEST FOODS/Registered"; screw on top	10+	1

1 Other
2 Bottles or Jars

P-15-003366

OTHER ARTIFACTS RECORDING FORM

Recorder: Costello **Site:** SPRR Grade

Date: November 2, 1993 **Feature:** 2; Loci A, B, C

Type of Recording: Complete inventory

Type	Size	Material	Description	Pcs	Items
Feature 2A					
Battery carbon rod	4"	Carbon	Battery part		1
Bullet casing	38 special	Steel	Center fire base "R-P/38 SPL"		1
Feature 2B					
Post	2" x 3"	Wood	Broken		1
Clothing hook	4.5 x 2.75	Iron	Folded wire		2
Feature 2C					
Hinge	1" long	Steel/Alum	For decorative box or chest		1
Hair curler	2 1/4" long	Aluminum	Round with metal clamp and wire bail		1
Scattered Outside Loci					
Strapping	38" L, 1" W, 13" bracing	Iron	Riveted ends		1
Barrel stave	19" L, 3" W	Wood			1
Wire hoop	12" diam.	Iron	Heavy gauge, twisted ends		1

TIN CANISTER RECORDING FORM

Recorder: Marvin

Site: SPRR Grade

Date: November 2, 1993

Feature: 2; Locus B

Type of Recording: Complete Inventory

Page: 1 of 2

Style/ Shape	Width (Dia)	Height	Depth	Ends	Side Seam	Solder	Filling Method	Opening Method	Count	Comments/Misc
Feature 2B										
3C	305	408		F	C	M	HC	KC	42	
3C	400	412		F	C	M	HC	KC	26	
3C	400	412		F	C	M	HC	JL	8	
3C	210	215		C	C		EE	JL	1	"10" in center of lid
3C	211	300		C	C		EE	JL	1	
3C	300	409		C	C	M	MS	KC	2	
3C	215	408		F	C	M	2MS	KC	23	
3C	207	207		C	C		EE	JL	2	"071-6X" on top of can lid; (tab on side)
3C	304	308(?)		F	C	M	HC	KO	1	
Outside of Loci										
3C	305	408		F	C	M	HC	KO	4	
3C	400	412		F	C	M	HC	KO	5	
3C	400	412		F	C	M	HC	B	1	
KN	303	404	12	C	C		EE	TP	1	"Norway" on bottom
3C	210	215		C	C		EE	JL	1	
3C	306	408		C	C		EE	JL	1	
3C	214	400		F	C		MS	PH	1	
3C	207	207		C	C		EE	JL	1	
3C	300	406		C	C		EE	JL	2	
3C	210	215		C	C		EE	JL	1	
LID	510								1	"Estab 3-0" on bottom
3C	508(?)	614		F	C		HC	KO	1	
3C	212	215		C	C		EE	JL	1	
3C	300	411		C	C		EE	KO	1	"303" on outside

millimeters

P-15-00336

TIN CANISTER RECORDING FORM

Recorder: Marvin

Site: SPRR Grade

Date: November 2, 1993

Feature: 2; Locus B

Type of Recording: Complete Inventory

Page: 2 of 2

Style/ Shape	Width (Dia)	Height	Depth	Ends	Side Seam	Solder	Filling Method	Opening Method	Count	Comments/Misc
Outside of Loci continued										
3C	211	300		C	C		EE	B	3	
3C	400	509		C	C		EE	CK	1	Oil can; "medium"
HL	301	405	15	C	C		HL	HL	2	Tobacco tin
3C	(?)	512		C	C		(?)	(?)	1	
3C	307	409		C	C		EE	KO	1	
OS	305	404	105	C	C		IF	IF	1	Oval; "Keep airtight" and "Press down lid" on lid; IF closure

millimeters

p-15-003366

TIN CAN SUMMARY

Recorder: Marvin

Site: SPRR Grade

Date: November 2, 1993

Feature: 2; Locus B

Type of Recording: Complete Inventory

Page: 1

Type	Quantity
Feature 2B	
Hole and cap food cans	77
Sanitary cans	4
Matchstick	2
Double matchstick	23
Total	**106**
Outside of Loci	
Tobacco tins (1907)	2
Fish tins	1
Hole and cap	11
Sanitary cans	7
Lid	1
Milk (1917 0 1929; Simonis)	1
Other/misc	8
Total	**31**

Comments: Most of the cans were knife-opened, and almost all were food cans. Deposit appears related to the railroad. Railroad construction began in 1908; deposit is possibly related to construction crew.

TIN CANISTER RECORDING FORM

Recorder: Marvin and Costello

Site: SPRR Grade

Date: November 2, 1993

Feature: 2; Locus C

Type of Recording: Complete Inventory

Page: 1 of 2

Style/ Shape	Width (Dia)	Height	Depth	Ends	Side Seam	Solder	Filling Method	Opening Method	Count	Comments/Misc
Feature 2C										
3C	305	408		C	C		EE	TO	5	TO & P38 not easy to tell apart
3C	212	300		C	C		EE	PH	2	
3C	212	300		C	C		EE	KC	1	
3C	212	300		C	C		EE	JL	1	
3C	212	300		C	C		EE	TO	8	
3C	305	400		C	C		EE	TO	2	
3C	208	206		F	C		MS	PH	7	Milk
3C	212	212		C	C		EE	B	1	
OTS	210	404	100	C			EE	KC	1	
3C	300	211		C	C		EE	PH	1	
3C	411	400		C	C		EE	TO/P38	3	
3C	300	411		C	C		EE	(?)	3	
3C	302	405		C	C		EE	TO	3	
3C	408	308		C	C		EE	TO	1	
3C	215	209		C	C		EE	TO	1	
3C	306	312+		C	C		EE	(?)	1	
LID	500			C	C		EE	KC	1	EF closure; coffee can (?)
3C	500	215		C	C		EE	KC	3	EF closure
3C	300	313		C	C		MS	PH	1	
3C	211	215		C	C		EE	TO/P38	1	
3C	306	405		C	C		EE	TO/P38	2	
3C	303	408		C	C		EE	KC	1	
LID	404			C	C		EE	KC	1	
LID	600			C	C		EE	K3	1	IF closure
3C	212	300		C	C		EE	CK	6	
3C	212	300		C	C		EE	TO/P38	2	

millimeters

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TIN CANISTER RECORDING FORM

Recorder: Marvin and Costello

Site: SPRR Grade

Date: November 2, 1993

Feature: 2; Locus C

Type of Recording: Complete Inventory

Page: 2 of 2

Style/ Shape	Width (Dia)	Height	Depth	Ends	Side Seam	Solder	Filling Method	Opening Method	Count	Comments/Misc
Feature 2C continued										
3C	212	300		C	C		EE	PH	2	
3C	211	400		C	C		EE	TO/P38	3	
3R		211		C	C		EE	KS 1	2" X 3"	
LID		009		C	C		EE	KS 1		
3C	210	300		C	C		EE	TO/P38	1	
3C	411	410		C	C		EE	TO/P38	1	
3C	211	400		C	C		EE	TO/P38	1	
3C	108	208		C	C		EE	TO/P38	1	
	211	Unk		C	C				1	
3C	400	409		C	C		EE	TO/P38	2	
3C	208	100		C	C		EE	KS	1	Meat
3C		Unk							2	
LID	108	005		C	C		EF		1	Company design on edge

millimeters

P-15-00 3366

TIN CAN SUMMARY

Recorder: Marvin

Site: SPRR Grade

Date: November 2, 1993

Feature: 2; Locus C

Type of Recording: Complete Inventory

Page: 1

Type	Quantity
Feature 2C - Burried deposit	
Milk cans (1917 - 1930; Simonis)	7
Matchstick	1
Lids	4
Coffee can	1
Coffee can (key strip)	1
Sanitary food cans	ca. 56
Meat tin (Argentina)	1
Total	71

Comments: Deposit related to Railroad, possibly siding. Mostly sanitary cans with some milk cans (1920 - 1934).

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TIN CAN IDENTIFICATION KEY

STYLE/SHAPE

LID	Lid
BB	Beer beverage
3C	3 piece cylindrical
2C	2 piece cylindrical
MF	Multiple-friction
SF	Single-friction
OF	Oblong F style
CT	Crown cap/cone top
OS	Oblong spice
KR	Key-opening reclosure
KN	Key-opening nonreclosure
LS	Long spout seams
HL	Hinged lid pocket
FR	Flat round
FH	Flat hinged
SB	Square, oval end and round-breasted
SC	Slip cover
RT	Round truncated
PS	Pear shaped
TR	Two place redrawn
OK	Oblong key-opened
EO	Easy open oblong
TC	Tapered
FO	Flat Oval
3R	3-piece rectangular key opening (meat/tin)
OTT	Offset threaded tall can
OTS	Offset threaded short can
CTT	Center threaded tall can
CTS	Center threaded short can

ENDS

F	Flush
S	Stamped external
C	Crimped
X	Combination

SIDE SEAM

L	Cap
C	Crimped
BS	Various types of modern beer can seams
N	None

CLOSURE

ST	Screw top
CC	Crown cap
IF	Internal friction
EF	External friction
MF	Multiple friction
NO	None

FILLING METHOD

HC	Hole-in-cap
MS	Match-stick filler
EE	Entire end
ST	Screw top
HT	Hole in top (hole and cap)
2MS	Double matchstick

HANDLE

BA	Bail
BL	Bail with lugs
CA	Cast
MT	Molded tin
SW	Shaped wire
CW	Curved wire

(If added for secondary use)

AO	Attached outside
HC	Holes punched in can

OPENING METHOD

CK	Church key
BO	Bayonet
TO	Twist opener
P3	P38
JL	Jab lift
KS	Key strip
PH	Punched holes
KC	Knife cut(s)
XC	X cut
TB	Tear tabs
TP	Tear top
CS	Center hold and circle slice
ST	Screw top
KT	Key top
TS	Top strip

ELEMENTS ABSENT

A	Element Absent

SOLDER

H	Hand
M	Machine
N	None

DIMENSIONS: If ends vary in size, place a "D" in the width column and record the base and top diameters in the comments column. If the can is rectangular, the width and depth are opposite directions. Can dimensions are recorded to the nearest 1/16 inch.

EMBOSSING: If present, enter under comments and describe locatoin and nature.

LITHOGRAPHY: If present, locate on can and describe in comments section.

FRL 11-93

P15-003366

ARCHAEOLOGICAL SITE RECORD

Permanent Trinomial: ~~CA-INY-~~ CA-KER- 3366H

Other Designation: SPRR Grade

1. County: Inyo and Kern

2. USGS Quad:

Inyo Co.

- Bartlett (7.5') provisional edition 1988
- Olancha (7.5') provisional edition 1988
- Haiwee Pass (7.5') provisional edition 1987
- Haiwee Reservoirs (7.5') provisional edition 1982
- Coso Junction (7.5') provisional edition 1982
- Little Lake (7.5') provisional edition 1983
- ~~Inyokern Canyon (7.5') provisional edition 1982~~

Kern Co.

- Pearsonville (7.5') provisional edition 1982 -282D
- Inyokern (7.5') 1972 - 258A
- Inyokern SE (7.5') 1972 258D
- Ridgecrest South (7.5') 1973 257C
- El Paso Peaks (7.5') 1967 234

3. UTM Coordinates: Zone 11

Northern terminus (Bartlett Quad.):
408920 m Easting 4031760 m Northing

Southern terminus (El Paso Peaks Quad):
442920 m Easting 3925860 m Northing

P-15-003366

ARCHAEOLOGICAL SITE RECORD

Permanent Trinomial: CA-INY-
CA-KER-

Other Designation: SPRR Grade

4. Base Meridian. MDM

Township:	Range:	Section:
17S	37E	30, 31
18S	37E	6, 7, 18
18S	36E	24, 25, 36
19S	36E	1, 12, 13
19S	37E	19, 30, 29, 32
20S	37E	5, 4, 9, 16, 21, 28, 33
21S	37E	3, 10, 15, 22, 27, 34
22S	37E	3, 10, 11, 14, 23, 26, 25, 36
22S	38E	31
23S	38E	6, 7, 18, 19, 29, 32
24S	38E	5, 4, 9, 16, 21, 22, 27, 34
25S	38E	2, 11, 13, 24, 25, 36
26S	38E	1
26S	39E	6, 7, 18, 19, 30, 29, 32
27S	39E	5, 8, 17, 16, 21, 28, 27, 34, 35
28S	39E	unsectioned land
27S	40E	31, 32
28S	40E	4, 5, 6, 9, 10, 15, 14, 23, 26

5. Map Coordinates: N/A

6. Elevation: 2290-3900 ft (698-1189 m)

P-15-003366

ARCHAEOLOGICAL SITE RECORD

Permanent Trinomial: CA-INY-
CA-KER-

Other Designation: SPRR Grade

7. Location: Project area is approximately 76 miles of railroad grade beginning approximately 12 miles south of Lone Pine, Inyo County (northern terminus) and ending at Searles Junction, Kern County (southern terminus). Railroad grade continues both to north and south of the project termination points, outside of the project area. The railroad runs from the Owens Valley, south through the pass at Little Lake, through Indian Wells Valley, and into the El Paso Mountains (see site location maps).

8. Site Type: Historic.

9. Site Description: Site is approximately 76 miles of the old Southern Pacific railroad which was originally constructed in 1908-10 to haul personnel, equipment, and supplies for the building of the L.A. Aqueduct. Site consists of the railroad track, grade, and other railroad related features. The 296 features recorded include culverts, bridges, and trestles along with structural remains at some of the 18 stations which once existed along the project route. Each feature was assigned a number, and each station was assigned a separate locus designation.

10. Area: 76 miles surveyed; line continues to north and south.

How determined: Scaled from maps.

11. Depth: N/A Method of Determination: N/A.

12. Features: A total of 296 features were recorded along the 76 miles of railroad grade surveyed. Feature numbers and descriptions are found in the list attached to this record. Loci and their associated features are listed below.

Locus A: Monachee Station; three associated features.
Feature 12 - iron pipe culvert
Feature 13 - track crossing
Feature 14 - ring of fieldstones and broken concrete

Locus B: Cartago Station; six associated features.
Feature B-1 - timber culvert
Feature B-2 - concrete building foundation
Feature B-3 - concrete building foundation
Feature B-4 - subsurface wooden enclosure
Feature B-5 - outdoor hearth of fieldstone and brick
Feature B-6 - loading dock/platform

ARCHAEOLOGICAL SITE RECORD

Permanent Trinomial: CA-INY-
CA-KER-

Other Designation: SPRR Grade

12. **Features** (Cont.):

Locus C: Olancha Station; three associated features and siding.
Feature C-1 - loading dock/platform
Feature C-2 - concrete arch culvert
Feature 54 - concrete arch culvert

Locus D: Loco Station; no associated features.

Locus E: Pumice Mill (adjacent to Locus D); two associated features.
Feature E-1 - wood foundation with adjacent concrete pit containing "I" beams and a sheet metal chute
Feature E-2 - concrete foundation with cut off structural steel supports

Locus F: Haiwee Station; three associated features.
Feature F-1 - concrete arch culvert (w/U.S. Coast and Geodetic Survey Benchmark M1161 1962)
Feature F-2 - timber culvert
Feature F-3 - timber culvert

Locus G: Talus Station; three associated features.
Feature G-1 - iron pipe culvert
Feature G-2 - timber culvert
Feature 107 - track crossing

Locus H: Sykes Station; two associated features.
Feature H-1 - loading dock/platform
Feature H-2/111 - iron pipe culvert

Locus I: Mabel Station; five associated features.
Feature I-1 - concrete foundations (for cinder processing)
Feature I-2 - earthen loading ramp (for cinder processing)
Feature I-3 - concrete building foundation
Feature I-4 - track crossing
Feature I-5 - iron pipe culvert

Locus J: Little Lake Station; three associated features.
Feature J-1 - iron pipe culvert
Feature J-2 - irrigation ditches
Feature 145 - track crossing

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ARCHAEOLOGICAL SITE RECORD

Permanent Trinomial: CA-INY-
CA-KER-

Other Designation: SPRR Grade

12. Features (Cont.):

Locus K: Narka Station; two associated features.
Feature 151 - track crossing
Feature 153 - cattle guard crossing

Locus L: Linnie Station: one associated feature.
Feature 190 - track crossing

Locus M: Brown Station; five associated features.
Feature M-1 - coal bin site
Feature M-2 - oil house remains with tank foundations and metal supports
Feature M-3 - track crossing with concrete storage shed foundations
Feature M-4 - "Desmond's Warehouse" site
Feature M-5 - five wood-lined pits

Locus N: Muerto Station; no associated features.

Locus O: Inyokern Station; two associated features.
Feature O-1 - concrete slab
Feature O-2 - track crossing

Locus P: Terese Station; three associated features.
Feature P-1 - concrete water storage tank footings
Feature P-2 - concrete pump house foundations
Feature 222 - track crossing

Locus Q: Code Station; one associated feature.
Feature Q-2 - loading dock/platform

Locus R: Rademacher Station; three associated features.
Feature R-1 - track crossing
Feature R-2 - timber culvert
Feature R-3 - track crossing

Locus S: Searles Station; no associated features, sidings intact.

13. Artifacts: Numerous pieces of glass, ceramics, and metal were observed along the entire route with heavier concentrations noted at and in the vicinity of the former stations.

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ARCHAEOLOGICAL SITE RECORD

Permanent Trinomial: CA-INY-
CA-KER-

Other Designation: SPRR Grade

14. Non-Artifactual Constituents: N/A

15. Date Recorded: September 1-13, 1992 16. Recorded by: J. Berg, et al.

17. Affiliation and Address: Far Western Anthropological Research Group, Inc.
P.O. Box 413, Davis, California 95617

18. Human Remains: None noted

19. Site Disturbance: Erosion through water action, highway construction, and intentional dismantling of certain features.

20. Nearest Water (type, distance, and direction): N/A

21. Vegetation Community (site vicinity): Varies from shadscale/saltbush associations, to blackbush scrub, and creosote/desert scrub.

22. Vegetation (on site): Typical desert scrub brush including, saltbush, shadscale, blackbush, creosote, sagebrush, Joshua tree, various cacti, and assorted bunchgrasses.

23. Site Soil: Varies, but is primarily alluvium originating from the Sierra Nevada.

24. Surrounding Soil: Same as #23.

25. Geology: Primarily granitic alluvium.

26. Landform: Lakeside terrace, valley floor, alluvial fan, and mountain slope.

27. Slope: Varies.

28. Exposure: Usually open, slightly restricted to east and west through pass at Little Lake. Eastern scarp of the Sierra Nevada dominates the western skyline for most of the route.

29. Landowner and Address: Lake Minerals Corp., Lone Pine, California.

30. Remarks: Survey area was a 100 foot wide corridor for the entire 76 mile length of the project route.

P-15-003366

ARCHAEOLOGICAL SITE RECORD

Permanent Trinomial: CA-INY-
CA-KER-

Other Designation: SPRR Grade

31. References:

32. Name of Project: Lake Minerals RR Survey

33. Type of Investigation: Archaeological Survey and Inventory

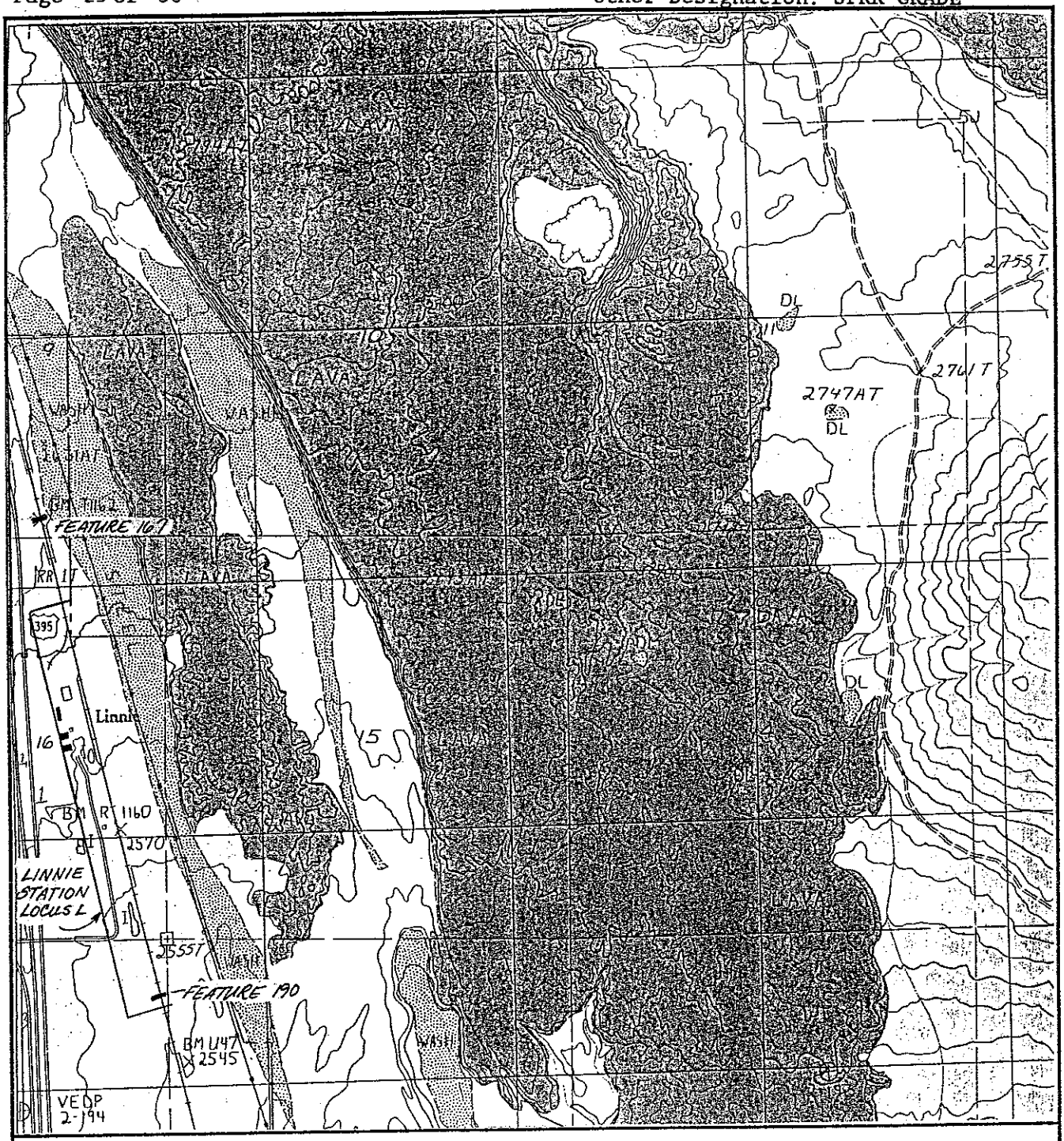
34. Site Accession Number: None. Curated At: No Collection.

35. Photos: Rolls 1-15

P-15- 003366

Permanent Trinomial:

Other Designation: SPRR GRADE

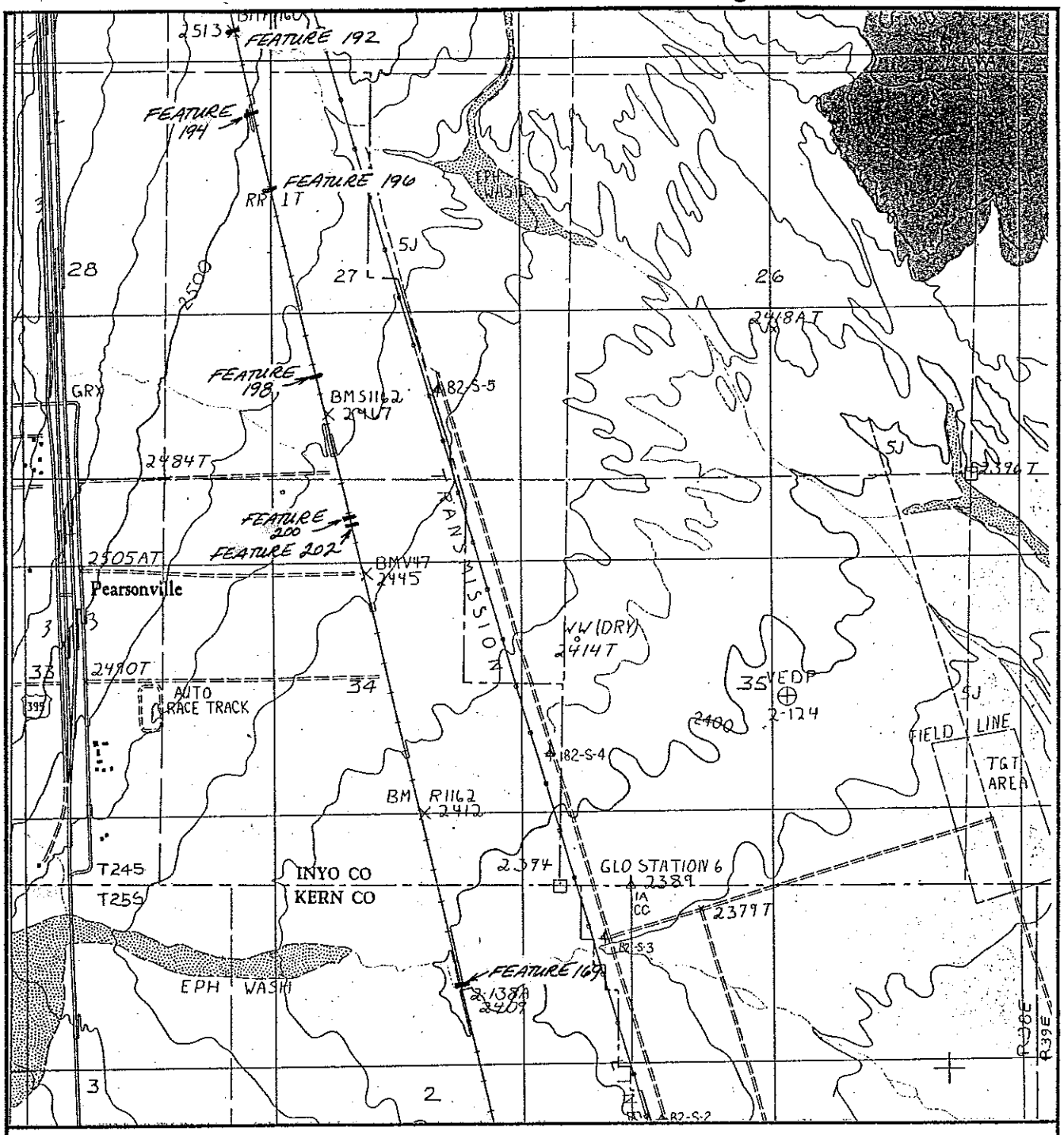


A PORTION OF
PEARSONVILLE QUADRANGLE
7.5 MINUTE
PROVESIONAL EDITION 1982

1 0 KILOMETERS 1 2
1000 0 METERS 1000 2000
1 0 1
MILES

P-15-003366

Permanent Trinomial:
Other Designation: SPRR GRADE

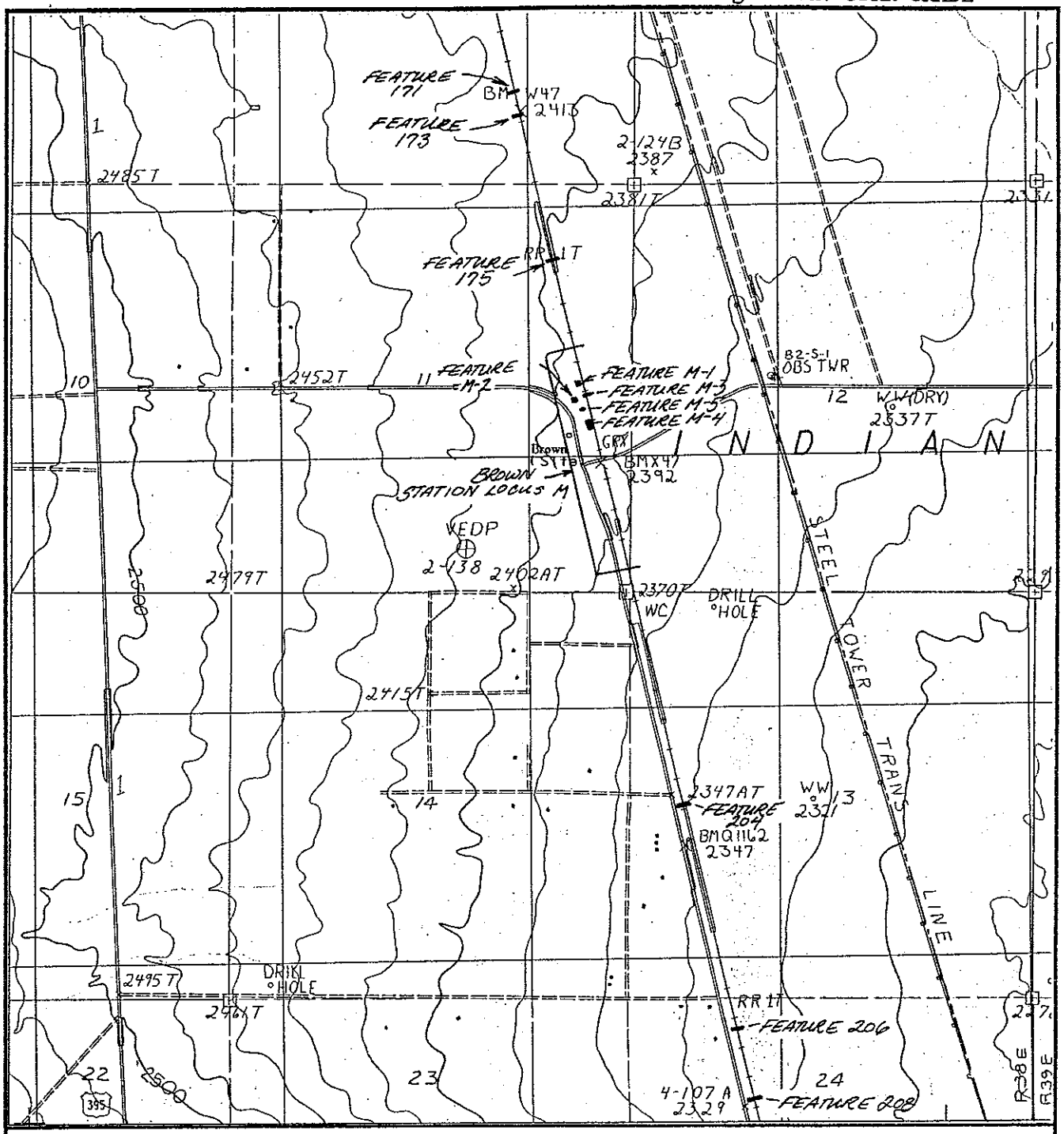


A PORTION OF
PEARSONVILLE QUADRANGLE
7.5 MINUTE
PROVESIONAL EDITION 1982

1 0 KILOMETERS 1 2
1000 0 METERS 1000 2000
1 0 1
MILES

P-15-003366

Permanent Trinomial:
Other Designation: SPRR GRADE



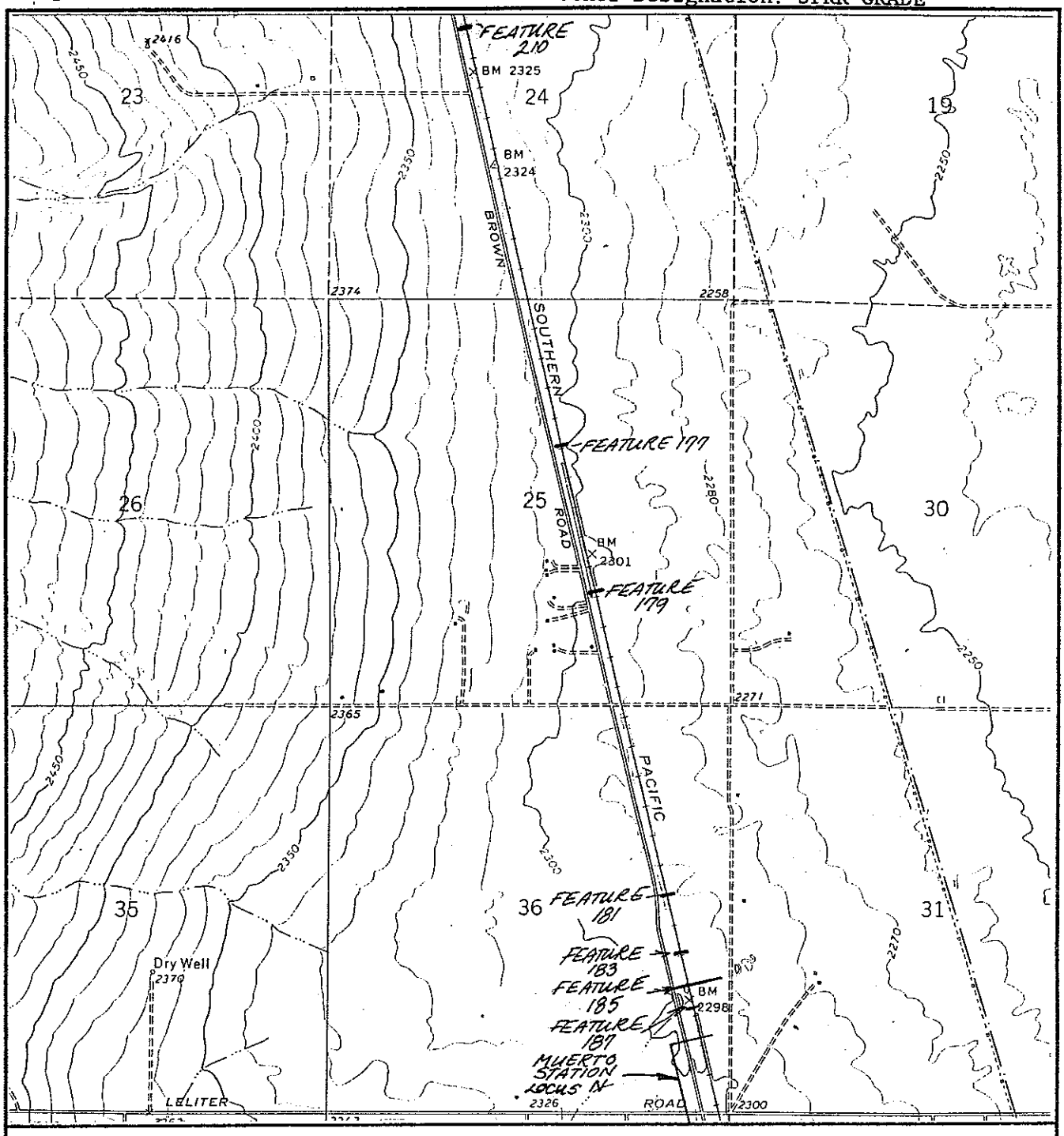
TN

A PORTION OF
PEARSONVILLE QUADRANGLE
7.5 MINUTE
PROVESIONAL EDITION 1982

1 0 KILOMETERS 1 2
1000 0 METERS 1000 2000
1 0 1
MILES

P-15-003366

Permanent Trinomial:
Other Designation: SPRR GRADE



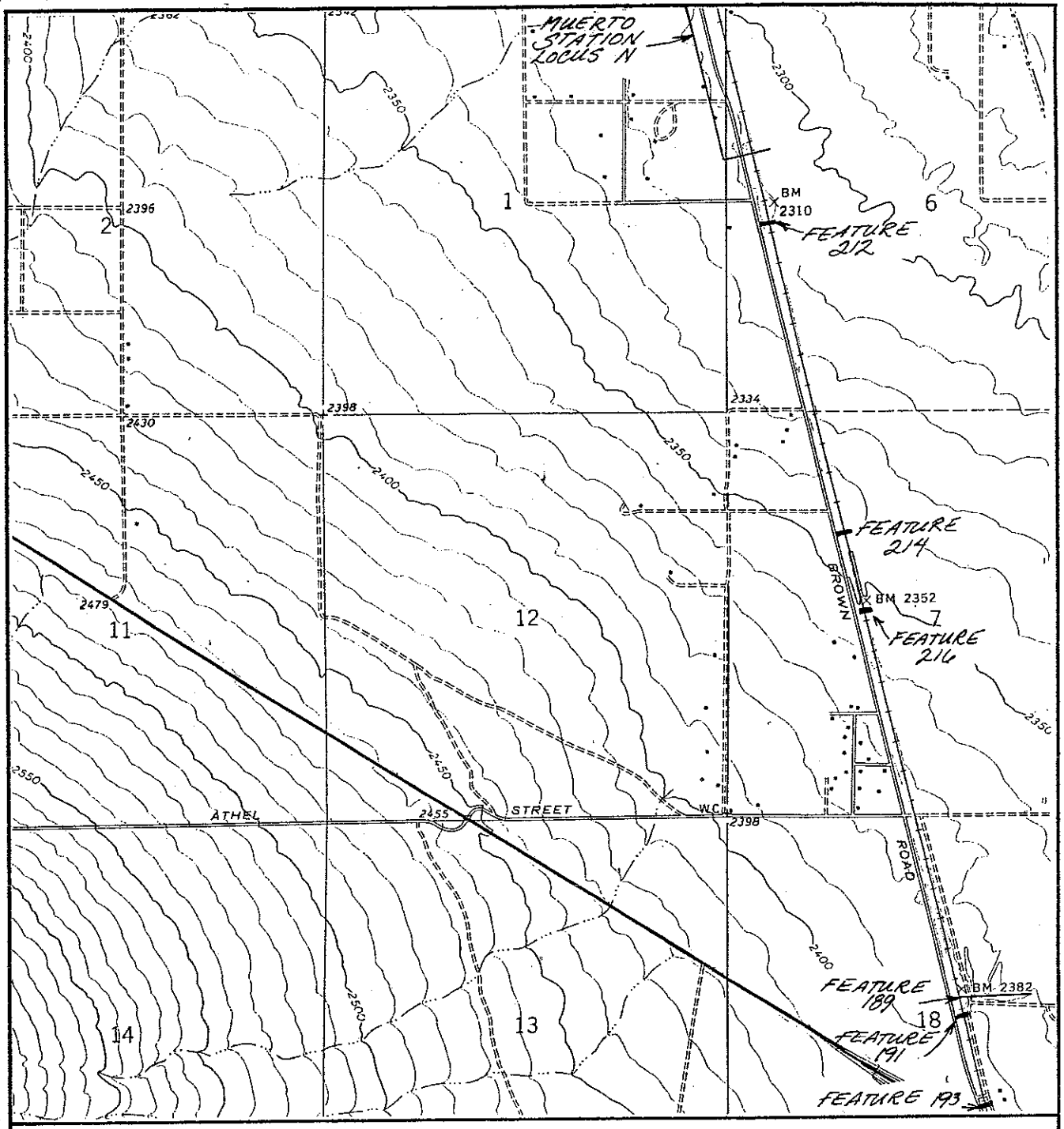
TN

A PORTION OF
INYOKERN QUADRANGLE
7.5 MINUTE
1972

1 0 KILOMETERS 1 2
1000 0 METERS 1000 2000
1 0 1
MILES

P-15-003366

Permanent Trinomial:
Other Designation: SPRR GRADE



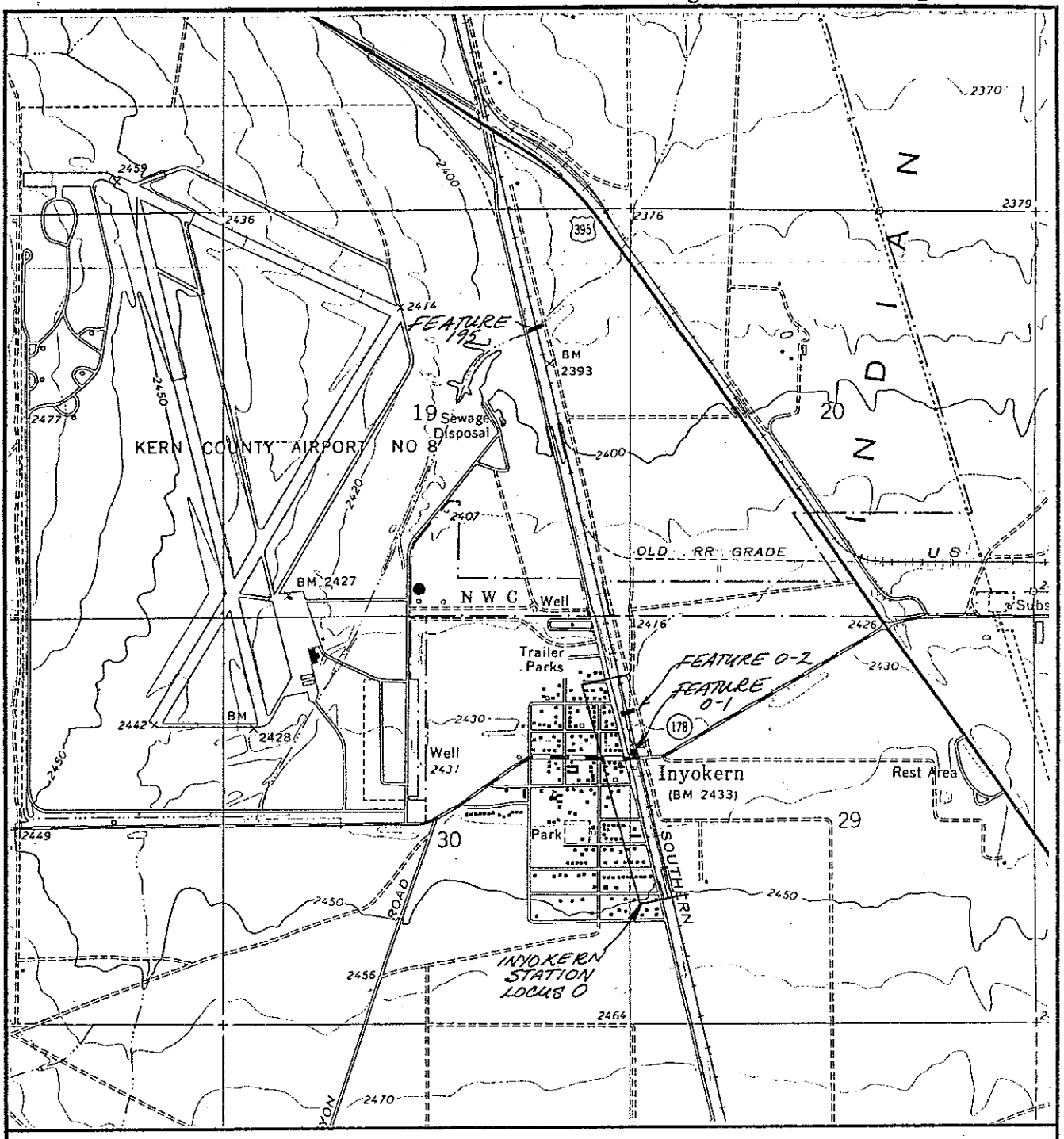
A PORTION OF
INYOKERN QUADRANGLE
7.5 MINUTE
1972

1 0 KILOMETERS 1 2
1000 0 METERS 1000 2000
1 0 1
MILES

P-15-003366

Page 30 of 36

Permanent Trinomial:
Other Designation: SPRR GRADE



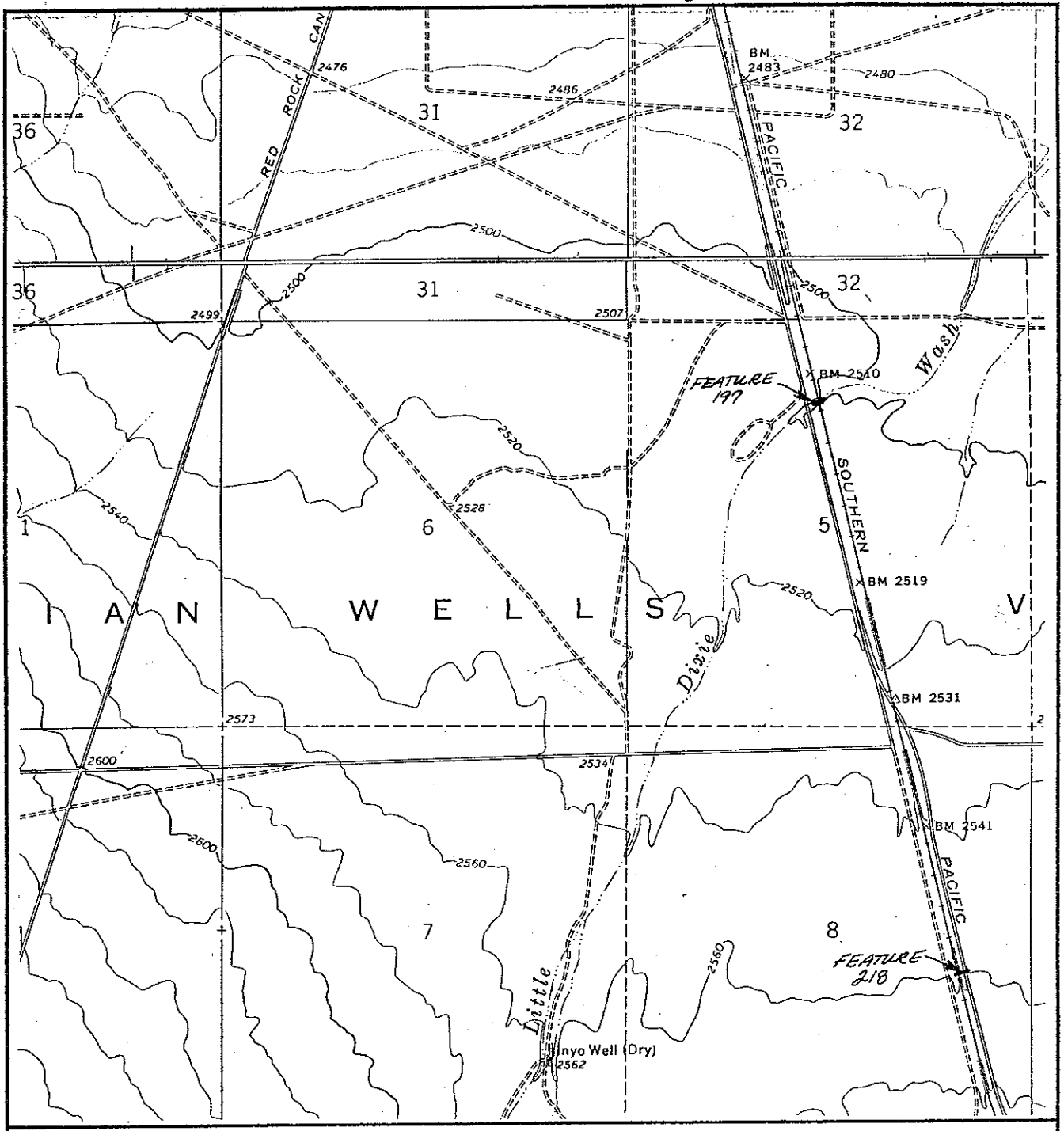
TN

A PORTION OF
INYOKERN QUADRANGLE
7.5 MINUTE
1972

1 0 KILOMETERS 1 2
1000 0 METERS 1000 2000
1 0 1
MILES

P-15-003366

Permanent Trinomial:
Other Designation: SPRR GRADE

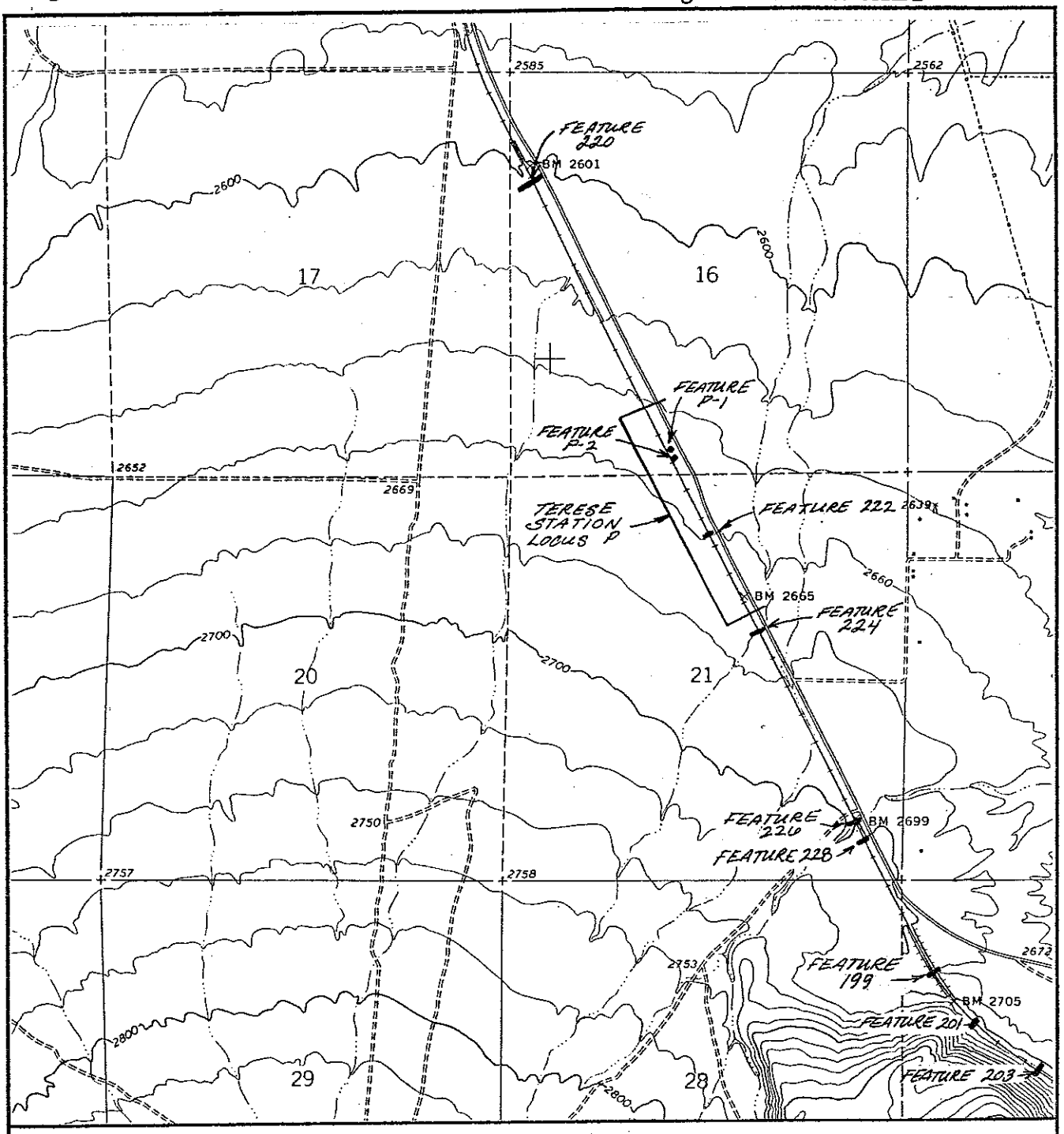


PORTIONS OF
INYOKERN AND INYOKERN SE QUADRANGLES
7.5 MINUTE
1972

1 0 KILOMETERS 1 2
1000 0 METERS 1000 2000
1 0 1
MILES

P-15-003366

Permanent Trinomial:
Other Designation: SPRR GRADE



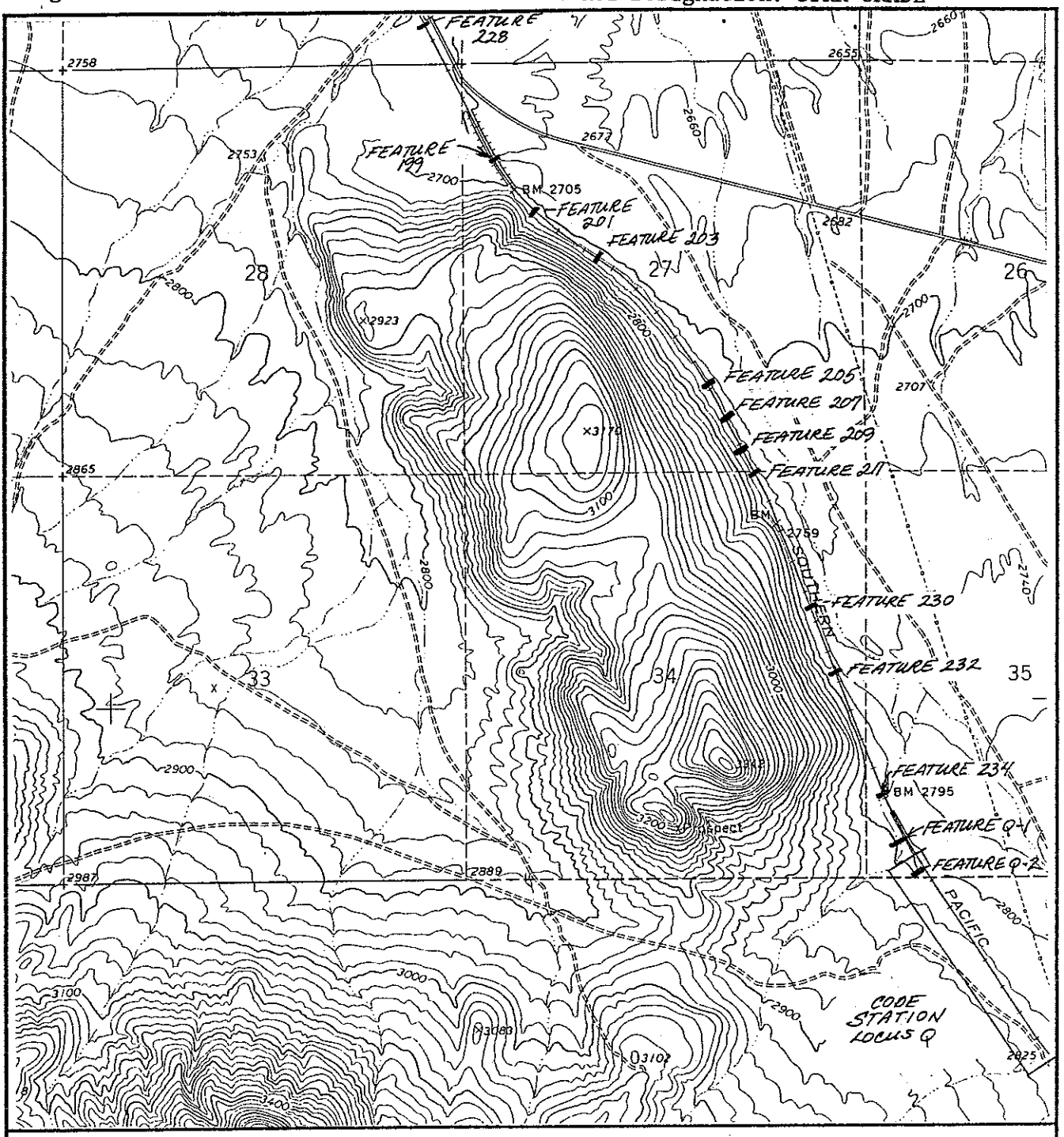
A PORTION OF
INYOKERN SE QUADRANGLE
7.5 MINUTE
1972

1 0 KILOMETERS 1 2
1000 0 METERS 1000 2000
1 0 1
MILES

P-15-003366

Permanent Trinomial:

Other Designation: SPRR GRADE



TN

A PORTION OF
INYOKERN SE QUADRANGLE
7.5 MINUTE
1972

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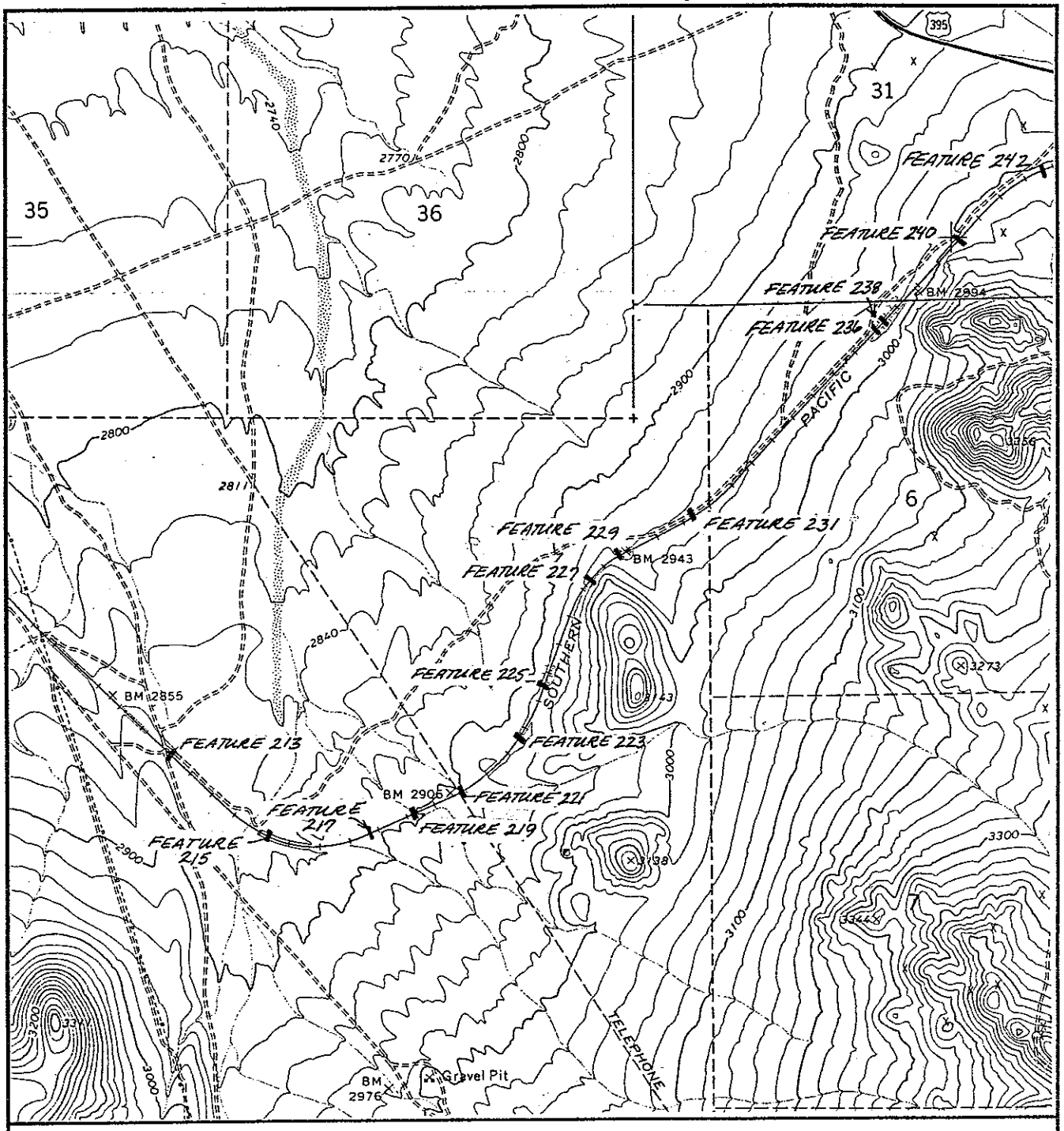
MILES

P-15-003366

Permanent Trinomial:
Other Designation: SPRR GRADE



A PORTION OF
RIDGECREST SOUTH QUADRANGLE
7.5 MINUTE
1973

TN

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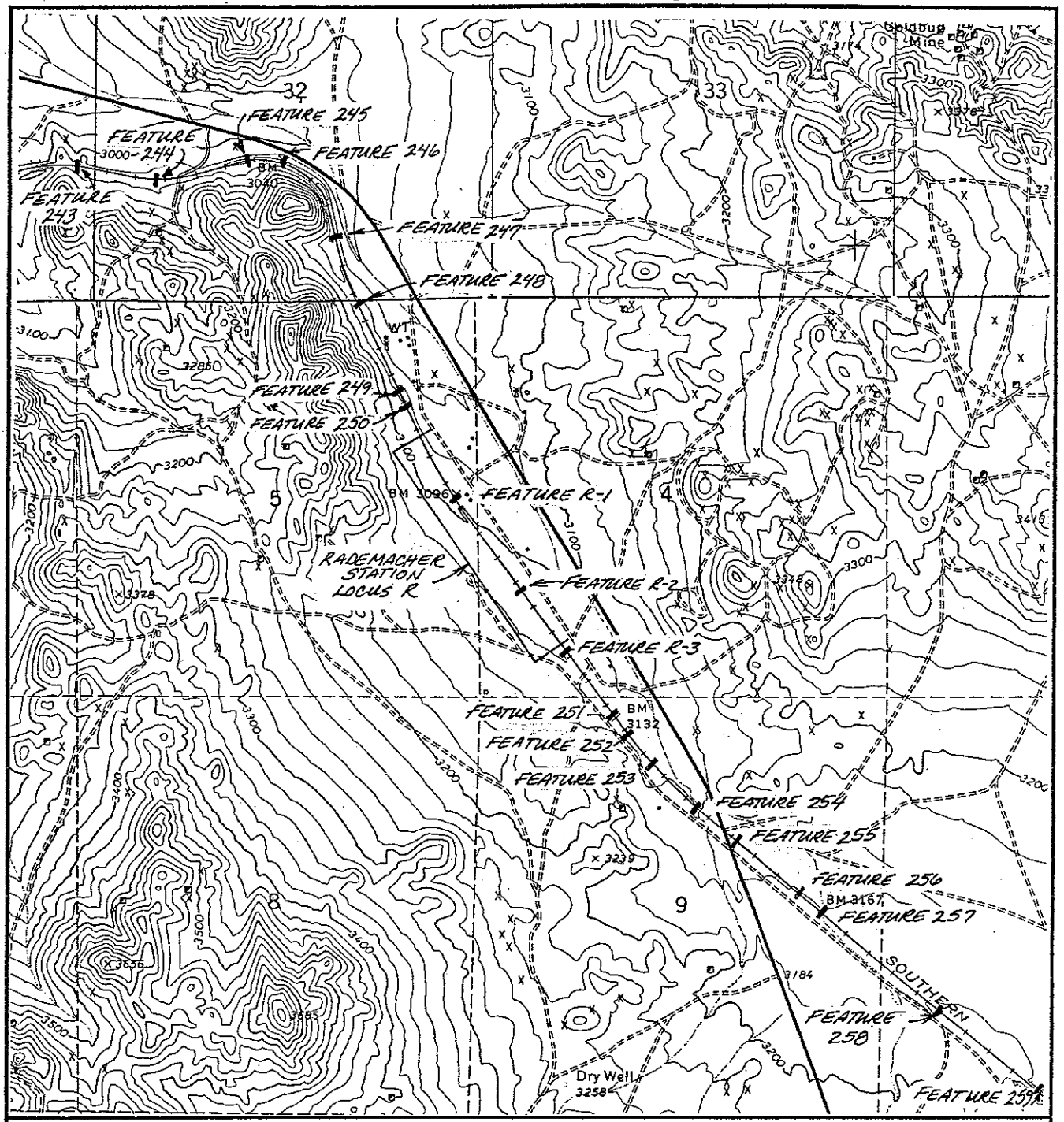
1000 0 METERS 1000 2000
1 0 1
MILES

P-15-003366

Permanent Trinomial:
Other Designation: SPRR GRADE



A PORTION OF
RIDGECREST SOUTH QUADRANGLE
7.5 MINUTE
1973

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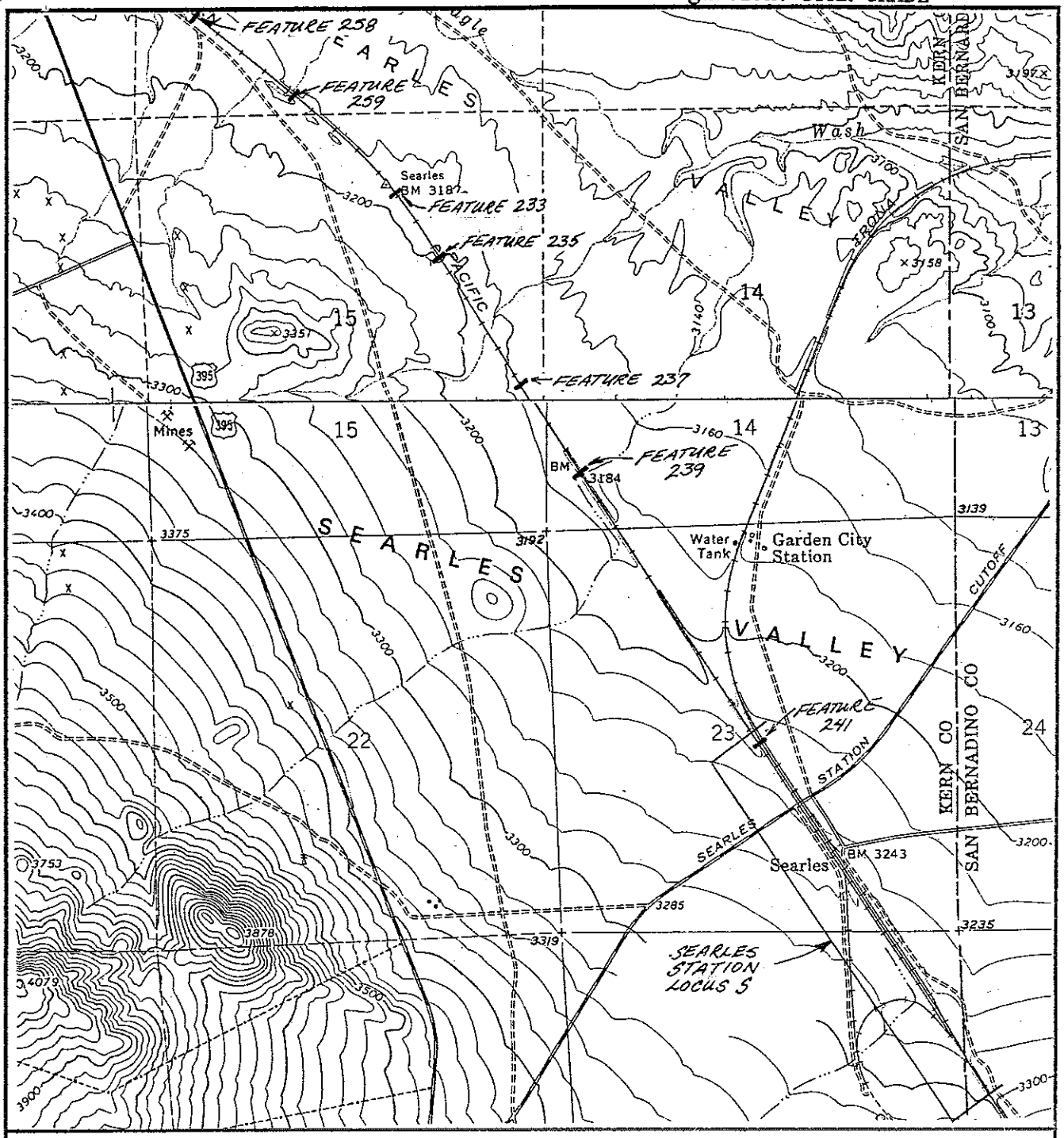
1000 0 METERS 1000 2000
1 0 1
MILES

P-15-003366

Permanent Trinomial:
Other Designation: SPRR GRADE



PORTIONS OF
RIDGECREST SOUTH AND EL PASO PEAKS QUADRANGLES
7.5 MINUTE
1973

1 0 KILOMETERS 1 2
1000 0 METERS 1000 2000
1 0 1
MILES

P-15- 003366

ARCHAEOLOGICAL SITE RECORD (Attachment)

Permanent Trinomial: CA-INY-
CA-KER-

Other Designation: SPRR Grade

SOUTHERN PACIFIC RAILWAY
(Lake Minerals Railway)
Feature Log

Feature #	Description
1	Track Crossing
2	Ballast Deck Culvert w/B.M. C1163 1962
3	Ballast Deck Culvert #504.26
4	Ballast Deck Culvert #504.15
5	Steel Bridge
6	Concrete Footings
7	Track Crossing
8	Ballast Deck Culvert #503.24
9	Wood/Plank Road
10	Ballast Deck Culvert
11	Concrete Arch Culvert (Monachee Station ?)
12	Iron Pipe Culvert
13	Track Crossing
14	Ring of fieldstones and broken concrete 10 m west of tracks (pole/post support ?)
15	Steel Bridge @ Ash Creek crossing, "American Bridge Company of New York U.S.A. 1910"
16	Trestle w/granite block rip-rap
17	Ballast Deck Culvert w/granite block rip-rap
18	Ballast Deck Culvert #501.27 w/B.M. E1163 1962
19	Track Crossing
20	Ballast Deck Culvert #500.07
21	Ballast Deck Culvert w/B.M. M45 1925
22	Track Crossing
23	Ballast Deck Culvert

P-15-003366

ARCHAEOLOGICAL SITE RECORD (Attachment)

Permanent Trinomial: CA-INY-
CA-KER-

Other Designation: SPRR Grade

SOUTHERN PACIFIC RAILWAY
(Lake Minerals Railway)
Feature Log

Feature #	Description
24	Iron Pipe Culvert @ HWY 395 crossing
25	Iron Pipe Culvert @ HWY 395 crossing
26	Track Crossing
27	Ballast Deck Culvert #99 w/B.M. F1163 1962
28	Track Crossing
29	Ballast Deck Culvert
30	Ballast Deck Culvert w/B.M. G1163 1962
31	Ballast Deck Culvert, single track, but wide enough for double track
32	Ballast Deck Culvert, single track, but wide enough for double track
33	Steel Bridge @ Cartago
34	Ballast Deck Culvert
35	Ballast Deck Culvert #496.88(?)
36	Track Crossing
37	Ballast Deck Culvert
38	Ballast Deck Culvert #496.44
39	Track Crossing
40	Ballast Deck Culvert #469.12
41	Ballast Deck Culvert #495.92
42	Track Crossing
43	Ballast Deck Culvert #495.61
44	L.A. Aqueduct distribution pipe under railroad grade berm
45	Ballast Deck Culvert #495.23
46	Track Crossing

P-15-003366

ARCHAEOLOGICAL SITE RECORD (Attachment)

Permanent Trinomial: CA-INY-
CA-KER-

Other Designation: SPRR Grade

SOUTHERN PACIFIC RAILWAY
(Lake Minerals Railway)
Feature Log

Feature #	Description
47	Track Crossing
48	Ballast Deck Culvert w/B.M. M1163 1962
49	Ballast Deck Culvert #492.32(?)
50	Ballast Deck Culvert #494.36
51	Track Crossing
52	Concrete Bridge crossing L.A. Aqueduct
53	Ballast Deck Culvert #488.42(?)
54	Concrete Arch Culvert
55	Battery Box for highway crossing controls
56	Ballast Deck Culvert w/B.M. N1163 1962
57	Ballast Deck Culvert #488.22(?)
58	Ballast Deck Culvert
59	Ballast Deck Culvert #488.83
60	Ballast Deck Culvert w/B.M. S1161 1962
61	Concrete Arch Culvert
62	Ballast Deck Culvert
63	Concrete Arch Culvert
64	Concrete Arch Culvert
65	Ballast Deck Culvert #487.79 w/B.M. Q1161 1962
66	Track Crossing
67	Track Crossing
68	Concrete Arch Culvert w/B.M. S45 1925, concrete addition to east side dated 3-25-46
69	Concrete Arch Culvert and Stone Retaining Wall
70	Stone Retaining Wall, dry masonry

P-15-003366

ARCHAEOLOGICAL SITE RECORD (Attachment)

Permanent Trinomial: CA-INY-
CA-INY-

Other Designation: SPRR Grade

SOUTHERN PACIFIC RAILWAY
(Lake Minerals Railway)
Feature Log

Feature #	Description
71	Concrete Arch Culvert
72	Track Crossing
73	Concrete Arch Culvert
74	Concrete Arch Culvert
75	Concrete Arch Culvert
76	Concrete Arch Culvert (no photo)
77	Concrete Arch Culvert
78	Iron Pipe Culvert, dated 1919 (no photo)
79	Track Crossing
80	Track Crossing
81	Concrete Arch Culvert
82	Ballast Deck Culvert, was B.M. R1161 1962 (cap missing)
83	Concrete Arch Culvert #485.45
84	Track Crossing
85	Concrete Arch Culvert #485.05
86	Concrete Arch Culvert
87	Track Crossing
88	Concrete Arch Culvert
89	Ballast Deck Culvert
90	Track Crossing
91	Ballast Deck Culvert
92	Ballast Deck Culvert #483.49
93	Ballast Deck Culvert
94	Concrete Arch Culvert #483.30 w/B.M. L1161 1962

P-15-003366

ARCHAEOLOGICAL SITE RECORD (Attachment)

Permanent Trinomial: CA-INY-
CA-KER-

Other Designation: SPRR Grade

SOUTHERN PACIFIC RAILWAY
(Lake Minerals Railway)
Feature Log

Feature #	Description
95	Battery Box for highway crossing controls
96	Concrete Arch Culvert #483.10
97	Ballast Deck Culvert #480.74
98	Concrete Arch Culvert #482.77
99	Ballast Deck Culvert #480.62
100	Track Crossing
101	Track Crossing
102	Concrete Arch Culvert #482.51
103	Ballast Deck Culvert #480.39
104	Ballast Deck Culvert #482.36 w/B.M. K1161 1962
105	Concrete Arch Culvert
106	Concrete Arch Culvert #482.21
107	Track Crossing
108	Ballast Deck Culvert #482.10
109	Ballast Deck Culvert
110	Track Crossing
111/H-2	Iron Pipe Culvert
112	Concrete Arch Culvert, "S"-shaped, @ Haiwee Creek crossing
113	Ballast Deck Culvert #475.14
114	Ballast Deck Culvert #421.99
115	Track Crossing
116	Track Crossing
117	Ballast Deck Culvert
118	Ballast Deck Culvert

P-15-003366

ARCHAEOLOGICAL SITE RECORD (Attachment)

Permanent Trinomial: CA-INY-
CA-KER-

Other Designation: SPRR Grade

SOUTHERN PACIFIC RAILWAY
(Lake Minerals Railway)
Feature Log

Feature #	Description
119	Track Crossing
120	Ballast Deck Culvert
121	Ballast Deck Culvert
122	Ballast Deck Culvert
123	Track Crossing
124	Ballast Deck Culvert w/B.M. H1161 1962
125	Ballast Deck Culvert #473.88(?)
126	Concrete Arch Culvert #478.09
127	Ballast Deck Culvert #473.45(?)
128	Track Crossing
129	Ballast Deck Culvert
130	Ballast Deck Culvert w/B.M. Z45 1925
131	Track Crossing
132	Ballast Deck Culvert #477.47
133	Ballast Deck Culvert w/B.M. A1161 1962
134	Fieldstone Pad
135	Ballast Deck Culvert
136	Ballast Deck Culvert #477.08
137	Ballast Deck Culvert
138	Iron Pipe Culvert, near B.M. E1161 1962
139	Track Crossing
140	Track Crossing
141	Ballast Deck Culvert w/B.M. X1160 1962
142	Ballast Deck Culvert #476.49 w/LADWP B.M. GGB V804 L.S. 3834

ARCHAEOLOGICAL SITE RECORD (Attachment)

Permanent Trinomial: CA-INY-
CA-KER-

Other Designation: SPRR Grade

SOUTHERN PACIFIC RAILWAY
(Lake Minerals Railway)
Feature Log

Feature #	Description
143	Track Crossing w/wood posts
144	Steel Bridge, L.A. Aqueduct crossing
145	Track Crossing
146	Ballast Deck Culvert w/B.M. D1161 1962
147	Track Crossing
148	Track Crossing
149	Ballast Deck Culvert
150	Track Crossing
151	Track Crossing
152	Iron Pipe Culvert
153	Cattle Guard Crossing
154	Ballast Deck Culvert w/B.M. N47 1925
155	Ballast Deck Culvert
156	Ballast Deck Culvert
157	Cattle Guard Crossing
158	Concrete Arch Culvert
159	Ballast Deck Culvert
160	Ballast Deck Culvert
161	Ballast Deck Culvert
162	Track Crossing
163	Ballast Deck Culvert (no photo)
164	Ballast Deck Culvert w/B.M. U1160 1962
165	Ballast Deck Culvert (no photo)
166	Track Crossing

P-15-003366

ARCHAEOLOGICAL SITE RECORD (Attachment)

Permanent Trinomial: CA-INY-
CA-KER-

Other Designation: SPRR Grade

SOUTHERN PACIFIC RAILWAY
(Lake Minerals Railway)
Feature Log

Feature #	Description
167	Trestle (no photo)
168	Ballast Deck Culvert
169	Trestle
170	Concrete Arch Culvert
171	Track Crossing
172	Concrete Arch Culvert
173	Ballast Deck Culvert #456.91 w/B.M. W47 1925
174	Concrete Arch Culvert
175	Trestle
176	Track Crossing near B.M. R47 1925
177	Track Crossing
178	Wooden Bridge, dated 1926
179	Ballast Deck Culvert
180	Concrete Arch Culvert
181	Trestle
182	Iron Pipe Culvert
183	Track Crossing
184	Track Crossing
185	Wagon Road to Mt. Spring
186	Iron Pipe Culvert
187	Trestle
188	Concrete Arch Culvert
189	Wagon Road to China Basin
190	Track Crossing

P-15-003366

ARCHAEOLOGICAL SITE RECORD (Attachment)

Permanent Trinomial: CA-INY-
CA-KER-

Other Designation: SPRR Grade

SOUTHERN PACIFIC RAILWAY
(Lake Minerals Railway)
Feature Log

Feature #	Description
191	Track Crossing
192	Ballast Deck Culvert w/B.M. P1160 1962
193	Track Switch (spur to Ridgecrest/China Lake)
194	Track Crossing
195	Trestle with structural steel supports
196	Trestle #459.41
197	Trestle #445.10
198	Track Crossing
199	Concrete Arch Culvert
200	Trestle
201	Iron Pipe Culvert
202	Track Crossing
203	Iron Pipe Culvert
204	Trestle
205	Track Crossing
206	Track Crossing
207	Iron Pipe Culvert
208	Trestle
209	Iron Pipe Culvert
210	Trestle
211	Iron Pipe Culvert
212	Ballast Deck Culvert #450.83
213	Ballast Deck Culvert
214	Trestle #450.18

P-15-003366

ARCHAEOLOGICAL SITE RECORD (Attachment)

Permanent Trinomial: CA-INY-
CA-KER-

Other Designation: SPRR Grade

SOUTHERN PACIFIC RAILWAY
(Lake Minerals Railway)
Feature Log

Feature #	Description
215	Trestle
216	Water Tank Footings(?), concrete
217	Track Crossing
218	Track Crossing
219	Ballast Deck Culvert
220	Road Crossing, portions of asphalt road to east and west of tracks
221	Ballast Deck Culvert
222	Track Crossing
223	Ballast Deck Culvert
224	Trestle
225	Concrete Arch Culvert
226	Ballast Deck Culvert w/B.M. N1160 1962
227	Track Crossing
228	Track Crossing
229	Ballast Deck Culvert
230	Iron Pipe Culvert
231	Ballast Deck Culvert
232	Track Crossing
233	Ballast Deck Culvert #430.56
234	Ballast Deck Culvert
235	Track Crossing
236	Track Crossing
237	Ballast Deck Culvert #429.99
238	Concrete Arch Culvert

P-15-003366

ARCHAEOLOGICAL SITE RECORD (Attachment)

Permanent Trinomial: CA-INY-
CA-KER-

Other Designation: SPRR Grade

SOUTHERN PACIFIC RAILWAY
(Lake Minerals Railway)
Feature Log

Feature #	Description
239	Ballast Deck Culvert w/B.M. E701 1948
240	Ballast Deck Culvert
241	Track Switch, north end of Searles Junction
242	Concrete Arch Culvert
243	Ballast Deck Culvert #434.32
244	Ballast Deck Culvert #434.14
245	Concrete Arch Culvert
246	Track Crossing
247	Concrete Arch Culvert
248	Track Crossing
249	Track Crossing
250	Ballast Deck Culvert #433.03
251	Ballast Deck Culvert #432.16
252	Track Crossing
253	Iron Pipe Culvert
254	Ballast Deck Culvert #431.86
255	Wooden Culvert
256	Wooden Culvert
257	Ballast Deck Culvert #431.44 w/B.M. F701 1948
258	Track Crossing
259	Ballast Deck Culvert
	CARTAGO STATION - Locus B
B-1	Ballast Deck Culvert
B-2	Building Foundation (concrete)

P-15-003366

ARCHAEOLOGICAL SITE RECORD (Attachment)

Permanent Trinomial: CA-INY-
CA-KER-

Other Designation: SPRR Grade

SOUTHERN PACIFIC RAILWAY
(Lake Minerals Railway)
Feature Log

Feature #	Description
	CARTAGO STATION - Locus B (Cont.)
B-3	Building Foundation (concrete)
B-4	Sub-surface wooden enclosure (privy?)
B-5	Outdoor hearth of fieldstone and brick
B-6	Loading Dock/Platform
	OLANCHA STATION - Locus C
C-1	Loading Dock/Platform
C-2	Concrete Arch Culvert
	PUMICE MILL - Locus E (South of Loco Station @ Sage Flat Road)
E-1	Structural foundation of 4x4 wood and adjacent concrete pit with steel "I" beam supports and sheet metal chute
E-2	Concrete foundation with structural steel supports (cut off)
	HAIWEE STATION - Locus F
F-1	Concrete Arch Culvert w/B.M. M1161 1962
F-2	Ballast Deck Culvert
F-3	Ballast Deck Culvert
	TALUS STATION - Locus G
G-1	Iron Pipe Culvert
G-2	Ballast Deck Culvert
	SYKES STATION - Locus H
H-1	Loading Dock/Platform
H-2\111	Iron Pipe Culvert

P-15-003366

ARCHAEOLOGICAL SITE RECORD (Attachment)

Permanent Trinomial: CA-INY-
CA-KER-

Other Designation: SPRR Grade

SOUTHERN PACIFIC RAILWAY
(Lake Minerals Railway)
Feature Log

Feature #	Description
	MABEL STATION - Locus I
I-1	Concrete Foundations, cinder loading facility
I-2	Earthen Ramp, cinder loading facility
I-3	Building Foundation (concrete)
I-4	Track Crossing
I-5	Iron Pipe Culvert
	LITTLE LAKE STATION - Locus J
J-1	Iron Pipe Culvert
J-2	Irrigation Ditches
	BROWN STATION - Locus M
M-1	Coal Bin Site
M-2	Oil House and Tank foundations and supports
M-3	Track Crossing with concrete foundation for storage shed
M-4	Desmond's Warehouse Site
M-5	Wood-lined Pits (privies?)
	INYOKERN STATION - Locus O
O-1	Building Foundation (concrete slab)
O-2	Track Crossing
	TERESE STATION - Locus P
P-1	Water Storage Tank Footings (concrete)
P-2	Pump House Foundations (concrete)

P-15-003366

ARCHAEOLOGICAL SITE RECORD (Attachment)

Permanent Trinomial: CA-INY-
CA-KER-

Other Designation: SPRR Grade

SOUTHERN PACIFIC RAILWAY
(Lake Minerals Railway)
Feature Log

Feature #	Description
	CODE STATION - Locus Q
Q-1	Gravel road bed with wooden bridge and concrete culvert across drainage west of tracks, road provided access to station
Q-2	Loading Dock/Platform
	RADEMACHER STATION - Locus R
R-1	Track Crossing
R-2	Ballast Deck Culvert
R-3	Track Crossing

NOTE: Unless otherwise noted, benchmarks (designated, B.M.) are a "U.S. Coast and Geodetic Survey" brass cap monument installed on feature.

Supplement

HARRY REID CENTER FOR ENVIRONMENTAL STUDIES
UNIVERSITY OF NEVADA, LAS VEGAS
PRIMARY RECORD

Primary # **Supplement**
HRI#
Trinomial CA-KER-3366H
NRHP Status Code

Other Listings
Review Code **Reviewer** **Date**

Page ***Resource Name or #:** (assigned by recorder)

P1. **Other Identifier:** Jawbone Branch of the Southern Pacific

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

***a.** **County:** San Bernardino

***b.** **USGS 7.5' Quad:** Mojave, CA USGS 7.5' Topographic Map
T11N, R12E, Crossing NE 1/4 of Section 8; B.M. SBM

c. **Address** **City** **Zip**

d. **UTM:** (Give more than one for large and/or linear resources) See existing site documentation

e. **Other Location Data:**

***P3.Description:** Throughout America's desert West, water is generally a scarce element, but one that is in high demand for use by commercial and agricultural industries as well as for domestic consumption. High density population centers in water deficient regions of the Southwest have made herculean efforts to divert and transport water over long distances through an expensive system of metal pipes, tunnels carved in mountains, and concrete lined canals to quench the thirst of their bourgeoning population. Los Angeles, Las Vegas, Phoenix, and Tucson are prime examples of this expensive survival strategy.

At the turn of the 20th century, the Los Angeles basin was experiencing an exponential growth in population, a severe drought, and reduced pressure at the artesian wells serving the valley. For a city that was dependent upon an aquifer water supply, city officials were quick to realize that measures would have to be taken to supplement the diminishing resource so vital to Los Angeles' continuation. William Mulholland and the Los Angeles Water Company would play a paramount role in the first of many efforts to acquire a reliable supply of water outside the confines of the basin by purchasing land and water rights in the Owens Valley (Reisner 1993). Even though the Owens Valley was 250 miles north of Los Angeles, it was reasoned that the problem of transporting the surface water supply across treacherous mountain terrain could be accomplished through an aqueduct assisted by gravity flow, the supply being higher in elevation than the destination.

Preparatory work on the Owens Valley Project, particularly at the portal of the Elizabeth Tunnel, began in the fall of 1907 amid bitter political wrangling, tough economic times, and the issuance of a $24 million bond to finance the work. In order to logistically support the project and its 57 construction camps, it was necessary to build 215 miles of road, 230 miles of temporary pipeline to furnish drinking water, 218 miles of power transmission lines, and 377 miles of telegraph and telephone lines (Taylor 1982). Initially, the transportation of men, construction material and support supplies (an estimated 350,000 tons of freight) was hauled by the wagon load over unimproved dirt trails to various c onstruction stations along the proposed aqueduct alignment (Mullholland 2000). Such an arrangement, complicated by distance, isolation, and unfavorable climate in the project area, was seen as cost prohibitive and was likely to slow the progress of the project. To solve this daunting problem, solicitation of railroad companies was undertaken when it was determined that a city-built railroad was financially unfeasible (Taylor 1982).

A contract between Los Angeles and the Nevada & California Railway Company, a company incorporated in 1905 and a subsidiary of the Southern Pacific Railroad, was negotiated and signed on April 10, 1908. This agreement resulted in the construction of a standard gauge railroad line from

Mojave to Owenyon, a distance of 143.5 miles (Taylor 1982; Fickewirth 1992). Mojave, a small railroad siding town established in 1876 by the Southern Pacific, soon became a recreation center for aqueduct construction workers where numerous saloons and brothels flourished. Construction of the branch line was begun on February 24, 1908 and completed with the driving of a silver spike on October 22, 1910. At Owenyon, the newly built standard gauge line linked with rails of the former Carson & Colorado Railway Company (a narrow, three-foot gauge offspring of the famous Virginia & Truckee Railroad in Nevada). The Carson & Colorado Railroad had been purchased by the Southern Pacific in 1905 for $2.75 million and included as part of the operation of the subsidiary Nevada & California Railroad. For its role in constructing the branch railroad line, Southern Pacific was granted tariff and other guarantees by Los Angeles for hauling aqueduct construction materials and supplies that netted the railroad over a million dollars; a benefit to both parties (Taylor 1982). The narrow gauge line between Mojave and Lone Pine persists today as the Jawbone Division of the Southern Pacific, mainly facilitating the transportation of chemicals such as borax.

As site CA-KER-3366H, the Southern Pacific Railroad "Jawbone Division", has previously been determined ineligible for the NRHP, additionally HRC recommends that construction of the proposed pipeline and the use of the yard location will result in no adverse effect to the property.

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

P5a. Photograph or Drawing: None

P5b. Description of Photo: None

***P6. Date Constructed/Age and Source:** √ Historic ☐ Prehistoric ☐ Both
Age indicated by artifacts and archival record.

***P7. Owner and Address:** Southern Pacific Railroad

***P8. Recorded By:** William G. White, Senior Archaeologist
Harry Reid Center for Environmental Studies (HRC)
University of Nevada, Las Vegas
4505 Maryland Pkwy, Box 454009
Las Vegas, NV 89154-4009

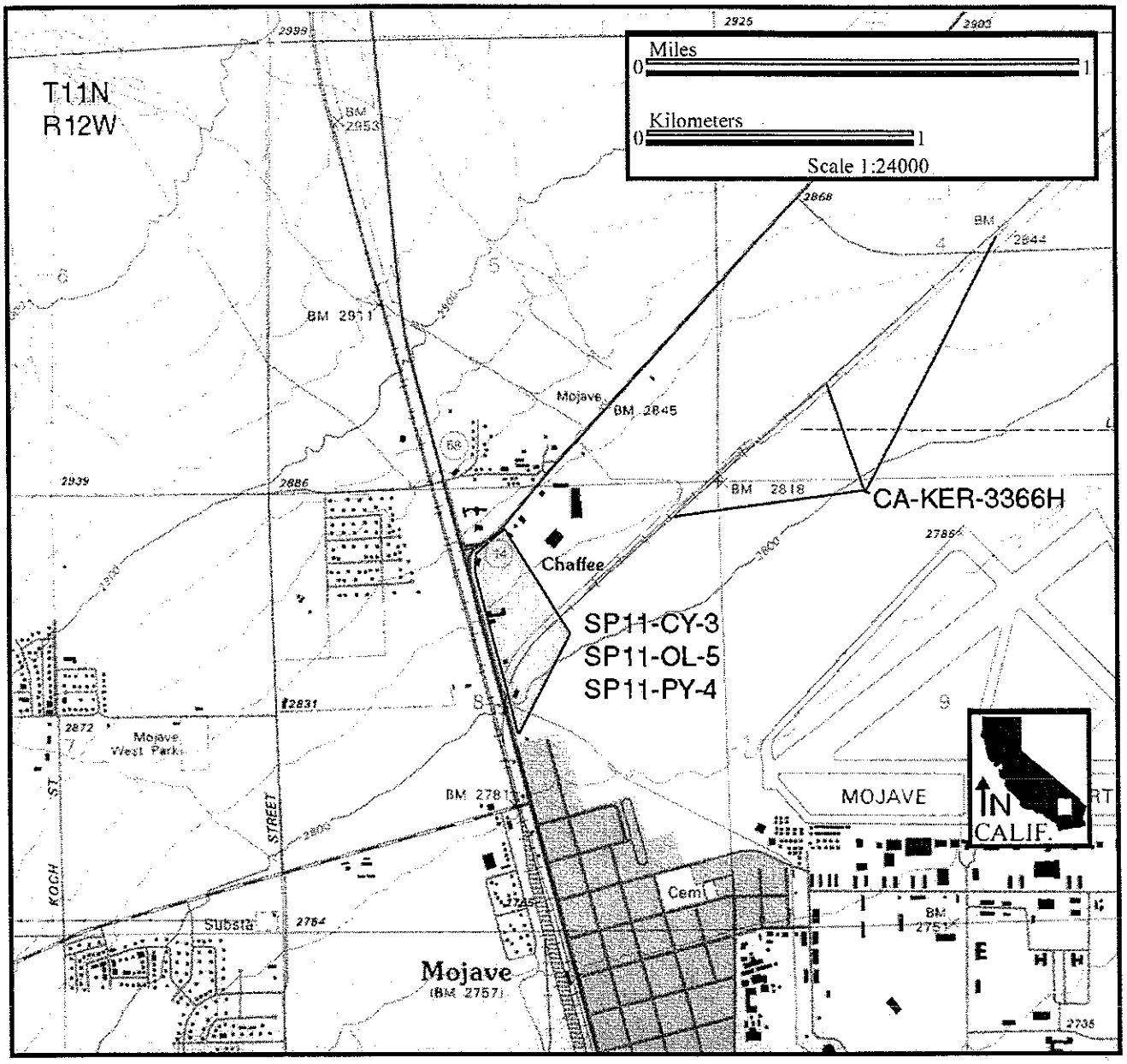
***P9. Date Recorded:** 11/7/01

***P10. Survey Type:** Pedestiran Class III block inventory

***P11. Report Citation:** HRC Report 5-150-14(7)

***Attachments:** Project map from report

DPR 523A ***Required Information**



Legend:
Yard Location

HARRY REID CENTER
FOR ENVIRONMENTAL STUDIES
UNIVERSITY OF NEVADA-LAS VEGAS

Project: 2003 KREP OFF-ROW
County: Kern
Quad: Mojave, CA 1992
7.5' USGS Topographic Map

HRC Report 5-150-14(7)

Map Location of Archaeological Site CA-KER-3366H.

State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION **PRIMARY RECORD**	Primary # _____ HRI # _____ Trinomial _____

***Resource Name or #:** RS-BE-341-130-16

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted** ***a. County:** Kern

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Inyokern SE **Date:** 1972 **T** 27; **R** 39; NE¼ **of** NE¼ **of Sec** 22**;** M.D. **B.M.**

c. Address: City: Zip:

d. UTM: Zone: 10 ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:

This building is located in an unincorporated area. To access it, proceed west on Brown Road from the intersection of Brown Road/Randsburg Inyokern Road and State Route 395, and turn right on the dirt road Calvert Boulevard. Continue approximately one mile and turn left at the dirt road Eione Avenue. Continue approximately 500 feet.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries) This building appears to be a prefabricated structure that functioned as a bunkhouse or workers' cabin related to homestead farming in the mid- to late 20th century in Section 22. It is a simple frame structure with a rectangular plan and a shed roof. The flat shed roof has a moderate overhang and enclosed eaves. Vinyl siding and windows have been applied to the structure that has few other defining characteristics.

***P3b. Resource Attributes:** (List attributes and codes) HP4 – ancillary building, rural worker's cabin

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

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo: Resource, view facing southwest, 4.2 Inventory and Survey Data\ Cultural\TM Architectural photos \Ridgecrest, DSCN9029, MKM 05-08-2009

***P6. Date Constructed/Age and Sources:** ☑Historic ☐Prehistoric ☐Both
Circa mid-20th century

***P7. Owner and Address:**
Schroeder Family
8016 Rancho Fanita Drive
Santee, CA 92071

***P8. Recorded by:**
M.K. Meiser, M.A.
EDAW AECOM
1420 Kettner Blvd. Ste. 500
San Diego, CA 92101

***P9. Date Recorded:** 05-08-2009

***P10. Survey Type:**
Intensive survey

***P11. Report Citation:** Meiser, M. K., *Historic Architecture Field Survey Report for the Proposed Ridgecrest Solar Power Project, Kern County, California.* EDAW AECOM, August 2009

***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):

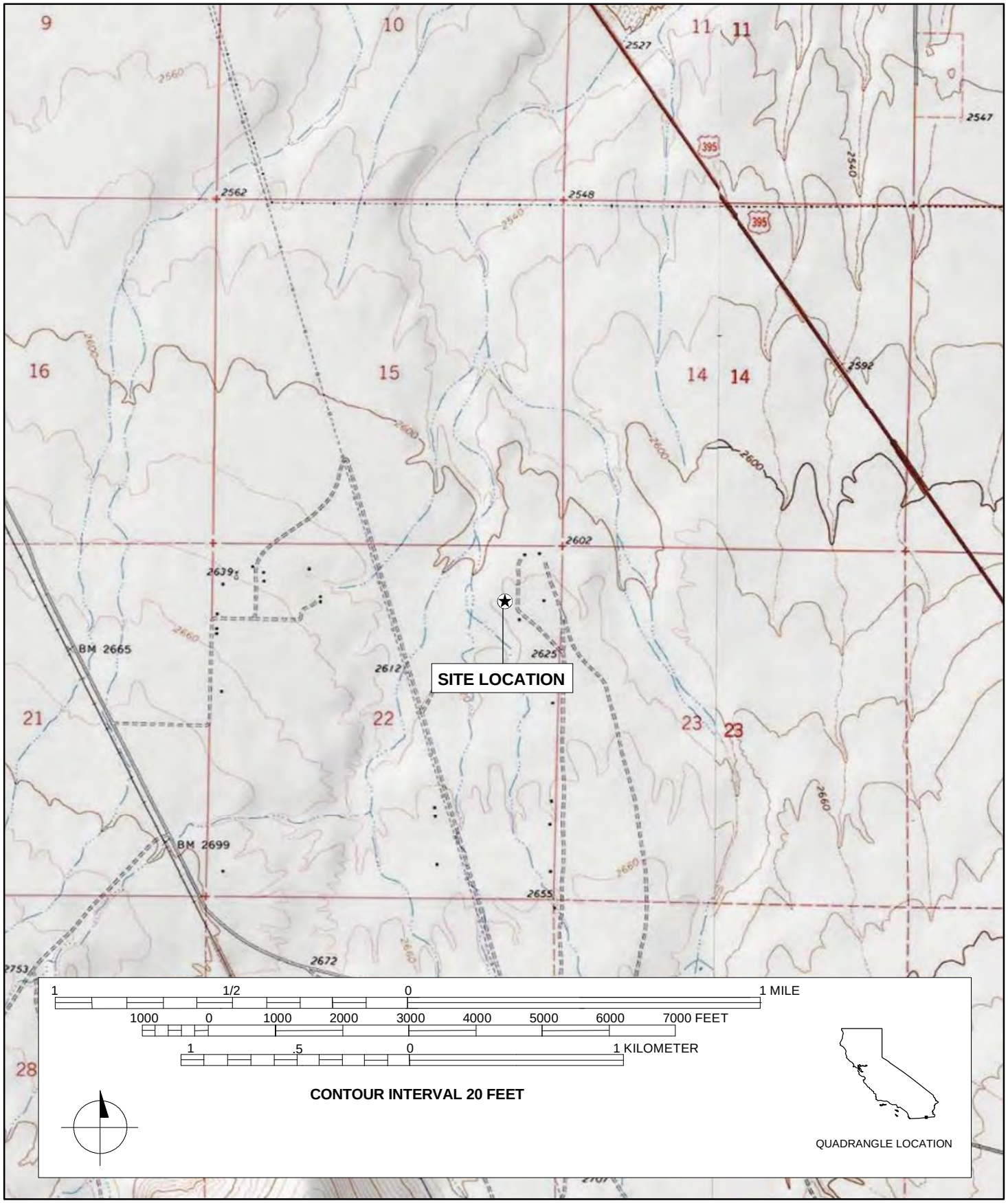
State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #_____
HRI #_____
Trinomial_____

Page 3 **of** 3 *** Resource Name or #** (Assigned by recorder) RS-BE-341-130-16

*** Map Name:** Inyokern SE *** Scale:** 1:24,000 *** Date of Map:** 1972



DPR 523J (1/95)

*Required Information

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

Primary # _____
HRI # _____
Trinomial _____

***Resource Name or #:** RS-BE-341-130-17

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted** ***a. County:** Kern

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Inyokern SE **Date:** 1972 **T** 27; **R** 39; NE¼ **of** NE¼ **of Sec** 22**;** M.D. **B.M.**

c. Address: City: Zip:

d. UTM: Zone: 10 ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:
This building is located in an unincorporated area. To access it, proceed west on Brown Road from the intersection of Brown Road/Randsburg Inyokern Road and State Route 395, and turn right on the dirt road Calvert Boulevard. Continue approximately one mile and turn left at the dirt road Eione Avenue. Continue approximately 500 feet.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries) This building appears to have been used as a bunkhouse or workers' cabin related to homestead farming. The building has a rectangular plan, frame construction, and a flat shed roof with a moderate overhang. The exterior walls consist of plywood and battens. The few windows appear to be vinyl. A single door provides access into this building.

***P3b. Resource Attributes:** (List attributes and codes) HP4 – ancillary building, rural worker's cabin

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

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo: Resource, view facing northeast, 4.2 Inventory and Survey Data\ Cultural\TM Architectural photos \Ridgecrest, DSCN9030, MKM 05-08-2009

***P6. Date Constructed/Age and Sources:** ☑Historic ☐Prehistoric ☐Both
Circa mid-20th century

***P7. Owner and Address:**
Rose E. Davis
2810 N. Van Ness Blvd.
Fresno, CA 93704

***P8. Recorded by:**
M.K. Meiser, M.A.
EDAW AECOM
1420 Kettner Blvd. Ste. 500
San Diego, CA 92101

***P9. Date Recorded:** 05-08-2009

***P10. Survey Type:**
Intensive survey

***P11. Report Citation:** Meiser, M. K., *Historic Architecture Field Survey Report for the Proposed Ridgecrest Solar Power Project, Kern County, California.* EDAW AECOM, August 2009

***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):

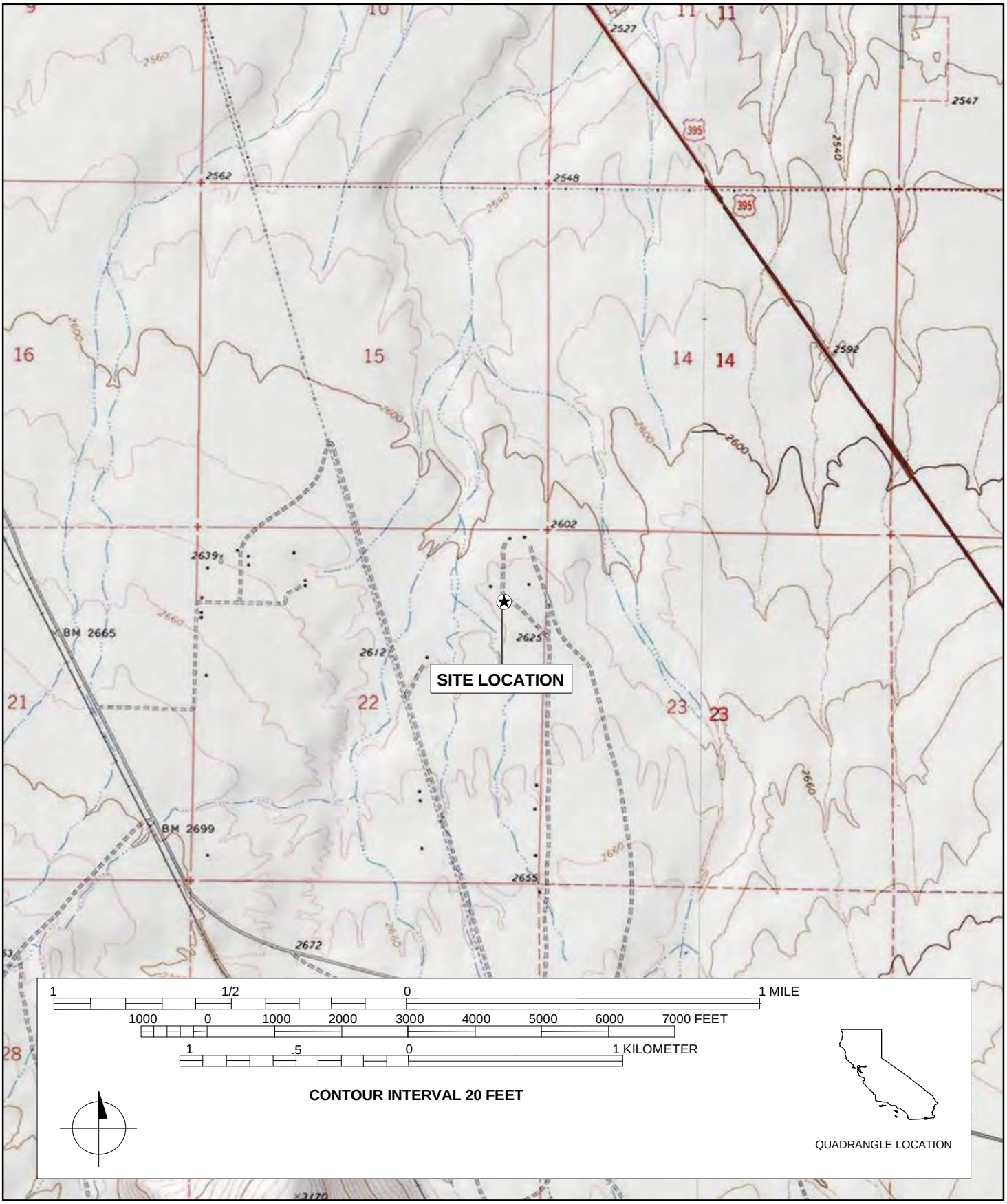
State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI #
Trinomial

Page 3 of 3 * Resource Name or # (Assigned by recorder) RS-BE-341-130-17

* Map Name: Inyokern SE * Scale: 1:24,000 * Date of Map: 1972



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

Primary # _____
HRI # _____
Trinomial _____

***Resource Name or #:** RS-BE-341-130-19

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted** ***a. County:** Kern

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Inyokern SE **Date:** 1972 **T** 27; **R** 39; SE¼ **of** NE¼ **of Sec** 22; M.D. **B.M.**

c. Address: City: Zip:

d. UTM: Zone: 10 ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:
This building is located in an unincorporated area. To access it, proceed west on Brown Road from the intersection of Brown Road/Randsburg Inyokern Road and State Route 395, and turn right on the dirt road Calvert Boulevard. Continue approximately 1/2 mile and turn left at the dirt road Clone Avenue.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries) Built at an unknown date, although most likely in the mid-20th century, the original characteristics of this house are difficult to discern. The low-pitched gabled roof has a narrow overhang, the exterior walls are at least partially covered in clapboard, and the windows are replacement aluminum horizontal sliding windows.

***P3b. Resource Attributes:** (List attributes and codes) HP2 – Single family property

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

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo:
Resource, view facing southwest, 4.2 Inventory and Survey Data\ Cultural\TM Architectural photos \Ridgecrest, DSCN9034, MKM 05-08-2009

***P6. Date Constructed/Age and Sources:** ☑Historic
☐Prehistoric ☐Both
Circa mid-20th century

***P7. Owner and Address:**
George B. York Nelson
PO Box 1702
Inyokern, CA 93527

***P8. Recorded by:**
M.K. Meiser, M.A.
EDAW AECOM
1420 Kettner Blvd. Ste. 500
San Diego, CA 92101

***P9. Date Recorded:** 05-08-2009

***P10. Survey Type:**
Intensive survey

***P11. Report Citation:** Meiser, M. K., *Historic Architecture Field Survey Report for the Proposed Ridgecrest Solar Power Project, Kern County, California.* EDAW AECOM, August 2009

***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):

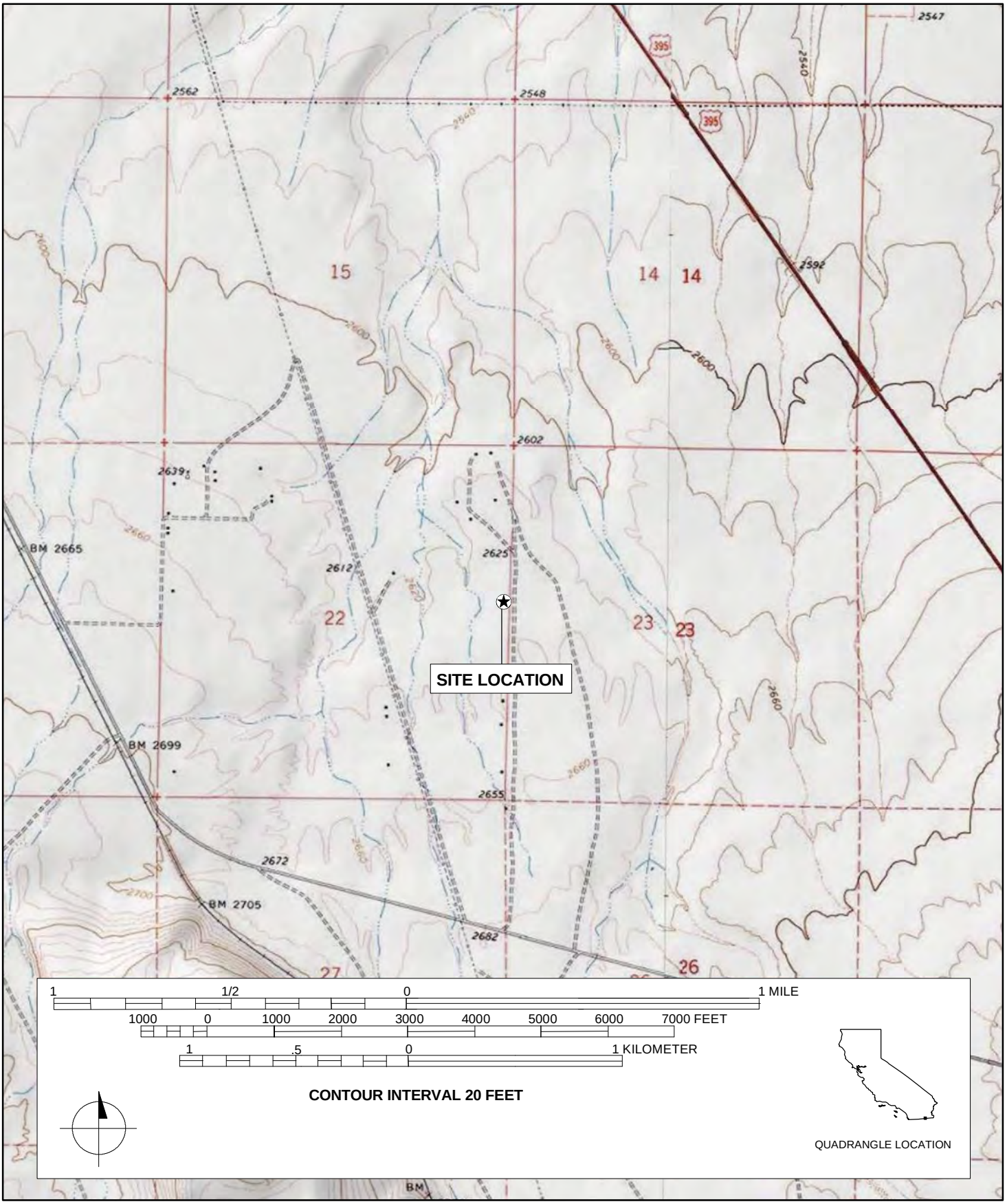
State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI #
Trinomial

Page 3 of 3 * Resource Name or # (Assigned by recorder) RS-BE-341-130-19

* Map Name: Inyokern SE * Scale: 1:24,000 * Date of Map: 1972



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

Primary # _____
HRI # _____
Trinomial _____

***Resource Name or #:** RS-BE-341-140-30

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted** ***a. County:** Kern

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Inyokern SE **Date:** 1972 **T** 27; **R** 39; SE¼ **of** SE¼ **of Sec** 22; M.D. **B.M.**

c. Address: City: Zip:

d. UTM: Zone: 10 ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:
This building is located in an unincorporated area. To access it, proceed west on Brown Road from the intersection of Brown Road/Randsburg Inyokern Road and State Route 395, and turn right on the dirt road Calvert Boulevard. Continue approximately 1/4 mile.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
This concrete block structure dates to the mid- to late 20th century. The building has a poured concrete foundation, concrete block walls, and a low-pitched roof. The building also has a wide access/garage door in the northern wall, man-door access in both the eastern and western walls, and regularly- spaced fenestration. Currently, it has no interior or exterior finishes, and is missing all windows and doors.

***P3b. Resource Attributes:** (List attributes and codes) HP2 – Single family property

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

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo:
Resource, view facing southeast, 4.2 Inventory and Survey Data\ Cultural\TM Architectural photos \Ridgecrest, DSCN9020, MKM 05-08-2009

***P6. Date Constructed/Age and Sources:** ☑Historic
☐Prehistoric ☐Both
Circa mid-20th century

***P7. Owner and Address:**
Roger C. Wickenden
974 Apokula Pl.
Kailua, HI 96734

***P8. Recorded by:**
M.K. Meiser, M.A.
EDAW AECOM
1420 Kettner Blvd. Ste. 500
San Diego, CA 92101

***P9. Date Recorded:** 05-08-2009

***P10. Survey Type:**
Intensive survey

***P11. Report Citation:** Meiser, M. K., *Historic Architecture Field Survey Report for the Proposed Ridgecrest Solar Power Project, Kern County, California.* EDAW AECOM, August 2009

***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):

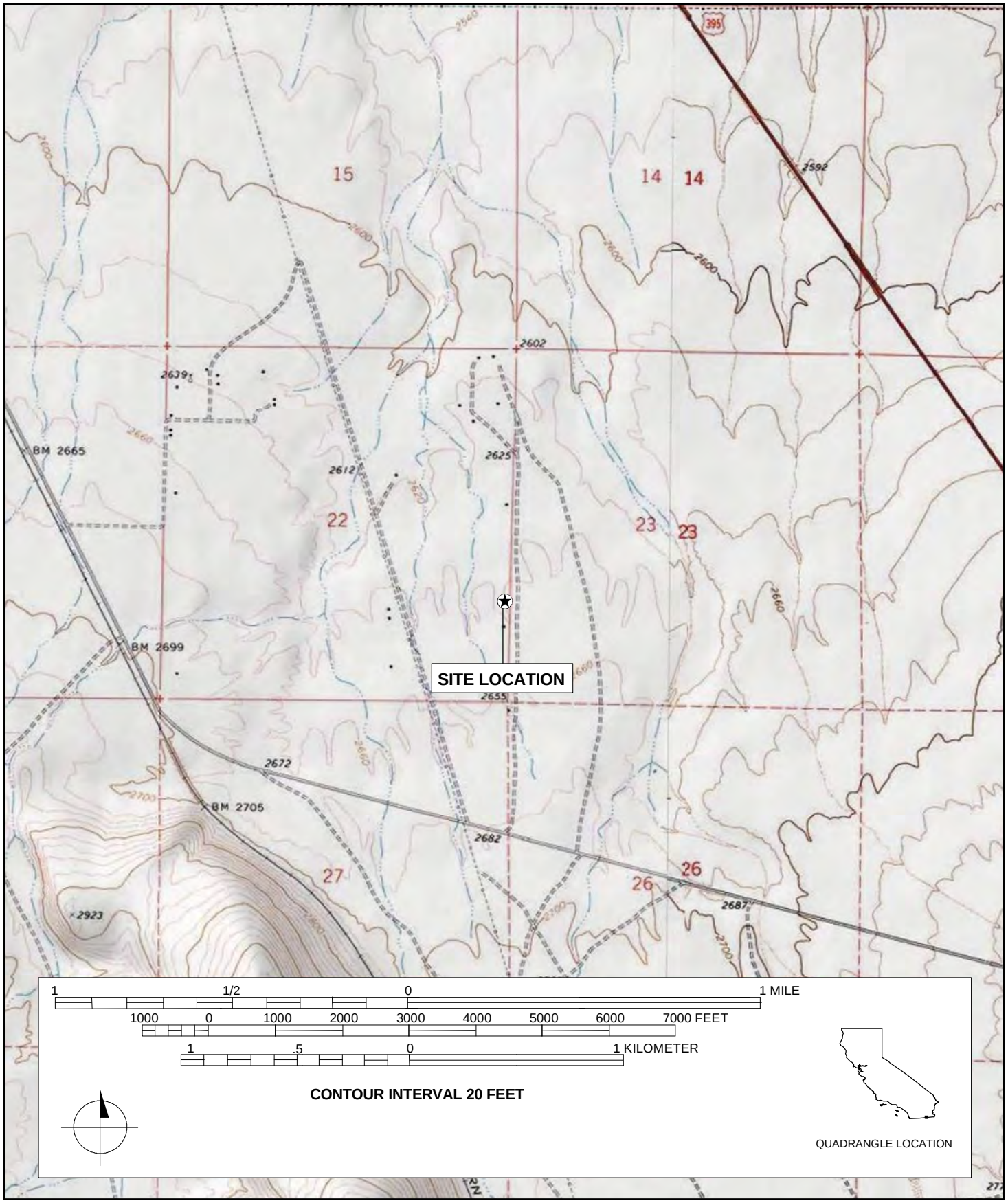
State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #_____
HRI #_____
Trinomial_____

Page 3 of 3 * Resource Name or # (Assigned by recorder) RS-BE-341-140-30

* Map Name: Inyokern SE * Scale: 1:24,000 * Date of Map: 1972



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

Primary # _____
HRI # _____
Trinomial _____

***Resource Name or #:** RS-BE-511-051-05

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted** ***a. County:** Kern

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Inyokern SE **Date:** 1972 **T** 27; **R** 40; SW¼ **of** SW¼ **of Sec** 19**;** M.D. **B.M.**

c. Address: 2165 W. Lund Street City: Ridgecrest Zip: 93555

d. UTM: Zone: 10 ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:
To access the resource, proceed north on S. China Lake Boulevard/Randsburg Inyokern Road and State Route 395 from the intersection of Brown Road, and turn left on the dirt road W. Lund Street.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
This building was built in 1959. The two-story frame building is of modern construction. It has a very low-pitched gabled roof with a wide overhang, exterior walls covered in boards, aluminum sliding glass doors and windows, including a large octagonal window in the second story. There are several sheds and objects adjacent to the building.

***P3b. Resource Attributes:** (List attributes and codes) HP2 – Single family property

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

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo:
Resource, view facing northwest, 4.2 Inventory and Survey Data\ Cultural\TM Architectural photos \Ridgecrest, DSCN9121, MKM 05-08-2009

***P6. Date Constructed/Age and Sources:** ☑Historic
☐Prehistoric ☐Both
1959

***P7. Owner and Address:**
Jamie Severn Graus
2165 W. Lund Street
Ridgecrest, CA 93555

***P8. Recorded by:**
M.K. Meiser, M.A.
EDAW AECOM
1420 Kettner Blvd. Ste. 500
San Diego, CA 92101

***P9. Date Recorded:** 05-08-2009

***P10. Survey Type:**
Intensive survey

***P11. Report Citation:** Meiser, M. K., *Historic Architecture Field Survey Report for the Proposed Ridgecrest Solar Power Project, Kern County, California.* EDAW AECOM, August 2009

***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):

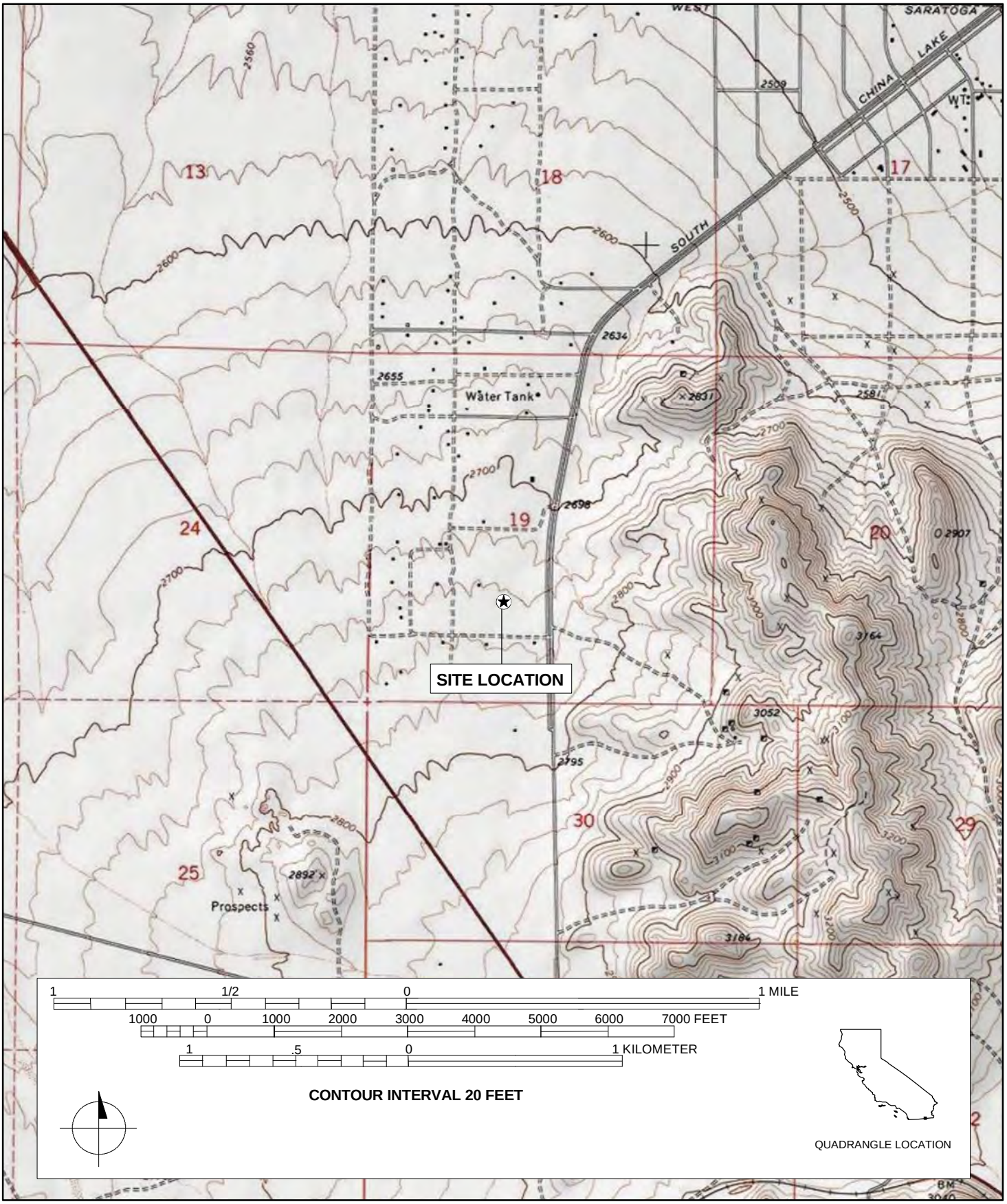
State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI #
Trinomial

Page 3 of 3 * Resource Name or # (Assigned by recorder) RS-BE-511-051-05

* Map Name: Ridgecrest South * Scale: 1:24,000 * Date of Map: 1973



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

Primary # _____
HRI # _____
Trinomial _____

***Resource Name or #:** RS-BE-511-051-07

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted** ***a. County:** Kern

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Inyokern SE **Date:** 1972 **T** 27; **R** 40; SW¼ **of** SW¼ **of Sec** 19**;** M.D. **B.M.**

c. Address: City: Zip:

d. UTM: Zone: 10 ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:
To access the resource, proceed north on S. China Lake Boulevard/Randsburg Inyokern Road and State Route 395 from the intersection of Brown Road, and turn left on the dirt road W. Lund Street.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
This building appears to be a prefabricated stick-frame construction worker's cabin. It is a frame structure with a rectangular plan, clapboard/board exterior walls, and a shed roof with a moderate overhang. Remnants of the interior and exterior finishes are scattered around the building.

***P3b. Resource Attributes:** (List attributes and codes) HP4 – Ancillary building

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

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo:
Resource, view facing west, 4.2 Inventory and Survey Data\ Cultural\TM Architectural photos \Ridgecrest, DSCN9097, MKM 05-08-2009

***P6. Date Constructed/Age and Sources:** ☑Historic
☐Prehistoric ☐Both
Circa mid-20th century

***P7. Owner and Address:**
Anna Ly
5772 Garden Grove Blvd. #498
Westminster, CA 92683

***P8. Recorded by:**
M.K. Meiser, M.A.
EDAW AECOM
1420 Kettner Blvd. Ste. 500
San Diego, CA 92101

***P9. Date Recorded:** 05-08-2009

***P10. Survey Type:**
Intensive survey

***P11. Report Citation:** Meiser, M. K., *Historic Architecture Field Survey Report for the Proposed Ridgecrest Solar Power Project, Kern County, California.* EDAW AECOM, August 2009

***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):

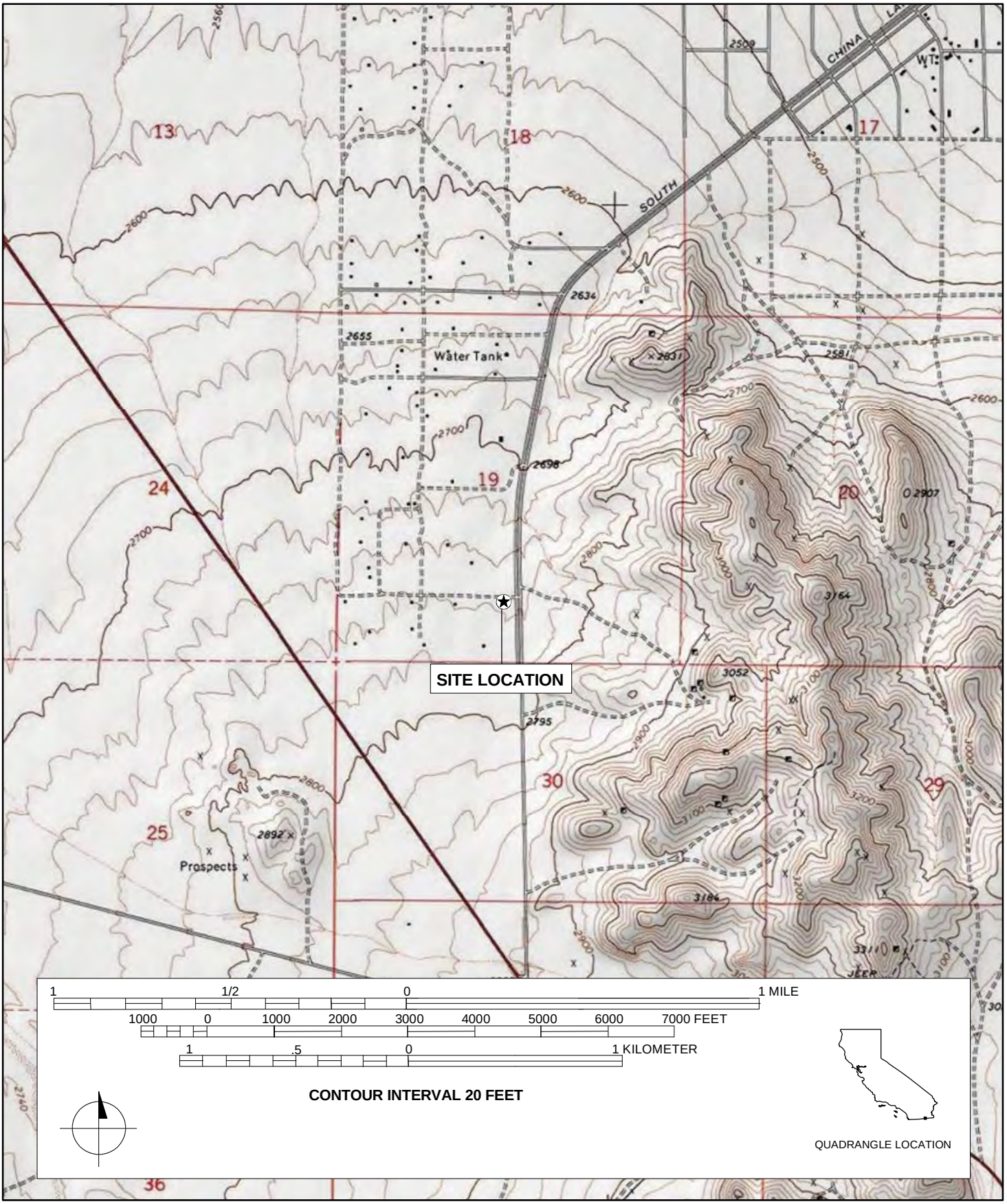
State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #_____
HRI #_____
Trinomial_____

* Resource Name or # (Assigned by recorder) RS-BE-511-051-07

* Map Name: Ridgecrest South * Scale: 1:24,000 * Date of Map: 1973



*Required Information

State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION **PRIMARY RECORD**	Primary # _____ HRI # _____ Trinomial _____

***Resource Name or #:** RS-BE-511-051-10

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted** ***a. County:** Kern

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Inyokern SE **Date:** 1972 **T** 27; **R** 40; SW¼ **of** SW¼ **of Sec** 19**;** M.D. **B.M.**

c. Address: City: Zip:

d. UTM: Zone: 10 ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:
To access the resource, proceed north on S. China Lake Boulevard/Randsburg Inyokern Road and State Route 395 from the intersection of Brown Road, and turn left on the dirt road W. Lund Street. Immediately turn left down the dirt service road and continue approximately 1/4 mile.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
This resource is a frame structure on a poured concrete foundation with a masonry veneer foundation wall and board shear walls which were once potentially covered in clapboard which is now stripped away. The building has a medium-pitched gable roof with a narrow overhang. Window openings and doors are now vacant, but regularly spaced in each elevation. Adjacent to the main structure is the remains of a pen that had a masonry kneewall and framing with net wiring enclosing it. The building has partially collapsed on the western side, and the remaining portions appear unsound.

***P3b. Resource Attributes:** (List attributes and codes) HP4 – Ancillary building

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

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo:
Resource, view facing west, 4.2 Inventory and Survey Data\ Cultural\TM Architectural photos \Ridgecrest, DSCN9092, MKM 05-08-2009

***P6. Date Constructed/Age and Sources:** ☑Historic
☐Prehistoric ☐Both
Circa mid-20th century

***P7. Owner and Address:**
Steven P. Merry
2865 Dole Road
Myrtle Creek, OR 97457

***P8. Recorded by:**
M.K. Meiser, M.A.
EDAW AECOM
1420 Kettner Blvd. Ste. 500
San Diego, CA 92101

***P9. Date Recorded:** 05-08-2009

***P10. Survey Type:**
Intensive survey

***P11. Report Citation:** Meiser, M. K., *Historic Architecture Field Survey Report for the Proposed Ridgecrest Solar Power Project, Kern County, California.* EDAW AECOM, August 2009

***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):

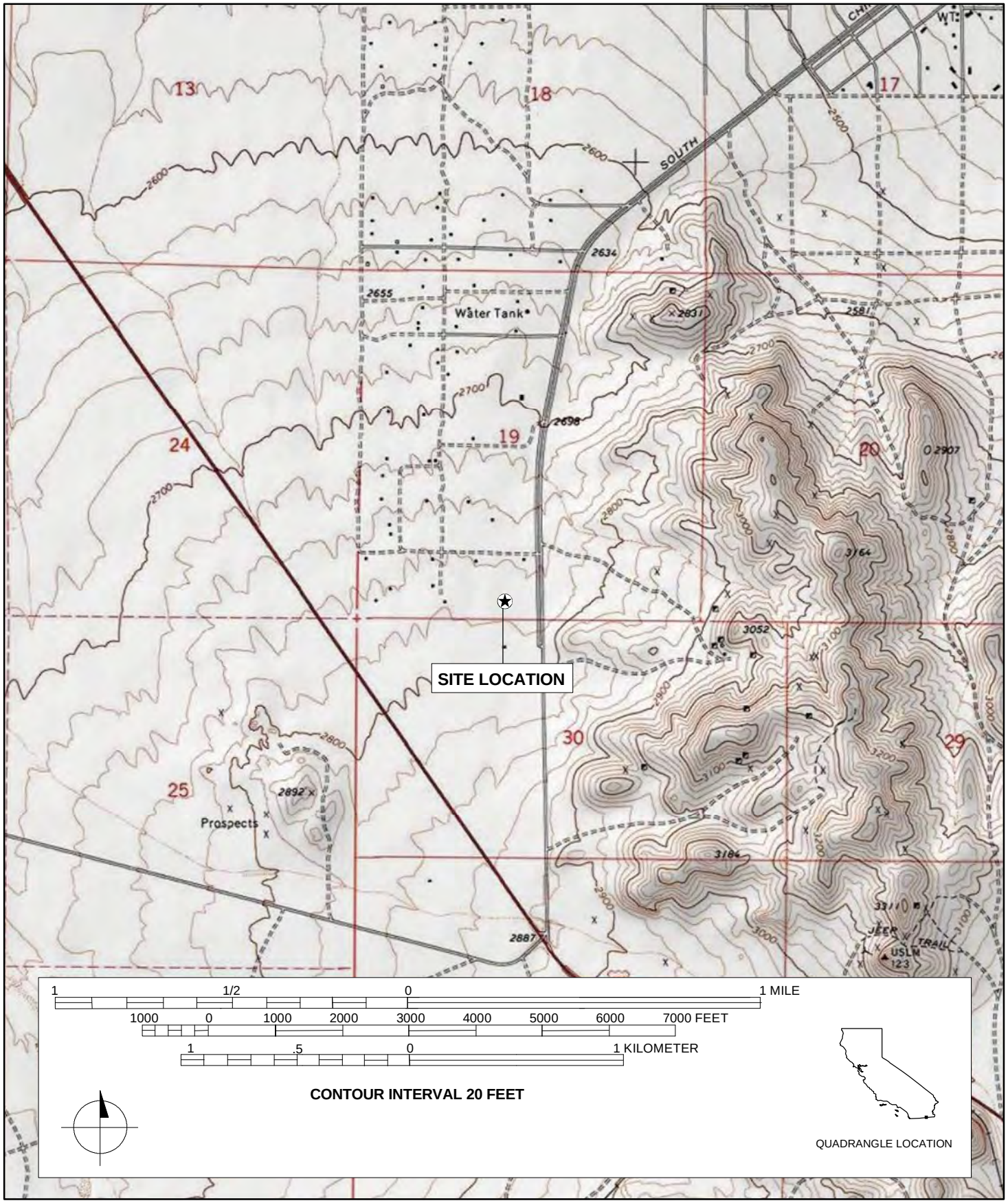
State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI #
Trinomial

Page 3 of 3 * Resource Name or # (Assigned by recorder) RS-BE-511-051-10

* Map Name: Ridgecrest South * Scale: 1:24,000 * Date of Map: 1973



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

Primary # _____
HRI # _____
Trinomial _____

***Resource Name or #:** RS-BE-511-051-11

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted** ***a. County:** Kern

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Inyokern SE **Date:** 1972 **T** 27; **R** 40; SW¼ **of** SW¼ **of Sec** 19**;** M.D. **B.M.**

c. Address: City: Zip:

d. UTM: Zone: 10 ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:
To access the resource, proceed north on S. China Lake Boulevard/Randsburg Inyokern Road and State Route 395 from the intersection of Brown Road, and turn left on the dirt road W. Lund Street. Take a left at Mikes Trail and continue to the end.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
This one-story frame building is of modern construction, built in the mid- to late 20th century. It has a low-pitched gabled roof with a wide overhang, exterior board and batten walls, and aluminum sliding windows. It appears to be a residence or bunkhouse, but currently it is partially boarded and unclear whether it is inhabited.

***P3b. Resource Attributes:** (List attributes and codes) HP4 – Ancillary building

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

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo:
Resource, view facing southeast, 4.2 Inventory and Survey Data\ Cultural\TM Architectural photos \Ridgecrest, DSCN9101, MKM 05-08-2009

***P6. Date Constructed/Age and Sources:** ☑Historic
☐Prehistoric ☐Both
Circa mid-20th century

***P7. Owner and Address:**
Gurunian
638 N. Bel Aire Drive
Burbank, CA 91501

***P8. Recorded by:**
M.K. Meiser, M.A.
EDAW AECOM
1420 Kettner Blvd. Ste. 500
San Diego, CA 92101

***P9. Date Recorded:** 05-08-2009

***P10. Survey Type:**
Intensive survey

***P11. Report Citation:** Meiser, M. K., *Historic Architecture Field Survey Report for the Proposed Ridgecrest Solar Power Project, Kern County, California.* EDAW AECOM, August 2009

***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):

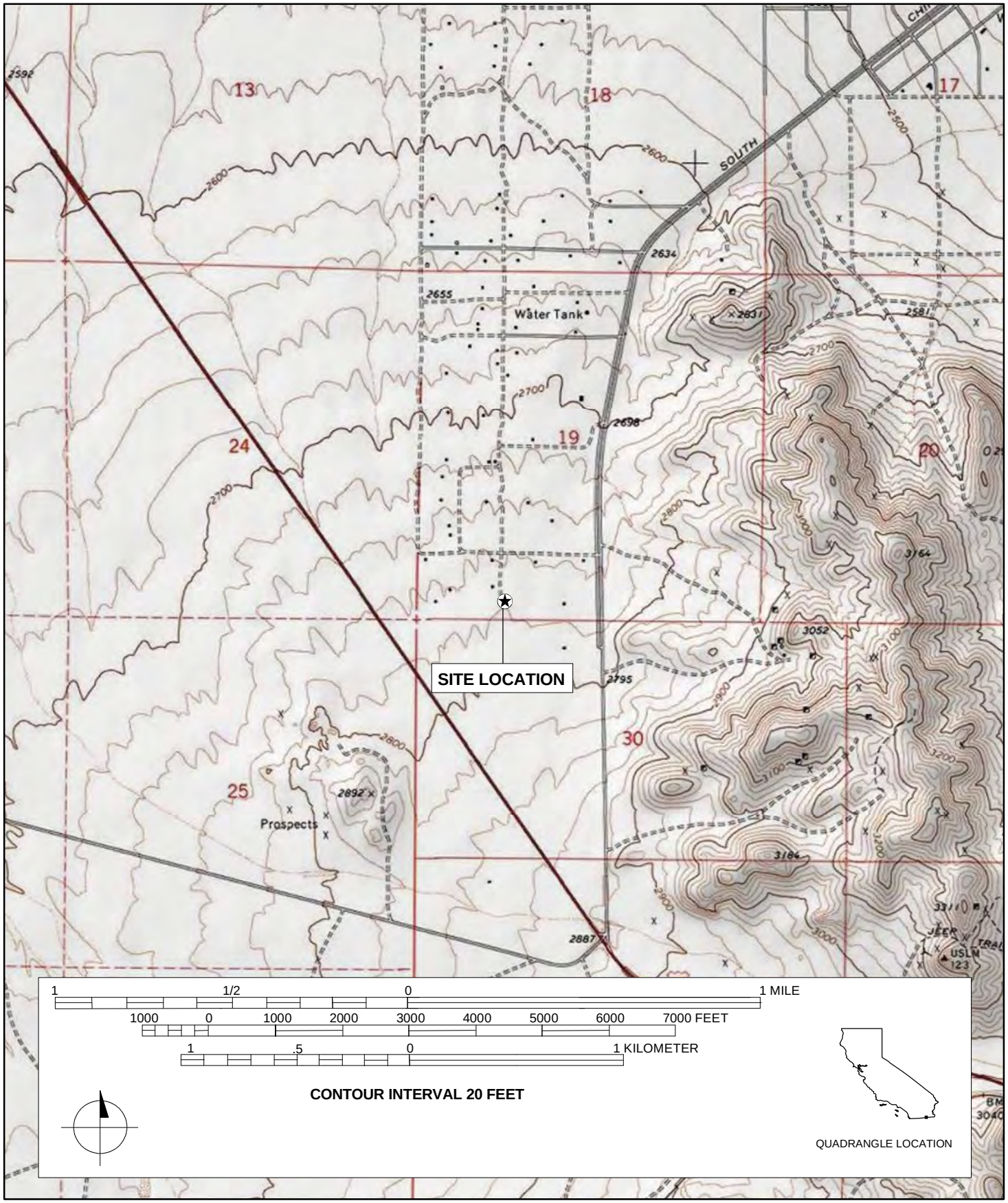
State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #_____
HRI #_____
Trinomial_____

* Resource Name or # (Assigned by recorder) RS-BE-511-051-11

* Map Name: Ridgecrest South * Scale: 1:24,000 * Date of Map: 1973



*Required Information

State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION **PRIMARY RECORD**	Primary # _____ HRI # _____ Trinomial _____

***Resource Name or #:** RS-BE-511-051-13

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted** ***a. County:** Kern

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Inyokern SE **Date:** 1972 **T** 27; **R** 40; SW¼ **of** SW¼ **of Sec** 19**;** M.D. **B.M.**

c. Address: City: Zip:

d. UTM: Zone: 10 ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:
To access the resource, proceed north on S. China Lake Boulevard/Randsburg Inyokern Road and State Route 395 from the intersection of Brown Road, and turn left on the dirt road W. Lund Street.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
This building appears to be a prefabricated stick-frame construction worker's cabin, built in the early to mid-20th century. It is a frame structure with a rectangular plan, clapboard/board exterior walls, and a shed roof with a moderate overhang and unenclosed eaves. The windows are currently boarded. Remnants of the interior and exterior finishes are visible, drywall and insulation.

***P3b. Resource Attributes:** (List attributes and codes) HP4 – Ancillary building

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

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo:
Resource, view facing southwest, 4.2 Inventory and Survey Data\ Cultural\TM Architectural photos \Ridgecrest, DSCN9099, MKM 05-08-2009

***P6. Date Constructed/Age and Sources:** ☑Historic
☐Prehistoric ☐Both
Circa mid-20th century

***P7. Owner and Address:**
Susan and Jean Nichols
10282 Vista De La Cruz
La Mesa, CA 91941

***P8. Recorded by:**
M.K. Meiser, M.A.
EDAW AECOM
1420 Kettner Blvd. Ste. 500
San Diego, CA 92101

***P9. Date Recorded:** 05-08-2009

***P10. Survey Type:**
Intensive survey

***P11. Report Citation:** Meiser, M. K., *Historic Architecture Field Survey Report for the Proposed Ridgecrest Solar Power Project, Kern County, California.* EDAW AECOM, August 2009

***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):

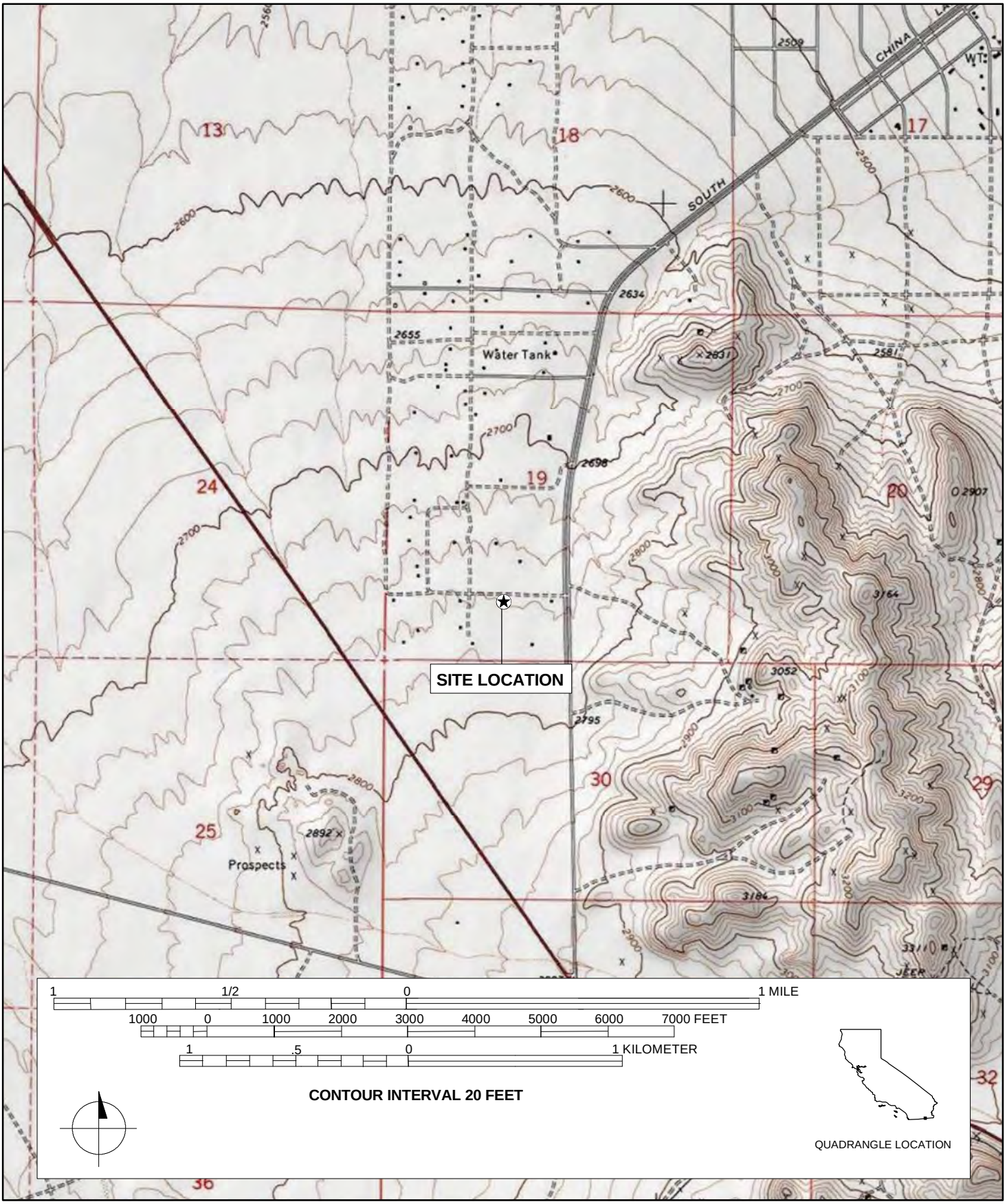
State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI #
Trinomial

Page 3 of 3 * Resource Name or # (Assigned by recorder) RS-BE-511-051-13

* Map Name: Ridgecrest South * Scale: 1:24,000 * Date of Map: 1973



DPR 523J (1/95)

*Required Information

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

Primary # _____
HRI # _____
Trinomial _____

***Resource Name or #:** RS-BE-511-051-19

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted** ***a. County:** Kern

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Inyokern SE **Date:** 1972 **T** 27; **R** 40; SW¼ **of** SW¼ **of Sec** 19**;** M.D. **B.M.**

c. Address: City: Zip:

d. UTM: Zone: 10 ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:
To access the resource, proceed north on S. China Lake Boulevard/Randsburg Inyokern Road and State Route 395 from the intersection of Brown Road, and turn left on the dirt road W. Lund Street. Turn right at Mikes Trail.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
This building appears to be a prefabricated stick-frame construction worker's cabin, built in the early to mid-20th century. It is a frame structure with a rectangular plan, clapboard/board exterior walls, and a shed roof with a moderate overhang. The windows are multi-light casements, but currently do not contain any panes of glass. This homestead building appears abandoned.

***P3b. Resource Attributes:** (List attributes and codes) HP4 – Ancillary building

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

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo:
Resource, view facing southeast, 4.2 Inventory and Survey Data\ Cultural\TM Architectural photos \Ridgecrest, DSCN9112, MKM 05-08-2009

***P6. Date Constructed/Age and Sources:** ☑Historic
☐Prehistoric ☐Both
Circa early 20th century

***P7. Owner and Address:**
Ervin R. Smith
PO Box 931
Ridgecrest, CA 93556

***P8. Recorded by:**
M.K. Meiser, M.A.
EDAW AECOM
1420 Kettner Blvd. Ste. 500
San Diego, CA 92101

***P9. Date Recorded:** 05-08-2009

***P10. Survey Type:**
Intensive survey

***P11. Report Citation:** Meiser, M. K., *Historic Architecture Field Survey Report for the Proposed Ridgecrest Solar Power Project, Kern County, California.* EDAW AECOM, August 2009

***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):

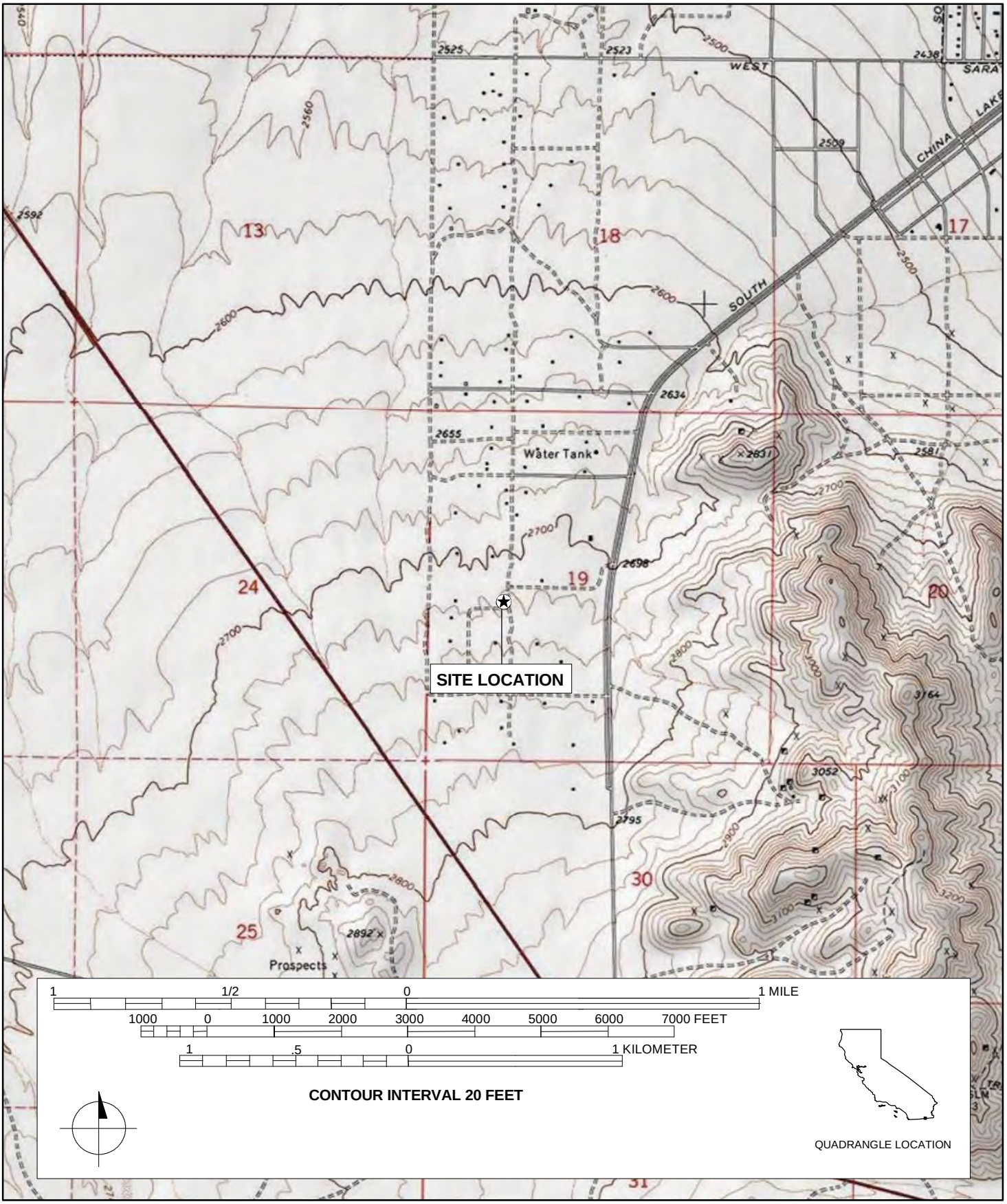
State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #_____
HRI #_____
Trinomial_____

* Resource Name or # (Assigned by recorder) RS-BE-511-051-19

* Map Name: Ridgecrest South * Scale: 1:24,000 * Date of Map: 1973



DPR 523J (1/95)

*Required Information

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

Primary # _____
HRI # _____
Trinomial _____

***Resource Name or #:** RS-BE-511-051-21

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted** ***a. County:** Kern

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Inyokern SE **Date:** 1972 **T** 27; **R** 40; SW¼ **of** SW¼ **of Sec** 19**;** M.D. **B.M.**

c. Address: City: Zip:

d. UTM: Zone: 10 ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:
To access the resource, proceed north on S. China Lake Boulevard/Randsburg Inyokern Road and State Route 395 from the intersection of Brown Road, and turn left on the dirt road W. Lund Street. Turn right at Mikes Trail.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
This small shed appears to have been used for storage or perhaps as a worker's cabin, and was potentially built as early as 1900. Built in the early 20th century, it is a frame structure on a concrete foundation with a rectangular plan, board-sided exterior walls, and a flat roof consisting of open rafters with a composition surface above.

***P3b. Resource Attributes:** (List attributes and codes) HP4 – Ancillary building

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

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

Intensive survey

P5b. Description of Photo:
Resource, view facing northwest, 4.2 Inventory and Survey Data\ Cultural\TM Architectural photos \Ridgecrest, DSCN9109, MKM 05-08-2009

***P6. Date Constructed/Age and Sources:** ☑Historic
☐Prehistoric ☐Both
Circa early 20th century
(1900, First American Corporation)

***P7. Owner and Address:**
Nick V. and Vicky Y Giordano
6211 Maryland Drive
Los Angeles, CA 90048

***P8. Recorded by:**
M.K. Meiser, M.A.
EDAW AECOM
1420 Kettner Blvd. Ste. 500
San Diego, CA 92101

***P9. Date Recorded:** 05-08-2009

***P10. Survey Type:**

***P11. Report Citation:** Meiser, M. K., *Historic Architecture Field Survey Report for the Proposed Ridgecrest Solar Power Project, Kern County, California.* EDAW AECOM, August 2009

***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):

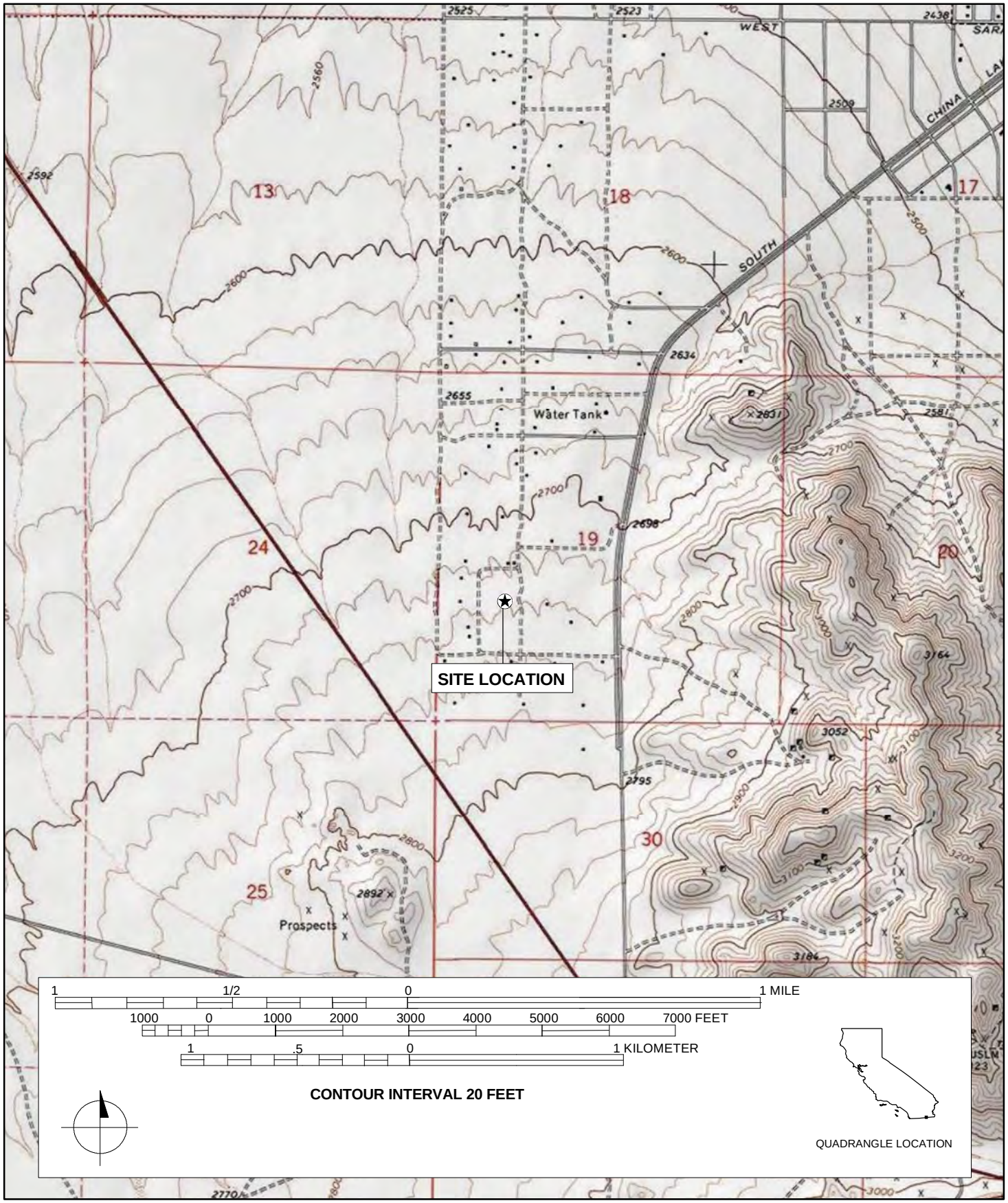
State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI #
Trinomial

Page 3 of 3 * Resource Name or # (Assigned by recorder) RS-BE-511-051-21

* Map Name: Ridgecrest South * Scale: 1:24,000 * Date of Map: 1973



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

Primary # _____
HRI # _____
Trinomial _____

***Resource Name or #:** RS-BE-511-051-25

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted** ***a. County:** Kern

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Inyokern SE **Date:** 1972 **T** 27; **R** 40; SW¼ **of** SW¼ **of Sec** 19**;** M.D. **B.M.**

c. Address: City: Zip:

d. UTM: Zone: 10 ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:
To access the resource, proceed north on S. China Lake Boulevard/Randsburg Inyokern Road and State Route 395 from the intersection of Brown Road, and turn left on the dirt road W. Lund Street. Turn left at S. Mikes Trail.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
This one-story frame building appears to have been built in the late 20th century. It has a low-pitched gabled roof with an overhang that extends over a porch, exterior board or stucco walls, and replacement vinyl windows and doors. It is a residence with many objects and debris in the surrounding lot.

***P3b. Resource Attributes:** (List attributes and codes) HP4 – Ancillary building

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

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo:
Resource, view facing northwest, 4.2 Inventory and Survey Data\ Cultural\TM Architectural photos \Ridgecrest, DSCN9102, MKM 05-08-2009

***P6. Date Constructed/Age and Sources:** ☑Historic
☐Prehistoric ☐Both
Circa late 20th century

***P7. Owner and Address:**
Lleland B. Ghormley
3119 S. Mikes Trail
Ridgecrest, CA 93555

***P8. Recorded by:**
M.K. Meiser, M.A.
EDAW AECOM
1420 Kettner Blvd. Ste. 500
San Diego, CA 92101

***P9. Date Recorded:** 05-08-2009

***P10. Survey Type:**
Intensive survey

***P11. Report Citation:** Meiser, M. K., *Historic Architecture Field Survey Report for the Proposed Ridgecrest Solar Power Project, Kern County, California.* EDAW AECOM, August 2009

***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):

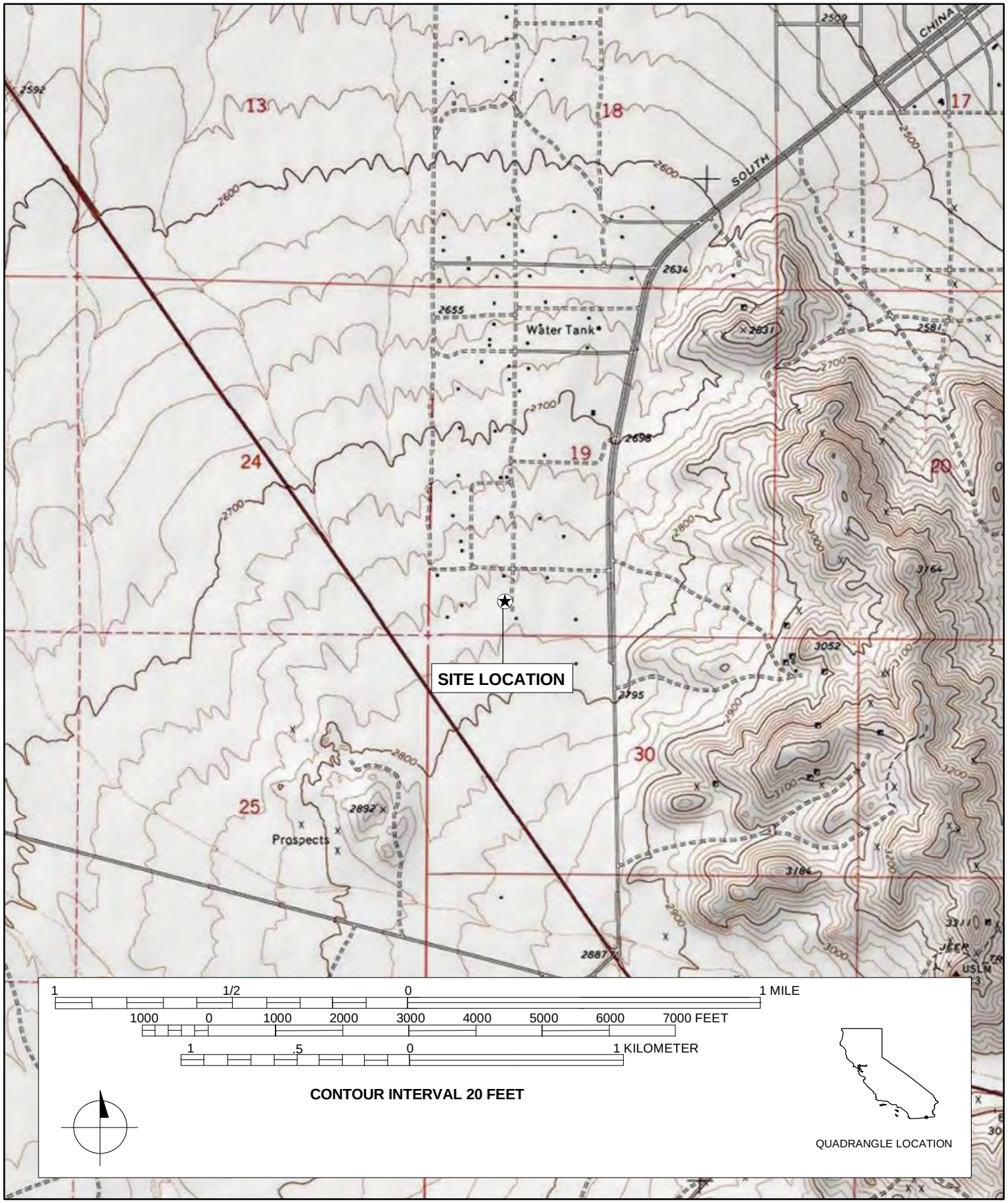
State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #_____
HRI #_____
Trinomial_____

Page 3 of 3 * Resource Name or # (Assigned by recorder) RS-BE-511-051-25

* Map Name: Ridgecrest South * Scale: 1:24,000 * Date of Map: 1973



DPR 523J (1/95)

*Required Information

ATTACHMENT 9
GEOARCHAEOLOGY

In process – Will be provided when Geoarchaeology Report is complete