

Cultural Resource Assessment for the Southern California Logistics Airport Specific Plan Amendment Technical Study Project, City of Victorville, San Bernardino County, California

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MANAGEMENT SUMMARY

The City of Victorville (City), in partnership with Stirling Development, proposes to amend the Specific Plan for the Priority Development Area ((PDA, herein referenced as “Project area”)) within the Southern California Logistics Airport (Project) in the City of Victorville, San Bernardino County, California. Under contract to Michael Baker International, Inc., Applied EarthWorks, Inc. (Æ) conducted a cultural resource investigation of the Project in accordance with the California Environmental Quality Act (CEQA). The City is the Lead Agency for compliance with CEQA.

Æ’s assessment included a records search and literature review, a Sacred Lands File (SLF) search with the Native American Heritage Commission (NAHC), and a combination Phase I intensive- and reconnaissance-level survey of the PDA (Project area). The purpose of the investigation was to determine the potential for the proposed Project to impact historical resources eligible or listed on the California Register of Historical Resources (CRHR).

The literature and records search at the South Central Coastal Information Center (SCCIC) of the California Historical Resources Information System indicated 104 cultural resources have been documented within a 1-mile-wide buffer of the Project area. Eleven of these previously recorded cultural resources are located within the Project area. The SLF with the NAHC also was completed with positive results.

Æ archaeologists Evan Mills, Andrew D. Miller, Andrew DeLeon, and Æ Associate Architectural Historian Annie McCausland, performed archaeological and built-environment sample surveys of the Project area from March 18 to March 27, 2019. Attempts were made, but five of the 11 previously documented cultural resources were not re-identified in the Project area during Æ’s survey. However, Æ’s fieldwork did confirm the other six of the 11 previously documented cultural resources within the Project area. Finally, four newly identified cultural resources were documented as a result of the survey.

Field notes documenting the current investigation are on file at Æ’s Hemet office. A copy of the final report will be placed on file at the SCCIC.

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INTRODUCTION

The City of Victorville (City), in partnership with Stirling Development, proposes to amend the Specific Plan for the Priority Development Area (PDA) within the Southern California Logistics Airport (SCLA; Project). Michael Baker International, Inc. as the prime contractor to Stirling Development for environmental compliance services retained Applied EarthWorks, Inc. (Æ) to conduct a cultural resource investigation of the PDA (Project area) for compliance with the California Environmental Quality Act (CEQA). The City is the Lead Agency for the purposes of CEQA. Amy L. Ollendorf, Ph.D., M.S., RPA (#12588), served as Æ's principal investigator and was responsible for overall quality control. Æ Associate Archaeologist Joan George, B.S., served as project manager. Fieldwork was conducted by Æ Associate Archaeologist Evan Mills, M.A.; Andrew D. Miller, M.A.; Andrew DeLeon, M.A.; and Æ Associate Architectural Historian Annie McCausland, M.A.

1.1 PROJECT LOCATION AND DESCRIPTION

The Project is in the northern portion of Victorville's city limits (Figure 1-1). Specifically, the Project is located within Sections 22–27 Township 6 North, Range 4 West as shown on the Adelanto and Victorville, California 7.5' U.S. Geological Survey (USGS) topographic quadrangle maps (Figures 1-2a and 1-2b). Elevation ranges from approximately 2,770 to 2,950 feet above mean sea level (amsl).

The SCLA Specific Plan became effective in 1993; the only major amendment to the Specific Plan occurred in 2004. Many of the foundational elements of the Specific Plan are now over 25 years old. The City proposes to amend the Specific Plan to: (1) reflect current development trends, economic and market conditions, and design guidelines; (2) provide an updated description of existing infrastructure serving SCLA, and projected requirements to serve future development; and (3) modernize the format and framework of the Specific Plan to more efficiently guide development at SCLA.

In general, primary modifications to the SCLA Specific Plan would involve the following:

- Modification of the existing land-use district boundaries to more appropriately guide future development at SCLA;
- Removal of the Airport and Support Facilities (ASF) Overlay;
- Creation of a new land-use district (Public Institutional [PI]) applicable to the existing Federal Correctional Institution (FCI) Victorville, located within the southerly portion of the Specific Plan, south of Air Expressway. This area was previously designated Industrial;
- Revisions to the circulation and infrastructure planning components of the Specific Plan; and

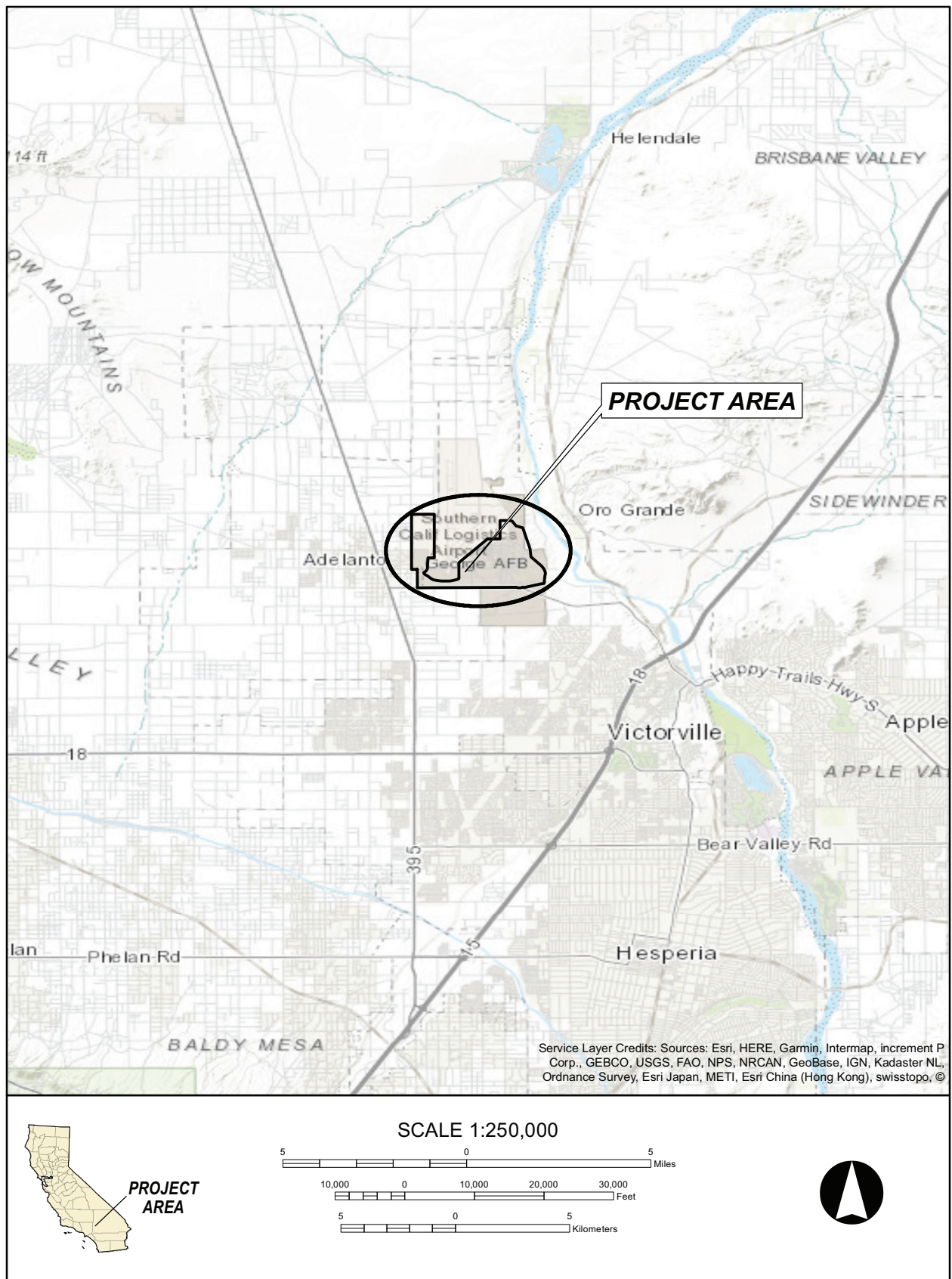


Figure 1-1 Project vicinity map.

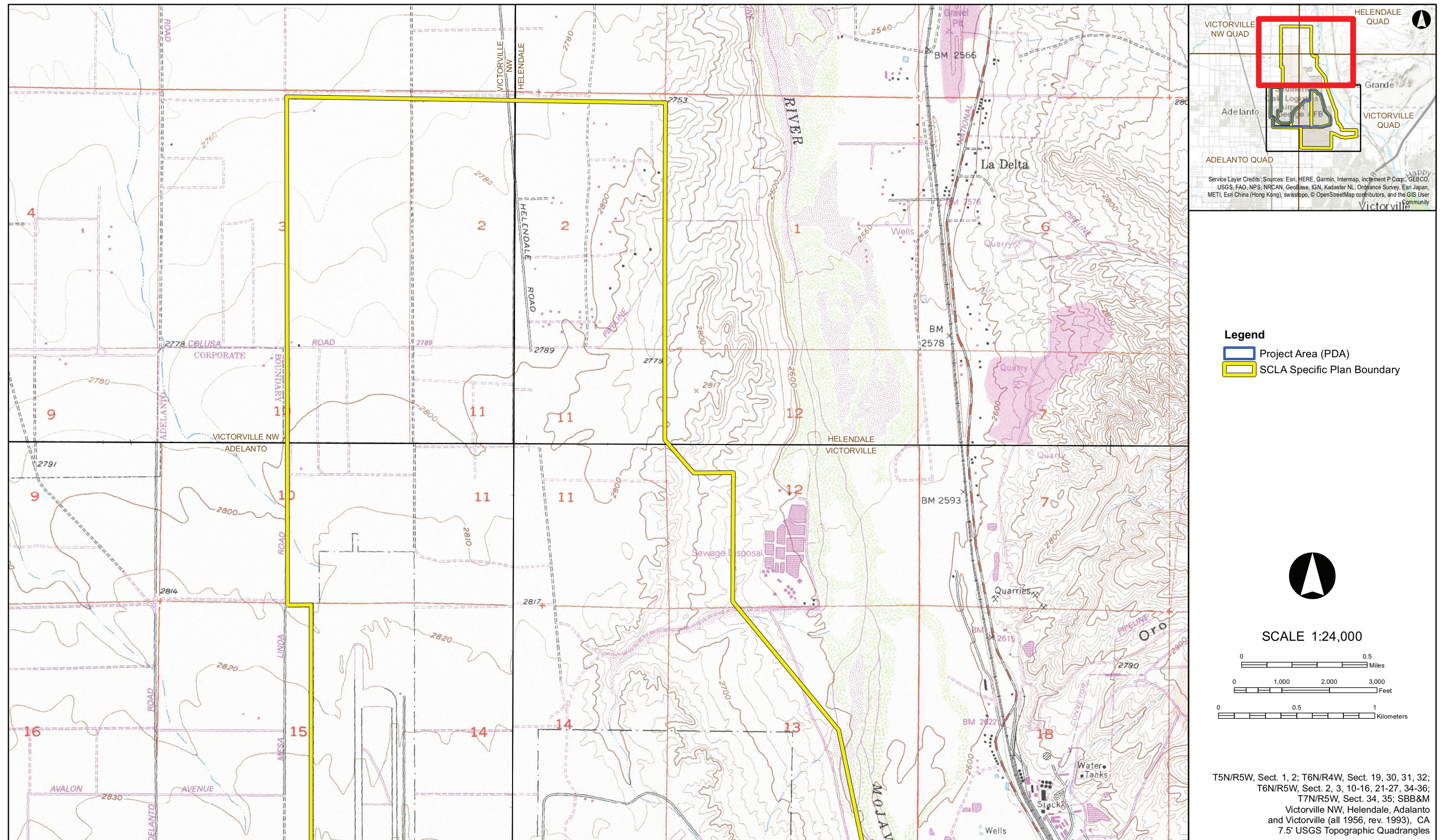


Figure 1-2a Project location (Sheet 1 of 2).

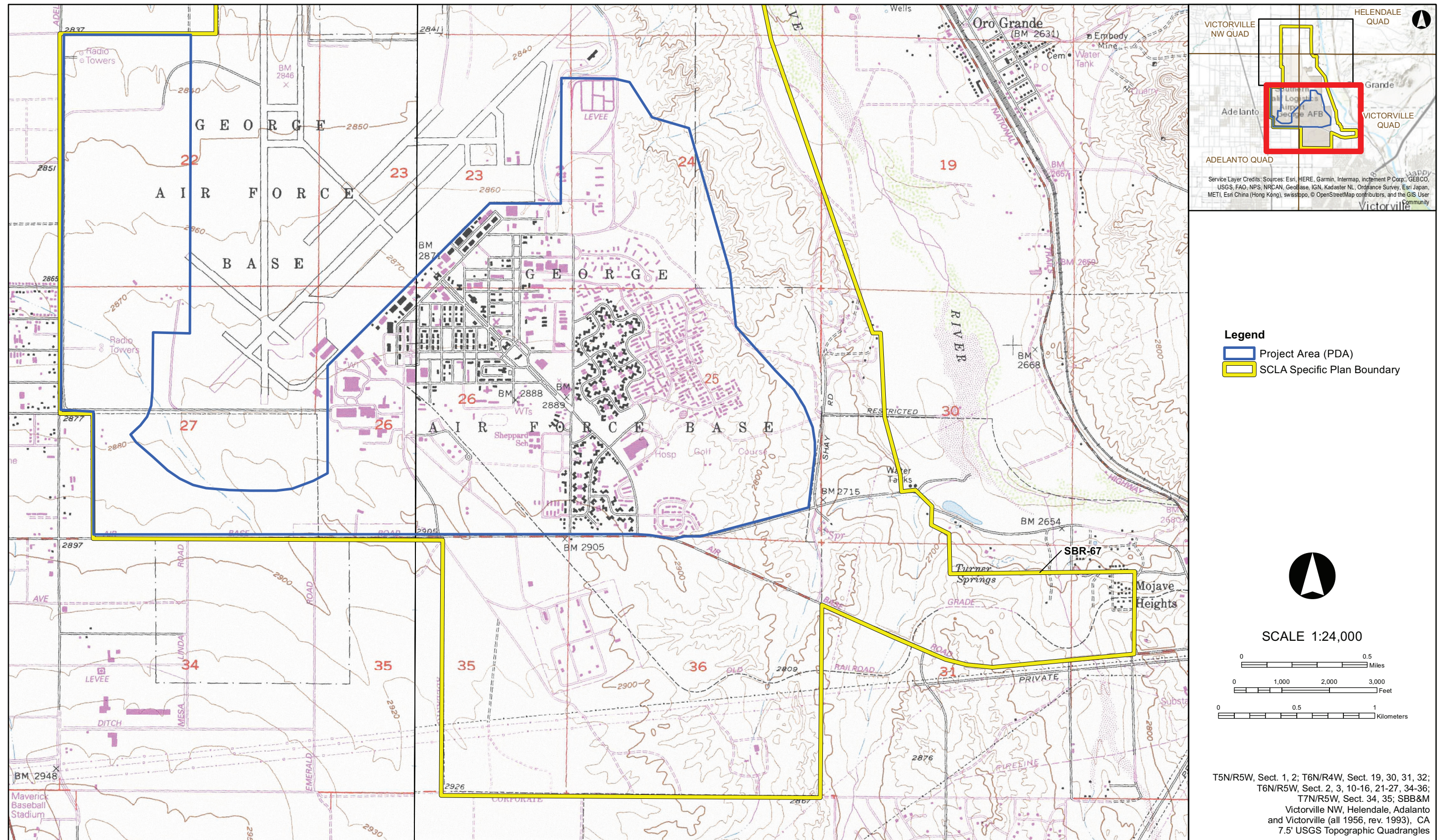


Figure 1-2b Project location (Sheet 2 of 2).

- Updates to the design guidelines (site planning, landscape, architectural, and lighting).

The City's PDA was established for locations of development that could feasibly occur within the Specific Plan area over the next 25 years, based on available infrastructure and projected market demand. The PDA primarily occurs within the Central Core, Airport, and West Side development districts, with an area of approximately 2,312 acres. Development within the PDA is anticipated to occur over a total of five phases, in 5-year increments over the next 25 years and would result in approximately 25,973,000 square feet of new building area.

1.2 REGULATORY CONTEXT

1.2.1 California Environmental Quality Act

The Project requires review and approval from the City of Victorville and is therefore subject to the requirements of CEQA. The CEQA Statute and Guidelines direct lead agencies to determine whether a project will have a significant impact on historical resources. A cultural resource considered "historically significant" is considered a "historical resource," if it is included in a local register of historical resources or is listed in or determined eligible for listing on the California Register of Historical Resources (CRHR) under any one of the following criteria (Title 14, California Code of Regulations [CCR], § 15064.5):

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.

Compliance with CEQA's cultural resource provisions typically involves several steps. Briefly, archival research and field surveys are conducted, and identified cultural resources are inventoried and evaluated in prescribed ways. Cultural resources (e.g., prehistoric and historical archaeological sites, standing structures, buildings, and objects) deemed historically significant and sufficiently intact (i.e., historical resources), must be considered in project planning and development.

A project with an effect that may cause a substantial adverse effect to the significance and/or integrity of a historical resource is a project that may have a significant effect on the environment (14 CCR § 15064.5[b]). The lead agency is responsible for identifying potentially feasible measures to mitigate significant adverse changes in the significance of a historical resource (14 CCR § 15064.5[b]4).

1.2.2 Other Statutes and Regulations

California Government Codes 65092; 65351; 65352, 65352.3; 65352.4; 65352.5; and 65560 (Senate Bill 18)

As of March 1, 2005, California Government Codes 65092; 65351; 65352; 65352.3; 65352.4; 65352.5; and 65560, formerly known as Senate Bill 18 (SB 18), requires that cities and counties contact and consult with Native American tribes prior to amending or adopting any general plan or specific plan, or designating lands as open space. The purpose of SB 18 is to involve Native Americans at the onset of the planning process to allow for considerations concerning the protection of traditional tribal cultural places in the context of broad local land use policy prior to individual site-specific, project level, and land use decisions. Tribes have 90 days from the date on which they receive notification to request consultation, unless a shorter timeframe has been agreed to by the tribe (Government Code Section 65352.3). At least 45 days before a local government adopts or substantially amends a general plan or specific plan, the local government must refer the proposed action to agencies, including Native American tribes, for review and comment.

California Assembly Bill 52

Signed into law in September 2014, California Assembly Bill 52 (AB 52) created a new class of resources—tribal cultural resources—for consideration under CEQA. Tribal cultural resources may include sites, features, places, cultural landscapes, sacred places, or objects with cultural value to a California Native American tribe that are included or determined eligible for inclusion in the CRHR, included in a local register of historical resources, or are determined by the lead CEQA agency, in its discretion and supported by substantial evidence, to be significant and eligible for listing on the CRHR. AB 52 requires that the lead CEQA agency consult in good faith with California Native American tribes that have requested consultation for projects that may affect tribal cultural resources. The lead CEQA agency shall begin consultation with participating Native American tribes prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report. Under AB 52, a project that has potential to impact a tribal cultural resource such that it would cause a substantial adverse change constitutes a significant effect on the environment unless mitigation reduces such effects to a less than significant level.

1.3 REPORT ORGANIZATION

This report documents the results of the cultural resource assessment of the Project area. Chapter 1 has described the Project and its location, defined the scope of cultural resource investigation, and stated the regulatory context. Chapter 2 summarizes the natural and cultural setting of the Project area and surrounding region. Chapter 3 presents the results of the archaeological literature and records search and the Sacred Lands File (SLF) search with the Native American Heritage Commission (NAHC). The field survey methods employed during this investigation are outlined in Chapter 4 and survey results are presented in Chapter 5. Cultural resource management recommendations are provided in Chapter 6, and bibliographic references are cited in Chapter 7, followed by appendices.

2 SETTING

This chapter describes the prehistoric, ethnographic, and historical cultural setting of the Project area to provide a context for understanding the nature and significance of cultural properties identified within the region. Prehistorically, ethnographically, and historically, the nature and distribution of human activities in the region have been affected by such factors as topography and the availability of water and natural resources. Therefore, prior to a discussion of the cultural setting, the environmental setting of the area is summarized below.

2.1 ENVIRONMENTAL SETTING

The Project area is located along the west side of the Mojave River in the Victor Valley in the western Mojave Desert of southern California. This area is characterized by interior-draining basins and ranges. For the most part, the western Mojave Desert is hydrated by a playa system consisting of three primary lakebeds—Rosamond, Rogers, and Buckhorn—surrounded by a number of smaller playas. The three larger playas lie within Edwards Air Force Base. Today these lakebeds are usually dry, only occasionally covered in water following large winter storms. The principal drainage in Victor Valley, as well as the western Mojave Desert, is the Mojave River. The Mojave River drains the San Bernardino Mountains and flows north and east to Soda Lake, near Baker, California. During the last glacial maximum in the late Pleistocene, the Mojave River flowed farther north, merging with the Amargosa River and ultimately flowed into Death Valley and Lake Manly. At one time, this drainage system included Lake Manix and Lake Mojave. Lake Manix encompassed Afton, Troy, Coyote, Harper, and Cronese basins; and Lake Mojave included the Soda Lake and Silver Lake basins (Parsons 2004:15).

The western Mojave Desert lies in the rain-shadow of the Sierra Nevada, Tehachapi Mountains, San Gabriel Mountains, and the San Bernardino Mountains. The rainfall in Victorville averages 5.48 inches annually, most of which occurs during the months of December through April, while some isolated thunderstorms may occur in July and August. Humidity is generally extremely low except during the brief period of thunderstorms during the summer months of July and August. Characterized by a mid-latitude, desert-type climate with cool, slightly moist winters and dry, hot summers, temperatures range from well below freezing in the winter to 100 to 110 degrees Fahrenheit in the summer.

During the late Pleistocene, the deserts contained woodlands; basins were joined by rivers; and herds of horses, camels, and mammoths roamed the fertile basins. As the glaciers retreated under comparatively warm conditions between 12,100 years before present (B.P.) and 10,100 B.P., both vegetation and animals began to move to higher elevations. The subsequent climatic history of the Mojave Desert was characterized by alternating cool, moist periods and warm, dry periods (Wells et al. 1989). Based on analyses of ancient lakebed sediments, a long history of wet-to-dry cycles has been postulated, and Wells and others (1989) concluded that wet periods occurred approximately 390 B.P., 3600 B.P., 13,700 B.P., and between 18,400 and 16,600 B.P.; dry periods existed 8700 B.P. and 15,500 B.P.

The alternating wet and dry periods would have affected other aspects of the desert. Lake development would occur during wet periods, promoting the range expansion of plants and animals. As drying periods began, lakes would recede first to form marshes and then dry playas, resulting in plants and animals dying off or adapting to more arid conditions. Due to these climatic fluctuations in the southern portions of the Mojave Desert, the floral and faunal composition of the region is believed to have not become established until after 4300 B.P., during the late Holocene. Thus, based on research from pollen records and pack rat middens, it is believed that the low-elevation woodlands of the western Mojave Desert were replaced by desert vegetation between 12,000 and 8,000 years ago (Earle et al. 1997; Mehringer 1967; Van Devender and Spaulding 1979).

Vegetation in the general vicinity of the Project area is currently composed of Mojave Desert scrub from the saltbush scrub (halophytic and arid phases), creosote bush scrub, Joshua tree and juniper Woodland, and Wash Wetland or Mesquite vegetation communities (Earle et al. 1997; Sawyer 1994; Vasek and Barbour 1977). Victor Valley is dominated by the creosote bush community, which consists of widely spaced shrubs and cacti. Common plant species of this community include creosote bush (*Larrea divaricata*), yucca (*Yucca brevifolia*, *Y. schidigera*), Mormon tea (*Ephedra* sp.), bursage (*Ambrosia dumosa*), range ratany (*Krameria erecta*), and galleta grass (*Hilaria rigida*). Numerous plant species in all the vegetation communities listed above were utilized as foods and medicines, or provided materials for making bows, arrows, baskets, cordage, digging sticks, houses, or fuel for the local Native American inhabitants of the general region.

The region also provided habitat for a variety of animals, including birds, insects, reptiles, rodents, pronghorn antelope, bighorn sheep, coyote, and fox, which may have been hunted by the local Native American inhabitants of the general region for both food and materials for clothing, shelter, and ceremonial regalia (Earle et al. 1997). Mammals include blacktail jackrabbit (*Lepus californicus*), desert cottontail (*Sylvilagus audubonii*), Botta pocket gopher (*Thomomys bottae*), Panamint kangaroo rat (*Dipodomys panamint Mojavensis*), Merriam kangaroo rat (*Dipodomys merriami*), and coyote (*Canis latrans*), while bird species include rock dove (*Columbia livia*), lark (*Eremophila alpestris*), raven (*Corvus corax*), and black-throated sparrow (*Amphispiza bilineata*). In addition, desert tortoise (*Gopherus agassizi*) is found in the Victor Valley, as are a variety of snakes and lizards.

2.2 PREHISTORIC SETTING

The lack of a wholly adequate culture history for interior valley and mountain portions of southern California can be attributed to at least three major factors: (1) the nature and scope of investigations in the region, where research has been concentrated for the most part at single sites or on specific problems; (2) the complex historical sequence of investigations and discoveries, combined with a tendency on the part of many authors to explain similarities in assemblages to cultural diffusion; and (3) the confusion of typological and chronological terminology, which has led to ill-defined units that alternately describe time periods, tool morphology, social groupings, or technological adaptations. A prime example of muddled nomenclature is the "Milling Stone Horizon," first defined by Wallace (1955); this term has been applied variously to sites dating between 8400 B.P. and the period of Spanish contact. Basgall and True (1985) provided a particularly cogent critical review of southern California chronologies, emphasizing the "Milling

Stone Horizon” concept, tracing the development of the typological and chronological confusion inherent in existing culture histories.

The prehistoric cultural chronology for the region is most often based on the Mojave Desert chronology. The most widely cited prehistoric cultural framework for the California deserts was proposed by Claude N. Warren (1980, 1984; Warren and Crabtree 1986). Warren’s framework for human history in the Mojave Desert divided prehistory into five distinct archaeological periods associated with changes in climate related to the terminal Pleistocene and Holocene epoch. These include Lake Mojave, Pinto, Gypsum, Saratoga Spring, and Shoshonean (or Late Prehistoric) periods. Claims have also been made for archaeological assemblages dating to periods earlier than Lake Mojave, but as Warren and Crabtree (1986) note, all are controversial and, even if valid, have little or no relationship to later cultural developments in the region.

Sutton et al. (2007) recently expanded on Warren (1984) to include elements more closely aligned to prehistoric cultural complexes of the Central Mojave Desert. Sutton et al. (2007) employ the term “complex” to emphasize cultural rather than temporal association, deferring temporal association to the term “period,” which they associate with geologic time. Subdivisions of the Mojave Desert cultural framework proposed by Sutton et al. (2007) include hypothetical “Pre-Clovis” and “Paleo-Indian” complexes, and the Lake Mojave, Pinto, Dead Man Lake, Gypsum, Rose Spring, and Late Prehistoric complexes.

2.2.1 Terminal Pleistocene (circa [ca.] 12,000 to 10,000 cal B.P.)

As the glaciers retreated under comparatively warm conditions between 12,100 B.P. and 10,100 B.P., both vegetation and animals began to move to higher elevations. Paleoenvironmental, paleobotanical, and geomorphologic investigations reveal that the climate, vegetation, and landscape across the North American continent, including the inland southern California region, changed dramatically at the end of the Pleistocene, from wet and cool conditions to a drier and warmer regime (Anderson 2001; Onken and Horne 2001; Spaulding 2001). In very general terms, the desert interior may have been more productive and more attractive to prehistoric groups than the inland areas farther to the west and south during the early Holocene (ca. 10,000–8000 B.P.).

2.2.1.1 Paleo-Indian Complex

The Paleo-Indian complex within the Mojave Desert is thus far represented exclusively by Clovis material culture, though the relationship with later Great Basin stemmed series points is also a consideration. Some early researchers pose the theory of two different traditions relating to interior and coastal adaptation during the Late Pleistocene to Early Holocene transition. Based on work in the Panamint Valley, Davis (1970) posited the theory of “Paleo-Desert,” a geographic distinction from Paleo-Indian sites of the “Paleo-Coastal” tradition. In the Paleo-Desert geographic region, Paleo-Indian sites are generally located along the shorelines of these ancient pluvial lakes (Davis 1970).

One common theme among nearly all Paleo-Indian complex sites in North America is the tool assemblage—fluted projectile points made from fine-grained lithic material, hafted to the end of a spear and launched using a throwing tool (atlatl). Fluted points, defined as a component of the

Clovis material culture in California, have been found nearly throughout the entire state from coastal estuary environments to ancient Pleistocene lakeshores, which are now in desert areas. At least five sites near Cajon Pass containing fluted projectile points have been identified, suggesting an early occupation of approximately 12,000 B.P., which corresponds to the “hypothetical Pre-Clovis” complex (pre-10,000 B.P.) for San Bernardino County (Sutton et al. 2007:236). In addition to fluted points, the Paleo-Indian tool assemblage was composed mainly of scrapers, burins, awls, and choppers, all used for the processing of animal remains and foodstuffs.

2.2.2 Early Holocene (ca. 10,000 to 8500 cal B.P.)

As the climate changed, so did the distribution of floral and faunal communities and people living in the desert regions migrated toward the coastal region to exploit littoral resources. During periods of drought, human populations from the deserts may have moved toward the coast to exploit littoral resources. Economic activities of the early Holocene were focused on the pluvial lakes and their environs where people could fish, take waterfowl and their eggs, gather aquatic plants, harvest mollusks, hunt for large and small game, etc. Very small numbers of ground stone artifacts suggest limited grinding of hard seeds (Sutton et al. 2007:234, 237), representing a shift to a more diversified and generalized economy (Sutton 1996:228). Milling slabs and handstones for seed processing are rare in early Holocene sites relative to their abundance in later times, so milling of vegetation seems not to have been very important (Grayson 2011:295). The high incidence of exotic materials (including marine shell) bespeaks wider spheres of interaction than was seen previously. Sutton et al. (2007:237) interpret these and other data as indicators of “a forager-like strategy organized around relatively small social units.”

2.2.2.1 Lake Mojave Complex

A small frequency of ground stone implements is present during this time, from which limited hard seed grinding activities can be inferred (Sutton et al. 2007:234, 237) representing a shift toward a more diversified and generalized economy (Sutton 1996:228). The high incidence of extra-local materials and marine shell is interpreted as wider spheres of interaction than witnessed previously. Sutton et al. (2007:237) interpret these and other data as indicators of “a forager-like strategy organized around relatively small social units.”

Cultural materials dating from this complex encompass the Playa cultures (Rogers 1939), the San Dieguito complex (Warren 1967), and the Lake Mojave complex (Warren and Crabtree 1986). This phase is considered ancestral to the Early Archaic cultures of the Pinto complex. The Lake Mojave assemblages (Campbell et al. 1937) include Lake Mojave series projectile points (leaf-shaped, long-stemmed points with narrow shoulders) and Silver Lake points (short-bladed, stemmed points with distinct shoulders). Other diagnostic items include flaked stone crescents; abundant bifaces; and a variety of large, well-made scrapers, graters, perforators, and heavy core tools (Sutton et al. 2007:234).

2.2.3 Middle Holocene (ca. 8500 to 4000 cal B.P.)

This was a time of climatic conditions warmer and drier than had existed during the Ice Age or early Holocene. The terms Altithermal, Hypsithermal, and Mid-Holocene Climatic Optimum (and others) have been proposed since the 1940s to refer to the long periods of sustained drought. Lake levels fell, marshes and streams dried up, and the range of xeric vegetation expanded while mesic biotic communities retreated to higher elevations. The net result was that the land's carrying capacity for wildlife and humans declined substantially. Some parts of the Desert West may have been abandoned by people for long periods, while other areas witnessed a marked reduction of population density (Grayson 2011:302–307).

2.2.3.1 The Pinto Complex

The Pinto complex represents a broad continuity in the use of flaked stone technology, including less reliance on obsidian and cryptocrystalline silicates (CCS), as well as the prevalence of ground stone implements in the material culture (Sutton et al. 2007:238), which distinguishes it from the Lake Mojave complex. Warren (1984) argues that cultural adaptation to the changing desert environment between 7500 and 5000 B.P. may account for the material characteristics of the Pinto complex, which gradually replaced those of the preceding Lake Mojave complex. The age and motivations for technological adaptation noted in the Pinto complex remains one of dispute, as Sutton et al. (2007:238) cite recent work conducted on Fort Irwin and Twentynine Palms that produced radiocarbon dates as early as 8820 B.P. associated with Pinto complex assemblages, thus pushing back the inception of the complex coincidental with the Lake Mojave complex.

The Pinto complex is marked by the appearance of Pinto-series projectile points, characterized as thick, shouldered, expanding stem points with concave bases, as well as bifacial and unifacial core tools, and an increase in milling stones. Pinto points were typically produced by percussion reduction, with limited pressure retouch.

2.2.3.2 The Dead Man Lake Complex

Sutton et al. (2007) argue that this complex represents a local variation of the Pinto complex as suggested by archaeological discoveries in the Twentynine Palms area. The primary variation between Pinto and the Dead Man Lake complex is the presence of small to medium-sized contracting stemmed or lozenge-shaped points, battered cobbles, bifaces, simple flaked tools, milling implements, and shell beads (Sutton et al. 2007:239).

2.2.4 Late Holocene (ca. 4000 cal B.P. to Contact)

Based on the current archaeological data, there appears to have been an occupational hiatus within the inland desert regions between the Middle and Late Holocene period; few sites have been found that date between 5000 and 4000 B.P. It is believed that climatic changes during this period resulted in hotter and drier conditions, which may have led to the abandonment of this region for approximately 1,000 years when people migrated to areas with more suitable climates (Sutton et al. 2007:241).

2.2.4.1 Gypsum Complex (4000 to 1800 B.P.)

Technologically, the artifact assemblage of the Gypsum complex was similar to that of the preceding Pinto complex, although new tools were added either as innovations or as “borrowed” cultural items as adaptations to the desert environment. Gypsum complex sites are characterized by medium- to large-stemmed and corner-notched projectile points, including Elko series, Humboldt Concave Base, and Gypsum styles. In addition, rectangular-based knives, flake scrapers, and occasionally, large scraper planes, choppers and hammerstones, handstones, and milling tools become relatively commonplace, and the mortar and pestle appear for the first time. Ritual activities became important, as evidenced by split-twist figurines (likely originating from northern Arizona) and petroglyphs depicting hunting scenes. Finally, increased contact with neighboring groups likely provided the desert occupants important storable foodstuffs during less productive seasons or years, in exchange for valuable lithic materials such as obsidian and CCS. Archaeological assemblages attributed to the Gypsum complex have been radiocarbon dated to roughly 4000 B.P. to 1800 B.P.

Population increases and broadening economic activities characterize the Gypsum complex. Hunting continued to be an important subsistence focus, but the processing of plant foods took on greater importance. Perhaps due to these new adaptive mechanisms, the increase in aridity during the late Gypsum complex (after ca. 2500 B.P.) seems to have had relatively little consequence on the distribution and increase in human populations (Warren 1984; Warren and Crabtree 1986). In addition to open sites, the use of rock-shelters appears to have increased at this time. Base camps with extensive midden development are a prominent site type in well-watered valleys and near concentrated subsistence resources (Warren and Crabtree 1986). Additionally, evidence of ritualistic behavior during this time exists through the presence of rock art, quartz crystals, and paint (Sutton et al. 2007:241).

Rock art suggests that the hunting of mountain sheep was important during the Gypsum complex (Grant et al. 1968); mountain sheep and deer, rabbits and hares, rodents, and reptile remains are reported from Gypsum complex sites in the central Mojave Desert (Hall and Basgall 1994). Evidence from the western Mojave Desert suggests that there was a major population increase ca. 3000 to 2300 B.P. (Gilreath and Hildebrandt 1991; Sutton 1988). A shift in subsistence orientation and mobility near the end of the Gypsum complex is suggested, with increased emphasis on the hunting of smaller mammals, perhaps coinciding with the introduction of bow and arrow technology (Basgall et al. 1986; Sutton 1996:234).

2.2.4.2 Rose Spring Complex (1800 to 900 B.P.)

The Rose Spring complex is characterized by small projectile points, such as the Eastgate, Rose Spring, (and possibly ancestral Cottonwood series), stone knives, drills, pipes, bone awls, various milling implements, and marine shell ornaments; the use of obsidian (most notably Coso Obsidian) is prevalent in this complex (Sutton et al. 2007:241). Smaller projectile points such as the types noted above appear to mark the introduction of a bow and arrow technology and the decline of the atlatl and spear weaponry (Sutton 1996:235). Sutton (1996) notes that Rose Spring complex sites are common in the Mojave Desert and are often found near springs, washes, and lakeshores.

Subsistence practices during the Rose Spring complex appear to have shifted to the exploitation of medium and small game, including rabbits/hares and rodents, with a decreased emphasis on large game. At the Rose Spring archaeological site, numerous bedrock milling features, including mortar cups and slicks, are associated with rich midden deposits, indicating that the milling of plant foods had become an important activity. In addition, evidence of permanent living structures are found during this time (Sutton et al. 2007:241). In the eastern Mojave Desert, agricultural people appear to have been present, as Anasazi populations from Arizona controlled or influenced a large portion of the northeastern Mojave Desert by 1300 B.P. (Sutton et al. 2007:242).

Warren (1984:420–424) contends that the Rose Spring complex was marked by strong regional cultural developments (compare Saratoga Spring to Rose Spring) especially in the southern California desert regions, which were heavily influenced by technology and style originating from the lower Colorado River area (termed by Warren as the Hakataya culture). Warren (1984) divided the Rose Spring (Saratoga Springs) into three, possibly four, regionally distinct cultural developments deduced from pottery types and projectile point styles: northwestern Mojave, eastern Mojave, southern desert, and possibly Antelope Valley (Warren 1984:420–424).

In the northwestern Mojave, the Saratoga Springs Period was marked by the dominance of Rose Spring and Eastgate arrow points over the earlier Elko and Humboldt-series dart points. With the exception of this technological change, there appears to have been a strong continuity of Gypsum complex material assemblages in the northwestern Mojave.

In the eastern Mojave Desert, Anasazi interest in turquoise likely influenced populations living in the Mojave Desert as far west as the Halloran Springs area where hundreds of small turquoise mines existed. The presence of Anasazi pottery at many of the turquoise mines suggests that these mines initially were operated by the Anasazi between 1500 and 1300 B.P.

In the southern desert region, the impetus for change appears to have derived from Hakataya influences from the lower Colorado River, evidenced by the introduction of Buff and Brown Ware pottery and Cottonwood and Desert Side-notched projectile points. The initial date for the first Hakataya influence on the southern Mojave Desert remains unknown; however, it does appear that by 1200 to 100 B.P., the Mojave Sink was heavily influenced, if not occupied by, lower Colorado River peoples. Additionally, trade along the Mojave River extended Hakataya influence west and appears to have blocked all Anasazi influence west of the Cronise Basin and south of the New York and Providence mountains by 1000 B.P.; this influence apparently continued well after the Saratoga Spring Period (Warren 1984:423).

The Rose Spring (Saratoga Spring) complex is best characterized by cultural diversification with strong regional developments. Turquoise mining and long distance trade networks appear to have attracted both the Anasazi and Hakataya peoples into the California deserts from the east and southeast, respectively. Trade with the California coastal populations also appears to have been important in the Antelope Valley region and stimulated the development of large, complex villages. In the northwestern Mojave Desert, however, the basic pattern established during the Gypsum complex changed little during the Saratoga Spring Period. Toward the end of the Rose Spring/Saratoga Spring complex, the Hakataya apparently moved far enough to the north to gain

control of the turquoise mines, thus replacing the Anasazi occupation of the eastern California desert.

2.2.4.3 Late Prehistoric Complex (900 B.P. to Contact)

Late Prehistoric sites contain a significantly different suite of material culture than seen in the preceding archaeological complexes. Characteristic artifacts of the Late Prehistoric complex include Desert-series projectile points (Desert Side-notched and Cottonwood Triangular), Brownware ceramics, Lower Colorado Buff Ware, higher frequencies of milling stones (e.g., unshaped handstones, mortars, and pestles), incised stones, and shell beads (Warren and Crabtree 1986). The faunal assemblages typically contain deer, rabbits/hares, reptile, and rodents. The use of obsidian dropped off during this time with the increased use of CCS.

Evidence of large occupation sites, representing semi-permanent and permanent villages, characterizes Late Prehistoric settlement strategies. Large, complex housepit village sites (e.g., Guapiabit in Summit Valley) were established along the headwaters of the Mojave River (Smith 1963) and were somewhat similar to those reported in Antelope Valley (Sutton 1981). Although both of these areas appear to have participated in extensive trade between the desert and the coast, the lack of Buff and Brown Ware pottery at the Antelope Valley sites suggests that these people were minimally influenced by the Hakataya developments along the Mojave River (Warren 1984:426).

The Late Prehistoric complex marks an era of increased linguistic complexity within the Mojave Desert. One of the most important regional developments of the Late Prehistoric complex was the apparent expansion of Numic-speakers (Shoshonean groups) throughout most of the Great Basin. Many researchers accept the idea that sometime around 1000 B.P., the Numa spread westward from a homeland in the southwestern Great Basin, possibly from Death Valley (Lamb 1958) or Owens Valley (Bettinger and Baumhoff 1982). While there is little dispute that the Numic spread occurred, there is much disagreement over its mechanics and timing (see Madsen and Rhode 1994).

Regional cultural developments established during the preceding Rose Spring complex continued with some modifications. In the Southern Desert region (i.e., Colorado Desert; southeastern Mojave Desert), Brown and Buff Ware pottery, first appearing on the lower Colorado River at about 1200 B.P., started to diffuse across the California deserts by about 1100 B.P. (Warren 1984:425). Associated with the diffusion of this pottery were Desert Side-notched and Cottonwood Triangular projectile points dating to about 850 to 800 B.P., suggesting a continued spread of Hakataya influences. This influence appears to have diminished during the late Ethnohistoric Period when the extensive trade networks along the Mojave River and in Antelope Valley appear to have broken down and the large village sites were abandoned. Warren (1984:428) provides two possible explanations for the disruption of trade networks: (1) the drying up of the lakes in the Cronise Basin; and/or (2) the movement of Chemehuevi southward across the trade routes during late Ethnohistoric times.

Recent research into the distribution of Desert Side-notched versus Cottonwood-series projectile points in San Diego County indicates a Hohokam influence on the Desert Side-notched series that was strong in traditional Tipai territory (southeast San Diego) and moderate in traditional

Ipai territory (Central San Diego County), while Cottonwood dominated assemblages into traditional Luiseño territory to the north and west (Pignoli 2004). The presence of Lake Cahuilla was a likely catalyst in the movement of the Desert Side-notched style to the northwest into traditional Cahuilla territory although this element of the Hakataya influence appears to have waned farther north as demonstrated by the complete absence of Desert Side-notched series projectile points from the late prehistoric occupation at Oro Grande.

2.3 ETHNOGRAPHIC SETTING

Historically, the Project area is located within Serrano territory. Altschul and others (1989) have provided a useful overview of the ethnographic land-use patterns, social organization, and early ethnohistorical interactions in Serrano territory. Pertinent aspects of this overview, along with ethnographic information obtained primarily from Strong (1929), Gifford (1918), Kroeber (1925), and Bean and Smith (1978) are presented below.

2.3.1 Serrano

The Serrano, or “mountaineers” in Spanish, occupied the territory of the San Bernardino Mountains east to Mount San Gorgonio, the San Gabriel Mountains west to Mount San Antonio, and portions of the desert to the north and the fringe of the San Bernardino Valley to the south (Kroeber 1925:615–616). Numbering no more than perhaps 1,500 people, the Serrano were scattered over a rugged, expansive landscape. The Serrano were Shoshonean peoples, speakers of languages in the Takic sub-family of the larger Uto-Aztecan language family (Kroeber 1925:578–579). Their most intensive cultural contacts were with the Pass Cahuilla, who occupied the territory to the southeast, and the Gabrielino, who occupied the lands westward to the Pacific coast.

There were numerous clans of Serrano across the Mojave Desert and the San Bernardino Mountains (Sutton and Earle 2017). The Serrano subgroup, known as Yuhaaviatam occupied the portion of the San Bernardino Mountains and adjacent valleys that encompass the Project area, and thus this term refers here to the smaller cultural unit.

Serrano clans were politically autonomous, although linked by ceremonial ties to other clans and peoples of other tribal groupings (i.e., the Cahuilla and Gabrielino). A moiety structure conditioned Serrano social life, all clans belonging to either the Coyote or Wildcat moiety, and all spring ceremonial and mourning obligations extending to at least one other clan (Strong 1929: 12–13). Exchanges of shell money between clans occurred during ceremonies, and contributions of shell money were made to mourning clan leaders by members of other clans on occasions of death. These moieties were exogamous, while clan organization was both patrilineal and exogamous. Although some have suggested that the clans were totemic, Gifford (1918:218) disagrees. Gifford attributes the patrilineal clan and moiety form of organization to links with southwestern tribes (Gifford 1918:218); others would identify Serrano organization as a typically Shoshonean social structure.

Each Serrano clan had a hereditary leader, or *kika*, and an assistant who was a ceremonial leader, or *paha* (Strong 1929:17–18). These individuals were central to the ritual life of the Serrano, providing leadership during yearly ceremonial periods. In the context of discussions concerning mourning ceremonies, Strong (1929:32) indicates, “Immediately after death, much of the

property of the deceased was destroyed,” and Bean and Smith (1978:572) note that cremation was practiced concurrent with the destruction of most of the deceased’s possessions.

During the early historic era, Serrano peoples and their culture were dramatically affected by the Spanish mission system. San Gabriel Mission was established in 1771 in the Los Angeles area, and baptisms of Serrano individuals began by 1785. Much later, in 1819, a new mission was founded in the San Bernardino Valley at the Indian ranchería of Guachama. An irrigation ditch (the Mill Creek *Zanja*) was built with Serrano labor in 1819–1820, and agriculture became important in the valley. A more thorough review of relations between native inhabitants and early missionaries and explorers in the region is provided in the following sections.

In the late eighteenth century, the Mojave River formed portions of a major native travel and exchange corridor between the Colorado River and points east and the southern San Joaquin Valley and the Pacific Coast. The Vanyumé, now recognized as a desert division of the Serrano distinct from the Mountain Serrano (Sutton and Earle 2017), occupied the Mojave River portion of this corridor, while other culturally and linguistically distinct groups, such as the Chemehuevi had settled the desert region to the east of the Sinks of the Mojave, and the Desert Kawaiisu ranged to the north of the Mojave River. Mojave traders from the Colorado River traveled via this corridor to the southern San Joaquin Valley and coastal southern California to acquire shell beads and other items for exchange (Earle 2005:1). Marine shell beads, particularly those made from the *Olivella* shell, and abalone ornaments were obtained directly from the Chumash-speaking groups of coastal southern California; shell beads imported from Chumash territory could also be obtained from the Yokuts of the southern San Joaquin Valley (Earle 2005:12).

Regarding the use of the Mojave River as a trade/travel corridor, Earle states that “The late eighteenth century political geography of this area appears to have reflected the importance of this travel corridor to long-distance exchange, and particularly to the exchange involving Pacific coast shell beads which served as an important medium of exchange, and which were circulated far to the east of desert California” (Earle 2005:1).

Ethnohistorical information on the Mojave River area from the 1770s through the 1840s makes it clear that the Mojave River communities of the Vanyumé had developed long-standing political and social ties with the Yuman-speaking Mojave and functioned as intermediaries in the longer distance trade networks maintained by the Mojave. The Mojave lived in villages on terraces above the Colorado River to the east. The Mojave relied on the river floodplain for horticulture, fishing, and gathering for subsistence. The Mojave are well known for their long-distance travel, utilizing the trade networks extending east to the Pueblos of Arizona and west to the Pacific coast (Bean and Vane 1978). The frequency of Mojave long-distance travel through the region created an unusual situation, as they often recognized sacred places that were located hundreds of miles to the west of their zone of settlement and flood farming on the Colorado River. The Mojave traders negotiating the Mojave River route relied on the Vanyumé for sustenance and shelter along the trek, as they did not carry their own supplies (Earle 2005:10; Harrington 1986:III:167:20). Gifts of shell beads and other goods were bestowed upon the Vanyumé as reciprocal exchanges for this hospitality, and cemented relationships between the two groups (Earle 2005:30).

Mortuary patterns also provide information on site ethnic affiliation. For instance, the Mojave were known for cremating their dead (Kroeber 1925), and the different southern California Takic

groups also practiced cremation. However, the ethnographic and ethnohistorical record for mortuary practices among some Takic groups is not as straightforward as some have assumed. For the Serrano, ethnographic testimony does not provide a completely clear picture of traditional practice. While it would be tempting to attribute all such ambiguity to the effects of Christianization and missionization in the eighteenth and nineteenth centuries, this is too simple a view.

Sites along the Mojave River, such as the historic Serrano ranchería of Guapiabit and the Siphon Site, both in Summit Valley, have yielded evidence of cremation (Earle et al. 1997:121, 124; Sutton et al. 1993:28). Inhumations have been reported at Turner Springs, north of Victorville, and at Lenwood (CA-SBR-1549), the latter being of apparent Late Prehistoric age (Moffitt and Moffitt 1993). At the easterly lower end of the Mojave River, at Cronise Lake, both inhumations and cremations from late contexts have also been reported (Thomas 2011:21). The presence of a range of different populations in the area could help to account for evidence of both primary inhumation and cremation during the ethnohistoric and historic periods.

2.4 HISTORICAL SETTING

The historical background of the Upper Mojave River and adjacent San Bernardino Mountains is best presented by adhering to the familiar divisions of local history, which have become standardized in the area literature. Beginning with the Spanish (Mission) Period in 1771, the progression moves rapidly through the poorly documented Mexican (Rancho) Period into American (Anglo) times. In the following discussion, important historical events during these periods are summarized with a more detailed discussion of the historical developments in the immediate Project vicinity.

2.4.1 Spanish Exploration and Mission Period: 1771 to 1821

The earliest significant moment in the recorded history of the area was the arrival of Portola's former Lieutenant Pedro Fages who, as military governor, accompanied an expedition from San Diego in pursuit of deserters from the Presidio. Fages kept a journal which recorded that the party traveled along the west side of the San Jacinto Mountains to what is now Riverside, continued north into the San Bernardino Valley, and then crossed into the Mojave Desert by way of the Cajon Pass. The record of Fages' transit across the Mojave Desert in 1772 is the first written account of the area to have survived into modern times.

The diary of Father Francisco Tomás Hermenegildo Garcés contains the second known reference to a historic transit of the Upper Mojave River region. In 1776, Garcés traveled west from the Mojave villages in the Needles area towards the Providence Mountains and the easterly lower end of the Mojave River (Earle 2005:7–8). Seeking a direct land route from Arizona and the Colorado River to Monterey, he was accompanied by Mojave guides who had previously traveled to the coast, and a southern California native who had lived at Mission San Gabriel. To date, Garcés' journal of this expedition stands as the best of the very early accounts of crossing the Mojave Desert, and his commentary on the native inhabitants of the region and the Spanish missionary view of them is invaluable (Arnold et al. 1987).

In the early 1800s, the Spanish increased their efforts to incorporate Native Americans into the mission system. As part of this endeavor, a series of explorations was undertaken into the

Californian interior to identify possible locales for a chain of inland missions, which would run parallel to the coast chain (Berger 1941). One of these expeditions in 1806 was led by Father Zalvidea, who traveled through the Antelope Valley and recorded his visit to the Serrano villages of Amuscopiabit (Moscopiabit) and Guapiabit (Beattie and Beattie 1939:4).

Beginning in the 1800s, Native Americans residing in the Upper Mojave River region either were brought or came to the San Gabriel and San Fernando missions, established in 1771 and 1797, respectively. Although the Spanish were determined to gather all natives into the mission system, there are numerous examples of interior Native American villages not represented in the mission registers, suggesting low levels of interaction or influence prior to this time. As a side effect of the increased number of missions in southern California, native neophytes attempted to escape missions by running away and seeking refuge with interior tribes, such as in the southern San Joaquin Valley or the Mojave Desert and adjacent mountains. This impacted the existing tribes in these areas because forays into these regions were made by the Spanish on numerous occasions to recapture these people, and some tribes became mixed with the influx of natives from different tribal territories.

2.4.2 Mexican (Rancho) Period: 1821 to 1848

During the period of Mexican rule (1821 to 1848), the Upper Mojave River region appears to have remained relatively outside the Hispanic frontier. The closest Hispanic settlement was the San Bernardino Asistencia mission outpost, which had been established at the Guachama ranchería in 1819 in the adjacent San Bernardino Valley. During the 1820s and early 1830s, the San Bernardino Asistencia was active, functioning as rancho headquarters. In October 1834, the Paiutes attacked the San Bernardino Asistencia, killing Christianized Indians and taking stored grain and altar vessels. They returned in December 1834, burned buildings, and took Father Esteneza hostage. This last attack, coupled with the decree of secularization, dealt the final blow to the San Bernardino Asistencia; it was abandoned shortly thereafter.

In 1826, Jedediah Strong Smith became the first American citizen to enter California over land. The trapper and mountain man reached the San Bernardino Valley by way of the Cajon Pass in 1826. He and his men were taken in and cared for at a rancho some 5 miles short of San Gabriel, where they gave themselves up to the Mexican authorities. Smith's party left San Gabriel, apparently for his Salt Lake camp, on January 18, 1826 (Morgan 1953:243), with warnings from the Mexican authorities to never return to California. Despite the warnings, Smith returned to the San Bernardino Valley the following August 1827, again by way of the Cajon Pass. Detained for several months by the Mexican authorities and determined never to return, Smith was eventually allowed to leave on December 30, 1827.

Beginning in 1829, Mexican traders from New Mexico used Summit Valley and Crowder Canyon as a passageway to the Los Angeles basin and thus established what is now called the Old Spanish Trail. Anglo-American trappers and traders emanating from Taos, New Mexico (including Kit Carson), also used the route beginning in 1829. Spurred on by the demand for California mules, this trail served as a major pack train route until the end of the Mexican period with the 1846 War with Mexico (Speer 1980:5).

The unsettled political condition of California during the 1820s and 1830s was in part due to the turmoil in Mexico in the wake of the revolution. Most disturbing in California were the decrees issued by the Mexican authorities for the secularization of the mission system. The Indians were “liberated” by decree in 1826, followed by orders for the withdrawal of the Franciscans a few years later (Elliot 1883:27). On August 17, 1833, the Mexican Congress passed the Secularization Act, which placed all mission property into the hands of civil administrators. The former Mission Indians became the most vulnerable victims in the resulting shuffle and land grab, and their numbers were rapidly decimated by disease and culture shock. Those Indians surviving on *rancherías* throughout the valley apparently experienced mainly a change of masters, from padre to Californio *ranchero*. This relationship of Californio “*padrón*” and Indian stock tender worked as well as any system could for the aboriginal population.

2.4.3 American Period: 1848 to Present

Developments in the middle Mojave River Valley during the American period are closely tied to its location along a major travel corridor. As discussed above, this area was used as a trade route during both the prehistoric and early historic periods. After the Mormons colonized Utah in the mid-1800s, Salt Lake City gradually supplanted Santa Fe as a destination of commerce. The Old Spanish Trail became a favored route for Mormon settlers traveling from the Great Salt Lake to the San Bernardino area of southern California, thus becoming known as the “Mormon Trail.” Point of Rocks, which is located near present-day Helendale, was a stopping point for many Mormon wagon trains in the 1850s (Stickel and Weinman-Roberts 1980:183). In the early 1860s, a stagecoach station was established in the site; the station was subsequently burned by the Paiute Indians in 1863.

A great impetus to growth in the area was the arrival of the California Southern Railroad. A subsidiary of the Atchinson, Topeka, and Santa Fe (Santa Fe) Railway, the California Southern Railway Company began construction of a line from San Diego to Barstow in 1881. A rail station was established at Point of Rocks in 1885 to provide water for the steam engine locomotive moving trains across the Mojave Desert. In 1897, the name of the station was changed to Helen in honor of a daughter of a Santa Fe Railroad executive (Stickel and Weinman-Robert 1980:163). The community was subsequently renamed Helendale in 1918.

During the late nineteenth century and early part of the twentieth century, the middle Mojave River Valley was also the scene of mining activity. Gold and silver was first discovered in the area south of Oro Grande in the early 1870s. The Silver Mountain Mining District, which contained the Oro Grande Mine, was subsequently established in the area. Sometime during the 1880s, operations at the Oro Grande Mine were suspended due to the high costs associated with transporting ore and the scarcity of water (Vredenburg 1992). Mining resumed at the Oro Grande Mine in the 1920s and continued intermittently until 1941.

From 1885 through 1900, the wetter and more southwesterly areas of the Mojave Desert experienced a cycle of boom and bust in pioneer settlement. Following the extension of rail transport to the desert in the 1870s and 1880s, attempts were made to establish agricultural communities in several desert regions. The most important of these were the Antelope Valley and the upper Mojave River valley (Earle 1992, 1998:43–67; Thompson 1929:290–297, 381–384). In both of these regions, before the 1880s, stock grazing had been the principal agricultural

activity. This was in areas where typically fewer than five head of cattle might be grazed per square mile, so that access to open public rangeland was essential to cattlemen (Thompson 1929:41). However, by the late 1880s, both the establishment of organized colony communities and the undertaking of homesteading or desert land entry had become common. The colonies often emphasized shared political, ethnic, or religious values among participating members, emphasized community cooperation, and often counted on being able to use California's Wright Act to build community-governed gravity-flow irrigation systems in areas downslope from desert-edge mountain ranges. In low-lying areas in the center of desert basins, such as the vicinity of dry lakes, subterranean water with artesian flow characteristics could also sometimes be exploited for at least limited irrigation purposes. In these low-lying areas, alkali-tolerant crops such as alfalfa might be grown, and cattle and other stock grazed (Earle 1998:59–67).

The historic development of Victor Valley is tied to its location along a major travel corridor. A great impetus to growth was the arrival of the California Southern Railroad in 1885 and the establishment of Victor station. A subsidiary of the Santa Fe Railroad, the California Southern Railway Company began construction of a line from San Diego to Barstow in 1881. Victor station, which formed the nucleus of present-day Victorville, attracted new settlers to Victor Valley, which provided arable farmland irrigated by groundwater sources and the Mojave River. In 1886, the townsite of "Victor" was laid out around the site of the rail station; the town was renamed "Victorville" in 1901 to avoid confusion with Victor, Colorado.

As settlement activity increased in Victor Valley, lands that had once been used for cattle grazing were transformed for use as farms and orchards. Agrarian, mining, and commercial activities spurred the growth of Victorville and the neighboring communities of Apple Valley, Lucerne Valley, Hesperia, Adelanto, Oro Grande, and Helendale. The discovery of large deposits of limestone and granite in the 1910s and the construction of the Southwestern Portland Cement Company plant in 1917 solidified cement manufacturing as a major industry in Victor Valley.

A further impetus to growth in the middle Mojave River Valley was the paving of the National Trails Highway, which later became U.S. Route 66, in the late 1920s. The highway paralleled the Santa Fe Railway from Victorville to Barstow passing through both Oro Grande and Helendale. Access to the transcontinental highway strengthened the region's industrial and commercial base and brought increased settlement.

The phenomenon of desert homesteading received a further boost in the 1920s, when veterans of World War I, particularly those whose lungs had been damaged from poison gas, discovered the health benefits and therapeutic qualities of the desert climate. Adelanto itself was founded in 1915 by E. H. Richardson, who had hoped to turn the townsite into a community dedicated to the health needs of returning veterans. Although Richardson's plan for the townsite did not come to fruition, Adelanto did become a successful agricultural area with the establishment of fruit orchards and, later, with poultry ranching.

By far the greatest increase in the phenomenon of desert homesteading took place after World War II, when restless urban and suburban populations sought recreation opportunities and weekend retreats in the California deserts. Much of the desert homesteading that took place in Victor Valley during the 1950s was associated with the Small Tract Act of 1938, a desert homestead program in which 5 acres of land could be purchased for \$10 per acre and be defined

as a parcel of public lands of 5 acres or less that was found to be chiefly valuable for sale or lease as a home, cabin, camp, recreational, convalescent, or business site (Stringfellow 2009). By 1955, approximately 25,000 5-acre-tract, or “baby homestead,” permits had been issued in Joshua Tree, Twentynine Palms, Yucca Valley, Morongo Valley, Apple Valley, Lucerne Valley, Lancaster, Palmdale, and Victorville (Ainsworth 1955). However, a combination of factors, including the difficulties of desert farming and the hardships associated with rather primitive living conditions, led to the decline of desert homesteading as a viable and sustainable lifestyle.

Undoubtedly one of the greatest factors that fueled growth in the City of Victorville was the establishment of George Air Force Base in 1941, which brought military personnel, families, and associated services and industry to the region. It is also the site of the U.S. Penitentiary, Victorville, a high-security federal prison housing nearly 1,000 male inmates.

The City of Victorville was incorporated in 1962 with a population of approximately 8,110 and an area of 9.7 square miles. Since then, the City has grown substantially with a current population of 125,000 and an area of approximately 74 square miles (City of Victorville 2019a).

2.4.3.1 George Air Force Base

The Southern California Air Logistics Base or George Air Force Base, as it was known for nearly 44 years, was originally established as a flight training school (Victorville Army Flying School) for the United States Army Air Corps in 1941. The base was renamed in 1943 to Victorville Army Air Field and again in 1948 to George Air Force Base after the formation of the United States Air Force (Pacific Coast Architecture Database 2019).

During the Second World War, the base was home to several squadrons responsible for instruction in specific aviation operations for incoming crews. Training was offered for pilots (transports, fighters, and bombers), bombardiers, and radar operators (Military Museum 2019). The base was put on standby at the end of the war (1945), halting all flying operations in order to house a surplus of military aircraft. In 1948, the base was rebranded as George Air Force Base and continued to operate as an aviation training facility throughout the cold war. George Air Force Base was home to several fighter wings during its operation, one of which was the 35th Tactical Fighter Wing which trained F-4 pilots. The base continued to operate until its closure in 1989 as part of the Base Closure and Realignment Act, and the 35th Tactical Fighter Wing was relocated (Sahaida 2004). The base was officially decommissioned in 1992. Shortly after, the Air Force Civil Engineer Center transferred 4,196 acres over to the Southern California Logistics Airport Authority as it operates currently (Air Force Civil Engineer Center [AFCEC] 2019). The Southern California Logistics Airport now serves as a civilian aviation hub for maintenance, research, flight testing, and end-of-cycle services (City of Victorville 2019b). In 2002, just prior to the invasion of Iraq, abandoned base housing was utilized by the U.S. Marine Corps for urban warfare training (Copp 2018).

Throughout its operation, the base along with its personnel were exposed to a variety of hazardous and contaminated substances. A report published by the Military Times, cites nearly 300 cases involving female personnel who experienced reproductive and/or birth defects after living on base (Copp 2018). Hazardous substances such as jet fuel, gasoline, paints and solvents were often absorbed into the surrounding soils ultimately contaminating the water supply. Since

1981 the federal government has focused on abatement of the former base and expects efforts to continue to 2023 (AFCEC 2019).

3 SOURCES CONSULTED

3.1 CULTURAL RESOURCE LITERATURE AND RECORDS SEARCH

On January 16, 2019, prior to the field survey of the Project area, AECOM submitted a request for an archaeological literature and records search at the South Central Coastal Information Center (SCCIC) of the California Historical Resource Information System (CHRIS), housed at California State University, Fullerton. The objective of this records search was to determine whether any prehistoric or historical cultural resources had been recorded previously within the Project area plus a 1-mile-wide buffer (Study Area). The records search indicated 92 cultural resource investigations have been conducted previously within the Study Area (Appendix A). Twelve of these investigations (SB-01051, SB-01851, SB-05223, SB-05337, SB-05508, SB-07025, SB-07054, SB-07094, SB-07095, SB-07121, SB-07168, SB-07969), completed between 1967 and 2018, involved portions of the Project area (Appendix A) with the cumulative result being 100 percent coverage of the entire Project area by previous cultural resource surveys.

The investigations throughout the Study Area resulted in the identification of 104 cultural resources. Eighty-six of the resources are archaeological: 17 prehistoric archaeological sites, 27 prehistoric isolated artifacts, 30 historic archaeological sites, 6 historical isolated artifacts, and 6 sites containing both prehistoric and historic components. In addition, 17 built-environment resources also were identified within the Study Area. Finally, one resource, a rock alignment, is of uncertain age. Only 11 of the previously documented 104 cultural resources are within the Project area (Table 3-1). These resources are briefly described below and in detail in Appendix B.

**Table 3-1
Cultural Resources within the Study Area**

Primary	Trinomial	Description
Prehistoric Archaeological Sites		
36-000069	CA-SBR-69	Lithic scatter and bedrock milling
36-000072	CA-SBR-72	Habitation site
36-005431	CA-SBR-5431	Lithic scatter
36-005433	CA-SBR-5433	Lithic scatter
36-006153	CA-SBR-6153	Lithic and ceramic scatter
36-006782	CA-SBR-6782	Bedrock milling
36-007155	CA-SBR-7155	Bedrock milling
36-008391	CA-SBR-8391	Lithic scatter
36-008393	CA-SBR-8393	Lithic scatter
36-008863	CA-SBR-8863	Lithic scatter
36-010957	CA-SBR-10957	Lithic scatter, and features
36-010958	CA-SBR-10958	Lithic scatter

Table 3-1
Cultural Resources within the Study Area

Primary	Trinomial	Description
36-012609	CA-SBR-12336	Habitation site
36-029491	-	Habitation site
36-032889	-	Habitation site
36-032891	CA-SBR-32891	Habitation site
36-032892	CA-SBR-32892	Quarry
Isolated Prehistoric Finds		
36-013601	-	Granite anvil fragment
36-013604	-	Schist mano fragment
36-026810	-	Secondary chert flake
36-026830	-	Secondary metavolcanic flake
36-026892	-	Jasper flake
36-026893	-	Jasper flake
36-026894	-	Chalcedony flake
36-026895	-	Chalcedony flake
36-026896	-	Quartzite bifacial mano
36-026897	-	Chert flake
36-061237*	-	Agate flake
36-061265*	-	Quartzite unifacial mano
36-061266*	-	Chert scraper
36-061270	-	Quartzite core and flake
36-061278	-	Quartzite tested cobble
36-061279	-	Quartzite tested cobble
36-061280*	-	Quartzite chopper
36-061281*	-	Quartzite tested cobble
36-061282	-	Quartzite tested cobble
36-061283	-	Jasper flake and quartzite chopper
36-061284	-	Quartzite tested cobble
36-061285	-	Jasper flake
36-061286	-	Quartzite tested cobble
36-061287	-	Quartzite tested cobble
36-061288	-	Quartzite chopper
36-064032	-	Chalcedony projectile point fragment
36-064033	-	Chert flake
Historic Archaeological Sites		
36-006784	CA-SBR-6784,	Refuse scatter (cans and bottles)
36-008388	CA-SBR-8388H	Refuse concentration (cans and bottles)
36-008389	CA-SBR-8389H	Fire hearth and dog burial
36-008390	CA-SBR-3890H	Refuse scatter (ceramics, cans, glass, concrete, and rock)
36-008837	CA-SBR-8837H	Collapsed structure and associated refuse
36-008838	CA-SBR-8838H	Refuse scatter (cans, glass, ceramics, and brick)
36-008841	CA-SBR-8841H	Refuse scatter (cans and glass)

Table 3-1
Cultural Resources within the Study Area

Primary	Trinomial	Description
36-008842	CA-SBR-8842H	Refuse scatter (cans, glass, bed frame, metal fragments)
36-008859	CA-SBR-8859H	Refuse scatter (cans, glass, springs, and ceramics)
36-008860	CA-SBR-8860H	Refuse scatter (cans and bottles)
36-010883	CA-SBR-10883H	Refuse scatter (cans, ceramics, and bottles)
36-010885	CA-SBR-10885H	Historic well
36-010886	CA-SBR-10886H	Refuse scatter (cans, glass, milled lumber, and metal)
36-010887	CA-SBR-10887H	Refuse scatter (cans, glass, ceramics, and wire)
36-010889	CA-SBR-10889H	Historic well
36-013602	CA-SBR-12600H	Refuse and structural remains (cans, milled lumber, glass, ceramics, and metal)
36-013603	CA-SBR-12601H	Refuse and structural remains (foundation, lumber, metal)
36-013605	CA-SBR-12602H	Refuse scatter (cans, glass, ceramics)
36-013606	CA-SBR-12603H	Refuse scatter (cans, glass, ceramics)
36-013607	CA-SBR-12604H	Refuse scatter (cans, glass, ceramics)
36-013608	CA-SBR-12605H	Refuse scatter (cans, glass, ceramics and shell casings)
36-013609	CA-SBR-12606H	Refuse scatter (cans, glass, ceramics)
36-013896	CA-SBR-12712H	Refuse scatter (cans, glass, ceramics)
36-013897	CA-SBR-12713H	Refuse scatter (cans, glass, ceramics)
36-021548*	CA-SBR-13854H	Refuse scatter (cans, glass, ceramics)
36-023225	CA-SBR-14701H	Refuse scatter (cans, glass, ceramics, and household refuse)
36-061255	CA-SBR-61255H	Refuse scatter (cans, glass, ceramics)
36-061256	CA-SBR-61256H	Refuse scatter (cans, glass, ceramics)
36-061257	-	Refuse scatter (glass, ceramics, cans)
36-061261	-	Refuse scatter (cans, glass)
Isolated Historical Finds		
36-061258	-	Can
36-061259	-	Steel beams set in concrete
36-061260	-	Two cans
36-061262	-	Amethyst glass bottle
36-061293	-	Amethyst glass marble
36-064534	-	Milk bottle
Archaeological sites with prehistoric and historic components		
36-000066	CA-SBR-66/H	Prehistoric habitation and historic camping
36-000067	CA-SBR-67/H	Prehistoric habitation and historic camping
36-005432	CA-SBR-5432/H	Prehistoric rock cairn and historic refuse
36-007044	CA-SBR-7044/H	Historic refuse, litchis, cremation
36-010884	CA-SBR-10884/H	Prehistoric groundstone and historic refuse and rock alignment,
36-021547	CA-SBR-13853/H	Prehistoric lithics and historic homestead
Built Environment		
36-004272	CA-SBR-4272H	Historic road
36-008392*	CA-SBR-8392H	Historic road
36-010316	CA-SBR-10316H	Historic structure

**Table 3-1
Cultural Resources within the Study Area**

Primary	Trinomial	Description
36-012917	-	Historic military property
36-012918*	-	Historic military property
36-021292	-	Historic homestead
36-021620	-	Historic homestead
36-021621	-	Historic homestead
36-023283	-	Historic road
36-025783*	CA-SBR-16309H	Historic road
36-025784	CA-SBR-16310H	Historic road
36-025785	CA-SBR-16311H	Historic road
36-025786*	CA-SBR-16312H	Historic road
36-025787*	CA-SBR-16313H	Historic military property
36-026772	CA-SBR-16978H	Historic foundation
36-027569	-	Historic homestead
36-029351	-	Historic homestead
Other		
36-013600	-	Rock alignment of unknown age

* Cultural resources within the Project area.

3.2 RESOURCES WITHIN THE PROJECT AREA

The following descriptions of the cultural resources previously recorded within the Project area are organized according to the listing in Table 3-1.

3.2.1 Isolated Prehistoric Archaeological Finds

None of the 17 prehistoric archaeological sites recorded previously in the Study Area are located within the Project area. However, five of the 27 isolated prehistoric archaeological finds recorded in the Study Area are also within the Project area.

3.2.1.1 36-061237

This resource consists of a single moss-agate flake documented in 1980 by D. Hodder (Hodder 1980).

3.2.1.2 36-061265

This resource consists of a single, unifacial quartzite mano documented in 1990 by R. Sheets (Sheets 1990a).

3.2.1.3 36-061266

This resource is a single chert scraper documented in 1990 by R. Sheets (Sheets 1990b).

3.2.1.4 36-061280

This resource is a single quartzite chopper documented in 1990 by R. Sheets (Sheets 1990c).

3.2.1.5 36-061281

This resource is a single quartzite tested cobble documented in 1990 by R. Sheets (Sheets 1990d).

3.2.2 Historic Archaeological Sites

Only one of the 30 historic archaeological sites recorded previously in the Study Area is also within the Project area. None of the six isolated historic archaeological finds or six archaeological sites with prehistoric and historic components previously recorded in the Study Area are located within the Project area.

3.2.2.1 36-021548

This resource is a historic refuse deposit consisting of cans, glass, metal fragments, and modern refuse. It was recorded in 2008 by Nixon et al. This resource has not been formally evaluated.

3.2.3 Built-Environment Resources

Five of the 17 built-environment resources recorded previously in the Study Area are also within the Project area.

3.2.3.1 36-008392

This resource is the berm/grade of the former railroad associated with the George Air Force Base. It was first documented in 1996 by Archaeological Consulting Services (Alexandrowicz and Krautkramer 1996). The resource was updated in 1997 by William Self Associates and reported to have very little integrity (Wills et al. 1997). The resource was evaluated and found to not meet any of the criteria for inclusion in the National Register of Historic Places (NRHP) or CRHR (William Self Associates 1999).

3.2.3.2 36-012918

This resource is the Victorville United States Army Reserve Center #2, a building located on the former George Air Force base. It was first documented and evaluated in 2006 by PAR Environmental Services, Inc. The resource was evaluated as not eligible for inclusion in the NRHP or CRHR (Baker and Maniery 2007).

3.2.3.3 36-025783

This resource consists of an asphalt paved road located between Air Expressway and Turner Springs Ranch. The resource was documented by McKenna et al. in 2012 (McKenna et al. 2012a). The resource was found not to be eligible for inclusion in the NRHP or CRHR (McKenna 2012).

3.2.3.4 36-025786

This resource consists of an asphalt paved road between Highway 395 and Turner Road. The resource was documented by McKenna et al. in 2012 (McKenna et al. 2012b). The resource was found not to be eligible for inclusion in the NRHP or CRHR (McKenna 2012).

3.2.3.5 36-025787

This resource is the George Air Force Base (see Section 2.4.4). This resource was formerly a U.S. Army facility and later U.S. Air Force facility used for pilot training. The resource was documented in 2012 by McKenna et al. (McKenna et al. 2012c). The resource was found not to be eligible for inclusion in the NRHP or CRHR (McKenna 2012).

3.3 HISTORICAL MAP REVIEW

Æ consulted a series of archival maps to assess historical land-use development in the Study Area. These maps include the 1934 Barstow, CA (1:125,000) 30-Minute USGS topographic quadrangle, the 1953, 1956, and 1966 San Bernardino, CA (1:250,000) USGS maps, the 1956 Adelanto, CA (1:24,000) 7.5-Minute USGS topographic quadrangle, and the 1956 Victorville, CA (1:24,000) 7.5-Minute USGS topographic quadrangle. The Southern California Logistics Center Airport, formally known as the George Air Force Base, is depicted on the maps from 1953 and all maps of later dates.

3.4 SACRED LANDS FILE SEARCH

On January 25, 2019, Æ contacted the NAHC for a review of their SLF, to determine if any known Native American cultural properties (e.g., traditional use or gathering areas, places of religious or sacred activity) are present within or adjacent to the Project area. The NAHC responded on January 28, 2019, stating the SLF search was completed with positive results. The NAHC provided a list of Native American individuals and organizations to be contacted to elicit information and/or concerns regarding cultural resource issues related to the proposed Project. Results of the NAHC SLF search and Native American contact list were turned over to the City to assist with their government-to-government consultation requirements under SB-18 and AB-52. The NAHC file search is included as Appendix C.

CULTURAL RESOURCE SURVEY METHODS

Æ archaeologists Evan Mills, Andrew D. Miller, Andrew DeLeon, and Æ architectural historian, Annie McCausland, completed archaeological and built-environment surveys of the Project area from March 18 to March 27, 2019. The archaeological surveys of the approximate 2,312-acre Project area were conducted using two separate approaches. The first approach focused on subareas exhibiting characteristics of the undisturbed Mojave Desert landscape (approximately 720 acres). These subareas were subjected to a systematic and intensive pedestrian field reconnaissance survey along transects oriented north-south and east-west and spaced 15 meters apart. In contrast, subareas of recent or historic development (approximately 1,592 acres) were thoroughly investigated through unsystematic spot checking. In subareas surveyed using the second methodology, Æ archaeologists drove to, around, and, wherever closer inspection was warranted, Æ field archaeologists walked the ground surface to confirm past disturbance and any remaining potential for archaeological resources unaccounted for in the previous studies. The reconnaissance-level built-environment survey was conducted in the same fashion as the second archaeological survey approach. Æ's architectural historian drove to specific areas containing standing buildings, groups of buildings, or structures within the Project. The emphasis of the field investigation was to re-identify previously recorded properties and assess current physical condition, as well as identify and document any architectural resources within the Project area constructed prior to 1969.

As the environment varies greatly, Æ subdivided the Project area into three portions: West, Central, and East (Figure 4-1). The portions and field methods in each are:

- West portion includes Sections 22 and 27 on the Adelanto, CA 7.5-Minute USGS Topographic Quadrangle. Intensive-pedestrian surveys covered the north half of section 22 and the south half of Section 27. Because Æ did not have permission to access the large parking lot adjacent to the Snapple and Dr. Pepper plant or the facilities in the north half of Section 27 and south half of Section 22, the archaeological field crew was unable to survey in those locations. All remaining subareas of the West portion were surveyed by the spot-checking method.
- Central portion of the Project area includes Sections 23 and 26 on the Adelanto and Victorville, CA 7.5-Minute USGS Topographic Quadrangle. Intensive-pedestrian surveys were completed in areas between buildings and warehouses within Section 23 and the south half of Section 26 (between warehouses). All remaining subareas of the West portion were surveyed by the spot-checking method.
- East portion of the Project area includes Sections 24 and 25 on the Victorville, CA 7.5-Minute USGS Topographic Quadrangle. Intensive-pedestrian surveys were conducted in east half of Section 24 and the far eastern quarter of Section 25. All remaining subareas of the West portion were surveyed by the spot-checking method.

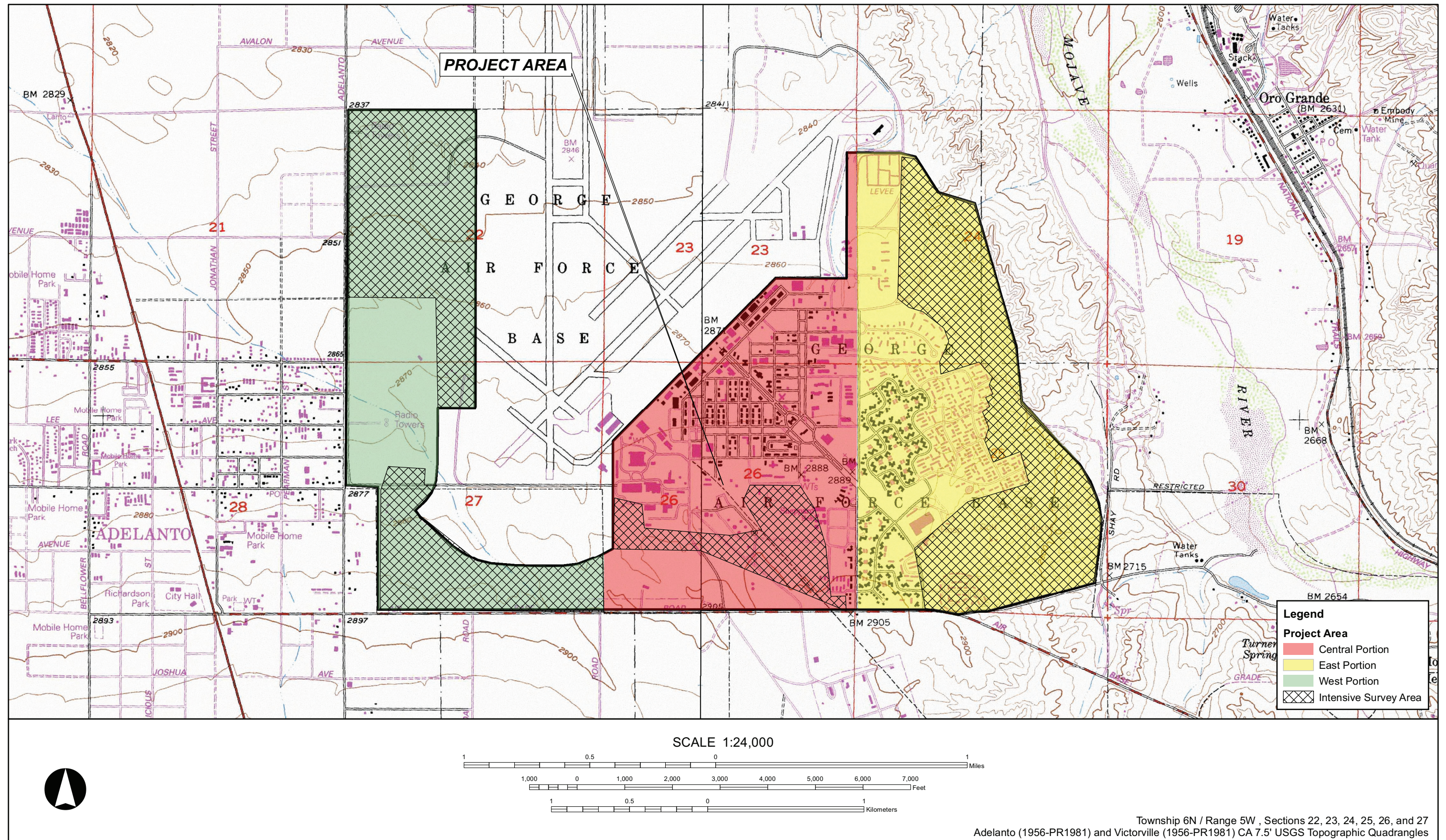


Figure 4-1 Project general survey locations

When encountered, all newly discovered cultural resources identified within the Project area were recorded on State of California Department of Parks and Recreation (DPR) Series 523 Primary and Archaeological Site Records (DPR Form). These forms document all pertinent aspects, constituents, and locational information of each resource (see Appendix B). Site locations were plotted to submeter accuracy using a handheld Trimble Geo7X Global Positioning System (GPS) unit; site maps of each resource were generated in a Geographic Information System (GIS) using this same GPS unit. Digital photographs of each resource and its constituents were taken as well.

Surveyors also visited all previously recorded cultural resources mapped partially or fully within the Project area. These resources were revisited to confirm location on the landscape, re-identify any cultural features or constituents situated within the Project area, discover any new cultural features or constituents within the Project area that had not been recorded previously, and evaluate current physical conditions. During these surveys, if a resource location was found to be mapped incorrectly on the preexisting site record, its physical condition or integrity had been altered since the initial recording efforts, or new cultural constituents or features were discovered, the DPR Form for the resource was updated appropriately to reflect these changes (see Appendix B).

5 CULTURAL RESOURCE SURVEY RESULTS

Æ's cultural resource surveys were completed to achieve two goals. One goal was to revisit locations of previously recorded cultural resources. The other goal was to record newly discovered cultural resources, if any, in the Project area. The survey results are presented in the next sections, according to one of these two stated goals.

Weather conditions during Æ's survey were generally good. Temperatures ranged from the low 60s to the mid-90s. Cloud cover was overcast some early mornings but primarily clear skies for the duration of the survey.

Ground conditions during Æ's surveys varied across the Project area and are discussed herein from west to east. Much of the West portion of the Project is extensively disturbed by current and former developments of the George Air Force Base, Southern California Logistic Airport, a Dr. Pepper and Snapple plant, and a large parking lot (owned by Stirling Development) that is currently storing Volkswagen vehicles recalled during the emissions scandal from 2014–2017. According to Google Earth™ past aerials, the subareas north of the parking lot and Dr. Pepper/Snapple plant have been recently (between 2017 and 2019) graded and all the vegetation in the vicinity is annual grasses and weeds; no perennial native vegetation was observed. Soils in the West portion of the Project area consist of sandy loam with frequent coarse quartz, quartzite, and granitic gravels. Aeolian sands emanating from outside of the Project area to the west are also present in the West portion. Technical soils of the west portion are classified as Bryman Loam Fine Sand (WebSoilSurvey 2019)

The Central portion of the Project area is mostly disturbed and should be considered overall as a built-environment landscape. The only subareas not already developed are in the south half of Section 26 between buildings. However, these subareas are all graded (recently) and display little-to-no potential for intact archaeological deposits. The depth of disturbance is unknown, but presumably is fairly deep considering there are underground utilities throughout the Base property. Large piles of soils were observed in a subarea in the south-central part of Section 26. These piles of soils have thousands of cubic yards of material from unknown (but presumably local) origins. Although no areas of undisturbed soils were observed, the soils consist of sandy loam with coarse quartz, quartzite, and granitic gravels. The south part of Section 23 and the north part of Section 26 are covered in hardscape and other built-environment resources as part of the Base. Technical soils of the central portion consist of Bryman Loan Fine Sand and Mohave Variant Loamy Sand (WebSoilSurvey 2019).

Much of the East portion of the Project area also previously has been extensively disturbed, although the far eastern edges are the least disturbed of the three portions of the Project area. The significant disturbances are derived from modern dumping, war games, as well as the construction, operations, and maintenance of historic and modern water infrastructure (i.e., water monitoring wells). Active industrial plants are located in Section 24 and former Base housing and infrastructure can be found throughout Sections 24 and 25. The south-central subarea of

Section 25 is the former Base golf course that has been graded, contoured, and irrigated with extensive underground water infrastructure. These areas are littered with modern refuse.

In contrast to this built landscape, the far eastern subarea of the East portion has substantial topographic relief with intact vegetation, geology, and soils in comparison to the rest of the East portion and much of the Project area. The entire west-facing slope of the bluff in parts of Sections 24 and 25 on the west side of the Mojave River is a combination of ridges and drainages that all flow downslope off the widespread bluff. Particularly intact are the slope and the toe of slope of the bluff. The exposed geology is primarily quartzite cobbles, with decomposing granite and quartz intermixed throughout. The soils observed in these somewhat undisturbed areas consist of the same sandy loam with coarse quartz, quartzite, and granitic gravels as Æ observed in the other two portions of the Project area. The technical soils of the East portion are a mixture of two variants of Cajon Sand, Helendale Loamy Sand, Mohave Variant Loamy Sand, PITS, and Haplargids-Calciorthids Complex (WebSoilSurvey 2019).

5.1 PREVIOUSLY RECORDED RESOURCES

Æ attempted to revisit and examine the 11 cultural resources previously recorded within the Project area to determine whether potential impacts could result from Project implementation. Descriptions of these resources are provided below in Section 5.1.1. In the process of revisiting these resources, Æ's crew also identified and documented four newly discovered historic archaeological sites, which are described below in Section 5.1.2. The locations of all 15 cultural resources are depicted on Figure 5-1 and all DPR forms are included in Appendix B.

5.1.1 Destroyed Resources or Otherwise Not Re-found

Attempts to revisit the following resources during the current survey yielded negative results since the resources appear to have been destroyed sometime after the most-recent documentation had been filed at the SCCIC:

- **36-061237** (Isolated moss-agate flake). The location of this previously recorded isolated prehistoric archaeological find is highly disturbed by former Air Force Base and current Airport activity.
- **36-061266** (Isolated chert scraper). The location of this previously recorded isolated prehistoric archaeological find is extensively disturbed by former Air Force Base and current Airport activities.
- **36-061281** (Isolated quartzite tested cobble). There are thousands of quartzite cobbles in the ephemeral drainage (down slope from the site location) where this isolated prehistoric archaeological find had been recorded; Æ did not observe anthropogenic characteristics on any of them.
- **36-021548** (Historic refuse deposit). This historic archaeological site was destroyed by recent development (grading for storage of Volkswagen recalled vehicles) on the property. According to Google Earth™, this site was destroyed in 2016.
- **36-008392** (Historic road). This built-environment resource was destroyed by the prison and recent warehouse construction on the property of the Southern California Logistics Airport. According to Google Earth™, the construction of the prison happened sometime between 1994 and 2005.

Figure 4-2 is considered confidential, and thus has not been provided as part of this document.

5.1.2 Resources with No Change in Condition

The following resources were revisited successfully during Æ's current survey and found to be in the same condition as the most recent DPR update or original DPR:

- **36-012918** (Victorville USAR Center #2). The resource was found to be in the same condition as the original documentation.
- **36-025783** (Historic Road). This resource was evaluated as not eligible for the NRHP or CRHR (McKenna 2012). This resource was determined to be in the same condition as the most recent documentation.
- **36-025786** (Historic Road). This resource was evaluated as not eligible for the NRHP or CRHR (McKenna 2012). The resource is an active (high traffic) road and found to be in the same condition as the original documentation.

5.1.3 Resources Requiring Updated Documentation

The following resources revisited during Æ's current survey required DPR updates due to characteristics that differ from the most-recent documentation:

- **36-061265** (Isolated quartzite mano). This isolated prehistoric archaeological find does not exhibit grinding characteristics of a mano; however, the pecking on the distal and proximal ends are present on the cobble.
- **36-061280** (Isolated quartzite chopper). This isolated prehistoric archaeological find is not a chopper; there is no chopping wear and no working edge. Æ reclassified this artifact as a tested cobble, likely via bipolar reduction technique. The artifact measures 13.5 by 9 by 7 centimeters. Æ did not find any other prehistoric artifacts in the vicinity of this location.
- **36-025787** (George Air Force Base). While this built-environment resource was recommended as NRHP-eligible in 2012, specific reasons and specific features are not discussed in detail (McKenna 2012). Æ has updated the DPR Form with the new information discovered during this investigation, although no formal evaluations were conducted. Formal evaluations are outside the scope of this Project.

5.2 NEWLY IDENTIFIED RESOURCES

During the survey of the Project area, four newly discovered historic resources were identified and documented (see Figure 5-1). The resources are described below.

5.2.1 Æ-3995-01H

This historic archaeological site comprises a platform and staircase composed of local stones, concrete, wooden boards, wire mesh, and wire nails. The platform and stairs are situated on a northerly-projecting, elevated (small) terrace within a large alluvial basin that drains and faces east-northeast to the Mojave River Oro Grande region.

5.2.2 Æ-3995-02H

This historic archaeological site consists of a wooden frame for (potentially) a well head. The frame is composed of four posts (3.25 by 3.25 inch), two beams, and three plywood walls held together with wire nails. The box is situated on the end of the top of a northeast-trending finger ridge overlooking a large cove immediately west of the Mojave River floodplain.

5.2.3 Æ-3995-03H

This historic archaeological site is a secondary deposit of broken glass beverage bottles in a 147 feet by 134 feet area against a southerly-facing (approximately 5-degree slope) gravel hillside. Bottle fragments number from 100–200 including 15 bottle bases, sidewalls, and finishes, and one complete “AVON/86” cologne/perfume bottle. The location and concentration of the scatter suggests the bottles were placed here and the fragmentary nature of the constituents suggests the bottles were used as target practice (possibly from the 2002 war games on the Air Force Base).

5.2.4 Æ-3995-04H

This historic archaeological site is a building foundation composed of concrete, rebar, brick, plaster, and cinderblocks. The foundation is situated in an open graded field (formerly the Base property). A porcelain insulator cap and kitchen timer are the only constituents besides rubble and glass fragments throughout the interior of the old structure. According to Google Earth™, the building was demolished between January 2015 and September 2016. The structure is listed as a Radio Tower on the 1993 topographic map.

6 MANAGEMENT RECOMMENDATIONS

At the outset of the present investigation, the SCCIC literature and records search (Chapter 3) indicated 11 previously recorded cultural resources within the Project area. However, Æ's field surveys of the Project area resulted in confirmation of only six of the 11 previously recorded resources still within the Project area. The other five previously recorded resources were not re-identified. Additionally, Æ identified and documented, four newly discovered and not previously recorded cultural resources within the Project area.

Development associated with the proposed Project (i.e., Specific Plan Amendment) could have the potential to disturb prehistoric and historic archaeological sites as well as built-environment resources. Therefore, Æ recommends testing and formal CRHR evaluation of cultural resources prior to issuance of permits for any development or improvements implemented under the proposed Specific Plan Amendment. For prehistoric and historic archaeological sites, the investigation should include an Extended Phase I (XPI) testing program to determine the presence/absence of cultural deposits in subsurface contexts. The XPI shall only apply to subareas of the Project subjected to intensive pedestrian survey (see Figure 4-1). Subareas of the Project in which unsystematic spot checking (i.e., developed areas within the built landscape) was conducted are sufficiently disturbed and do not warrant XPI investigations. XPI should entail the manual excavation of a limited number of Shovel Probes (SHPs) within the immediate vicinity of the site(s) to quickly determine the presence/absence of buried cultural deposits within these site areas. It should be noted that if buried cultural deposits are identified during XPI, Phase II testing would then be required to determine the horizontal and vertical extent, content, integrity, and data potential of these deposits to further determine the site's eligibility for CRHR inclusion. For built-environment resources, the investigation should include archival research and a formal evaluation of the structural integrity and historical significance of the standing structures within the Project area.

Potential impacts of any project on CRHR-eligible resources (i.e., "historical resources") would have to be assessed. If significant impacts to historical resources cannot be avoided, feasible mitigation measures must be implemented.

In the event that potentially significant archaeological materials are encountered unexpectedly during construction, all work must be halted in the vicinity of the discovery until a qualified archaeologist can visit the site of discovery and assess the significance and integrity of the find. If intact and significant archaeological remains are encountered, the impacts of the Project must be mitigated appropriately. Any such discoveries, and subsequent evaluation and treatment, should be documented in a cultural resource report, which should be submitted to the SCCIC for archival purposes.

Additionally, Health and Safety Code Section 7050.5, CEQA Guidelines Section 15064.5(e), and Public Resources Code Section 5097.98 mandate the process to be followed in the unlikely event of an accidental discovery of human remains in a location other than a dedicated cemetery.

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APPENDIX A

Previous Cultural Resource Studies in the Study Area

Table A
Previous Cultural Resource Studies in the Study Area

SCCIC Document #	Date	Author(s)	Title
SB-00078	1967	Walker, Clifford	Life and Adventure along the Mojave River Trail
SB-00166	1973	San Bernardino County Museum Association	Archaeological survey of the Mojave River Aqueduct and Recharge Area
SB-00257	1975	San Bernardino County Museum Association	Archaeological and Paleontologic Assessment: Wastewater Facilities Victorville
SB-00354	1976	Harris, Ruth D.	Archaeological - Historical Resources Assessment for City of Adelanto Street Lighting Program, Senior Center Project, Street Construction Project
SB-00428	1976	Hearn, Joseph E., Ruth D. Simpson, and Larry E. Burgess	Archaeological Resources, Mojave Water Agency, Project No. C-06-0822, Victorville Area
SB-00528	1977	Hearn, Joseph E.	Archaeological - Historical Resources Assessment Zone 6 - Adelanto East Channel, Adelanto Area
SB-00612	1978	San Bernardino County Museum Association	An Archaeological - Historical Assessment for The Proposed System Improvements for A Water System Master Plan for Victor Valley County Water District
SB-00874	1979	Barker, James P., Carol H. Rector, and Philip J. Wilke	An Archaeological Sampling of The Proposed Allen-Warner Valley Energy System, Western Transmission Line Corridors, Mojave Desert, Los Angeles And San Bernardino Counties, California And Clark County, Nevada
SB-01051*	1980	GeoScientific Systems and Consulting	Final Report: Archaeological/Historical Assessment of George Air Force Base
SB-01175	1981	Lerch, Michael K.	Cultural Resources Assessment of Proposed Improvement Projects of Adelanto Road And Rancho Road, City Of Adelanto, San Bernardino County, California
SB-01219	1981	Hall, Matthew C. Philip J. Wilke, Doran L. Cart, and James D. Swenson	An Archaeological Survey of The Proposed Southern California Edison Ivanpah Generating Station, Plant Site, And Related Rail, Coal Slurry, Water and Transmission Line Corridors, San Bernardino County, California, And Clark County, Nevada
SB-01280	1982	Macko, Michelle E., Edward B. Weil, Jill Weisbord, and Jamie Lytle-Webb	Class Iii Cultural Resource Survey: Intermountain Power Project (Ipp), Intermountain - Adelanto Bipole I Transmission Line, Right-Of-Way, California Section
SB-01479	1985	Dames & Moore	Mead/Mccullough-Victorville/Adelanto Transmission Project Technical Report: Volume Iv, Cultural Resources
SB-01503	1985	Lerch, Michael K.	Cultural Resources Assessment of City of Adelanto Well Fields, Mojave River, San Bernardino County, California
SB-01504	1985	Greenwood, Roberta S. and John M. Foster	Cultural Resources Investigation for Los Angeles Department of Water and Power: Victorville-Rinaldi 500 Kv Transmission Line 1: Final Report
SB-01646	1987	Norwood, Richard H.	A Cultural Resource Survey for Add/Alter Boundary Fence, George Afb, Ca.
SB-01734	1987	Shackley, M. Steven, Rebecca McCorkle, Jan Wooley, and Robert E. Reynolds	Cultural and Paleontological Resources Survey: Us Sprint Fiber Optic Cable Project, Rialto, California To Las Vegas, Nevada

Table A
Previous Cultural Resource Studies in the Study Area

SCCIC Document #	Date	Author(s)	Title
SB-01851*	1989	Murray, John	Archeological Resource Assessment Completed for A 350+/- Acre Proposed Runway Construction Project on George Air Force Base, Victorville, California
SB-01907	1989	Taylor, Thomas T.	Archaeological Survey Report: Inyokern-Kramer 220kv Transmission Line Conducting Project: Tower Sites, Pulling Areas, Sleeve Areas and Wire Setups, Kern and San Bernardino Counties, California
SB-01909	1989	Hampson, R. Paul	Cultural Resource Assessment: Kramer-Victor 115kv Transmission Line Project
SB-01915	1963	Smith, Gerald A.	Archeological Survey of The Mojave River Area and Adjacent Regions
SB-02180	1983	Dorn, Ronald I.	Cation-Ratio Dating: A New Rock Varnish Age-Determination Technique
SB-02421	1991	Drover, Christopher E.	Environmental Impact Evaluation: An Archaeological Assessment of The Community Facilities District 90-1 Northern Sewer Trunk Project, Victorville, California
SB-02570	1990	Sheets, Robert and Craig Woodman	Archaeological Survey and Inventory Of George Air Force Base, California
SB-02644	1992	Yohe II, Robert M. and Robert E. Parr	An Archaeological Inventory of The Oro Grande Sewer Pipeline Alignment, Victorville, San Bernardino County, California
SB-02731	1993	Macko, Michael E., Jeanne D. Binning, David D. Earle, and Paul E. Langenwalter	National Register Eligibility Determinations for Historic Resources Along the Proposed At&T Lightguide System, Victorville To Bakersfield, Ca
SB-02735	1993	Yohe II, Robert M.	Archaeological Test Excavations Along the Oro Grande Sewer Pipeline Alignment, Victorville, San Bernardino County, Ca
SB-03164	1996	Alexandrowicz, J.Stephan, S.R. Alexandrowicz, A.A. Kuhner, R.A. Krautkramer, D. Ingram, and E. Knell	Cultural and Paleontological Resources Inventory for The Airbase Road Improvement Project, City of Victorville, San Bernardino County, Ca--Interim Report. 101pp
SB-03288	1997	Shepard, Richard and Jeanette A. McKenna	A Phase I Cultural Resources Investigation of Two 9 Acre Parcels and Associated Rights-Of-Way, Adelanto, Ca. 16pp
SB-03784	1997	Earth Tech	Cultural Resource Investigation for The Rail Alignment Property & Tce Property at George Afb, San Bernardino County, Ca. 53pp
SB-03785	1995	Sapnne, Larry	Cultural Resources Survey of Properties Proposed for Acquisition for Water Supply Improvements at George Afb, Ca. 6pp
SB-03797	2000	McKenna, Jeanette A.	A Report on Archaeological Monitoring Activities at The California Bio-Mass, Inc Project Area in Victorville, Ca. 14pp
SB-03799	1999	Self, William	Cultural Resource Assessment of High Desert Power Project, Victorville, San Bernardino County, Ca

Table A
Previous Cultural Resource Studies in the Study Area

SCCIC Document #	Date	Author(s)	Title
SB-04427	2003	Dahdul, Miriam	Historical/Archaeological Resources Survey Report: Southern California Logistics Airport Specific Plan Amendment & Rail Service Project in The City of Victorville, San Bernardino County, Ca. 86pp
SB-04428	2001	Love, Bruce	Identification & Evaluation of Historic Properties: Southern California Logistics Airport Runway 17/35 Extension To 15000 Feet, City of Victorville, San Bernardino County, Ca. 47pp
SB-04430	2003	Dahdul, Miriam	Identification & Evaluation of Historic Properties: Aircraft Storage & Maintenance Facility Project, Southern California Logistics Airport, City of Victorville, San Bernardino County, Ca. 35pp
SB-04431	2002	Bonner, Wayne H.	Records Search Results for Cingular Wireless Site Sb-163-02 (The Spectra Site Adelanto Site) Located At 107450 Adelanto Road, Adelanto, San Bernardino County, Ca. 6pp
SB-04432	2002	O'Connell, Keith	Results of Archaeological Survey Conducted at Proposed "Spruce" Verizon Wireless Tower Site, San Bernardino County, Ca. 13pp
SB-04433	2002	Duke, Curt	Cultural Resource Assessment: AT&T Wireless Services Facility No. D110a, San Bernardino County, Ca. 5pp
SB-04436	2003	Chadderdon, Thomas	A Phase I Archaeological Survey for The Proposed Energy Savings Performance Contracting Project at The Federal Corrections Complex, Victorville, San Bernardino County, Ca. 23pp
SB-04437	2001	Self, William	Waterline Construction Corridor Survey
SB-04442	2002	McKenna, Jeanette A.	Results of A Paleontological & Archaeological Monitoring Program Along A Portion of Shay Road, Victorville, San Bernardino County, Ca. 14pp
SB-04446	2003	McKenna, Jeanette A.	Ca-Sbr-72 Site Review.7pp
SB-04447	1991	Woodward, Craig, and Roger Hatheway	George AFB, Ca: WWII Building/Facilities Architectural & Historic Evaluation Study. 3 Volumes. 778pp
SB-04452	2003	Dice, Michael, and Christeen Tanaguchi	Phase I Survey Results for AT&T Bechtel Telecommunications Facility 950024006a (Ladwp Vv), 17299 National Trails Highway, Victorville, San Bernardino County, Ca. 9pp
SB-05158	2005	Ahmet, Koral and Michael Lerch	Deteriorated Pole Replacement Project Archaeological Survey of Ten Pole Locations on The Poco 33kv, Cement 33kv, Rabbit 12kv, Sky Hi 12 kV, and Cushenbury 33kv Transmission Lines, San Bernardino County, California
SB-05205	2005	McKenna, Jeanette A.	Archaeological Investigations and Mitigation of Impacts to Ca-Sbr-72, A Prehistoric Archaeological Site Adjacent to The California Bio Mass Inc Facility, Victorville, San Bernardino County California.
SB-05223*	2004	Mirro, Michael	Cultural Resources Survey Of 39 Acres on the Keily Property for The Natural Resources Conservation Service

Table A
Previous Cultural Resource Studies in the Study Area

SCCIC Document #	Date	Author(s)	Title
SB-05236	2006	Bholat, Sara and Evelyn Chandler	Cultural Resources Investigation of a 10-Acre Property East of U.S. Highway 395, City of Adelanto, San Bernardino County, California.
SB-05337*	2006	Jordan, Stacey C. and Andrea M. Craft	Archaeological Survey Report for the Southern California Edison Company Replacement of One Deteriorated Pole on the Portland 12kV Circuit, United States Army Corps of Engineers, San Bernardino County, California.
SB-05373	2006	Dahdul, Mariam, Laura Henskey	Identification and Evaluation of Historic Properties: Southern California Logistics Airport Fuel Farm, City of Victorville, San Bernardino County, California
SB-05435	2006	Nationwide Infrastructure Support Technical Assistance Consultants	Cultural Resources Technical Report, Groundwater Wells, Mojave Water District
SB-05440	2007	McKenna, Jeanette A.	Proposed Improvements and Restoration of Mojave River Bank at Well Site, VVWRA
SB-05508*	2003	Estes, Allen, James Allen, and William Self	Final Cultural Resources Report: High Desert Power Project, Victorville, San Bernardino County, California.
SB-05698	2007	Hogan, Michael	Historical/Archaeological Resources Survey Report: US Highway 395 Realignment EIR, Victorville Area, San Bernardino County, California.
SB-05766	1997	Love, Bruce	Cultural Resources Report: Bakersfield—Rialto Fiberoptic Line Project, Kern, Los Angeles and San Bernardino Counties, California.
SB-05808	2007	Gust, Sherri, Amy Glover, and Kim Scott	Paleontological and Archaeological Assessment Report for The Adelanto Gateway Project, City Of Adelanto, California
SB-05862	2007	Hogan, Michael	Archaeological and Paleontological Monitoring of Earth-Moving Activities, Oro Grande Project, Victorville, San Bernardino County, California
SB-05863	2007	Allan, James M.	Archaeological Survey of the Potable Water Line, Victorville 2 Hybrid Power Project, Victorville, CA
SB-06005	2008	Encarnacion, Deirdre and Daniel Ballester	Historical/ Archaeological Resources Survey Report: Victor Valley Wastewater Reclamation Authority Administration Building Project, City of Victorville, San Bernardino County, California
SB-06201	2008	Encarnacion, Deirdre, Daniel Ballester, and Laura H. Shaker	Identification and Evaluation of Historic Properties: Mojave River Weed Eradication Project, Victorville Area, San Bernardino County, California
SB-07025*	2010	Garrison, Andrew	Phase I Cultural Resource Assessment for The Proposed East Side Electrical Infrastructure, In the City of Victorville, San Bernardino County, California
SB-07054*	2009	Zambrano, Ximena	EPA Grant XP-96941001-0 Elevated Recycled Water Tank
SB-07094*	2009	McGlade, John A.	Section 106 Consultation for Construction of Two Water Distribution Pipelines, Innovation Way, Victorville, CA
SB-07095*	2009	McGlade, John A.	Section 106 Consultation for Construction of Gas Pipeline, Southern California Logistics Airport, Victorville, CA

Table A
Previous Cultural Resource Studies in the Study Area

SCCIC Document #	Date	Author(s)	Title
SB-07120	2009	Weatherbee, Matthew	Phase I Archaeological Assessment for Various Water Projects in the City of Victorville, San Bernardino County, California.
SB-07121*	2007	Baker, Cindy L. and Mary L. Maniery	Cultural Resources Inventory and Evaluation of U.S. Army Reserve 63rd Regional Readiness Command Facilities.
SB-07168*	2012	McKenna, Jeanette A.	A Phase I Cultural Resources Investigation for The Proposed Air Expressway Sewer Lift Station and Force Main Project In The City Of Victorville, San Bernardino County, California
SB-07191	2006	Horne, Melinda C. and Dennis P. McDougall	A Phase I Survey of Six Archaeological Sites and Phase II Evaluation of Three Archaeological Sites Located in the Turner Springs Area, Western San Bernardino County, California for the Southern California Logistics Airport Rail Service Project.
SB-07381	2011	Wilson, Stacie, M.K. Meiser, and Theodore G. Cooley	Cultural Resources Class III Survey Report for the Proposed Mojave Solar Project and Lockhart Substation Connection and Communication Facilities, San Bernardino County, California.
SB-07706	2006	McKenna, Jeanette A.	Archaeological/Paleontological Monitoring Program, VVWRA Expansion.
SB-07899	2013	Strudwick, Ivan	Cultural Resource and Paleontology Monitoring Report - SCE Sandlot (Water Valley) Project
SB-07918	2015	Earle, David D.	Settlement in the Mojave River Corridor and the Clan Territory of Topipabit: Ethnohistoric and Ethnographic Contexts of Sites CA-SBR-67 and CA-SBR-12336, Mojave Heights, San Bernardino County, CA
SB-07953	2007	Estes, Allen, Thomas Young, Nazih Fino, Aimee Arrigoni, Eric Strother, and James Allan	Cultural Resource Assessment Report Victorville 2 Hybrid Power Project San Bernardino County, California
SB-07960	2010	Self, William	Class III Cultural Resources Survey Addendum for the Proposed Calnev Expansion Project, California Portion San Bernardino County, California
SB-07969*	2009	Wetherbee, Matthew	Phase I Archaeological Assessment for Various Water Projects in the City of Victorville San Bernardino County, California
SB-07982	2013	Dietler, Sara, Elizabeth Denniston, and Steven Treffers	Cultural Resources Impact Mitigation Analysis for the Adelanto North 2035 Sustainable Community Plan, City of San Bernardino County, California
SB-07998	2013	Brunzell, David	Cultural Resources Assessment: Expressway Solar Project, City of Victorville, San Bernardino County, California
SB-08161	2014	Gust, Sherri M.	Combined Paleontological Identification and Evaluation Report Without Survey for The High Desert Corridor Freeway, Los Angeles And San Bernardino Counties, California

Table A
Previous Cultural Resource Studies in the Study Area

SCCIC Document #	Date	Author(s)	Title
SB-08162	2014	Sikes, Nancy, Dustin Keeler, Molly Valasik, and Sherri M Gust	Extended Phase I Testing Report P-19-004366, P-36-000066 (Ca-Sbr-66), P-36-000182 (Ca-Sbr-182), And P-36-012609 (Ca-Sbr-12336), High Desert Corridor Project from Sr 14 To Sr 18 Los Angeles And San Bernardino Counties, California, 07-La/ 08-Sbr Ea No. 116720
SB-08162 A	2014	Sikes, Nancy and Sherri M Gust	Extended Phase I Testing Proposal, P-19-004366, P-36-000066 (CA-SBR-66), P-36-000182 (CA-SBR-182) and P-36-012609 (CA-SBR-12336), High Desert Corridor/ SR 138 Widening Project from SR 14 to SR 18, Los Angeles and San Bernardino Counties, California, 07-LA/PM 48.0 to SR 138 EA No. 116720
SB-08163	2014	Gust, Sherri, Victoria Harvey, Kim Scott, Dustin Keeler, Tadhg Kirwan, Nancy Sikes, David Earle, Karolina Chmiel, Mark C. Robinson, and Catharine M. Wood	Archaeological Survey Report for The High Desert Corridor, Los Angeles & San Bernardino Counties, California, 07-La/ 08-Sbd, Sr-14 To Sr-18, Ea 116720
SB-08163 A	2014	Earle, David D.	Historic Context and Potential National Register Eligibility of Archaeological Sites at Turner Springs, San Bernardino County
SB-08164	2014	Gust, Sherri M., Tadhg Kirwan, and Lynn Furnis	Extended Phase I Testing and Phase Ii Evaluation Proposal, High Desert Corridor/ Sr 138 Widening Project from Sr 14 To Sr 18 Los Angeles And San Bernardino Counties, California, 07-La/Pm 48.0 To Sr 138 Ea No. 116720
SB-08165	2015	Gust, Sherri M., Lynn Furnis, Justin Lev Tov, Ian Seharlotta, Desiree Martinez, and Capl'ice "Kip" Harper	Preliminary Historic Property Treatment Plan for The High Desert Corridor Project Sr-14 To Sr-18 Los Angeles And San Bernardino Counties, California, 07-La/ 08-Sbd Ea 116720, Efis 07-1200-0035
SB-08165 A	2015	Cogstone Resource Management, Inc.	HDC Shell Bead Analysis
SB-08165 B	2015	Martinez, Desiree	Lithic Analysis by Desiree Martinez
SB-08165 C	2015	Cogstone Resource Management, Inc.	Reflectance Transformation Imagery (Rti) Analysis
SB-08165 E	2015	Cogstone Resource Management, Inc.	Variable Pressure Scanning Electron Microscopy (Vpsem) Analysis
SB-08166	2014	Riches, Mark	Geophysical Investigation for The High Desert Corridor SR-138 Widening Project in Victorville, California
SB-08167	2014	Sikes, Nancy	Historic Property Survey Report for The High Desert Corridor, Los Angeles & San Bernardino Counties, California, 07-La/ 08-Sbd, Sr-14 To Sr-18, Ea 116720 Efis 07-1200-0035

* Studies that involved portions of the Project area.

APPENDIX B

Cultural Resource Site Records

APPENDIX C

Native American Heritage Commission Sacred Lands File Search

Sacred Lands File & Native American Contacts List Request

Native American Heritage Commission

1550 Harbor Boulevard, Suite 100

West Sacramento, CA 95691

916-373-3710

916-657-5390 – Fax

nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Date: January 25, 2019

Project: So Cal Logistics Center Project (AE Job#3995)

County: San Bernardino

USGS Quadrangle Name: Adelanto and Victorville

Township: 6 North **Range:** 5 West **Section(s):** 22, 23, 24, 25, 26, 27

Company/Firm/Agency: Applied EarthWorks, Inc.

Contact Person: Joan George

Street Address: 3550 East Florida Avenue, Suite H

City: Hemet **Zip:** 92544

Phone: (951) 766-2000

Fax: (951) 766-0020

Email: jgeorge@appliedearthworks.com

Project Description: The project proposes development within the existing Southern California Logistics Center. The project will result in ground disturbance. Applied EarthWorks, Inc. has been contracted to conduct a cultural resource study of the Project area in accordance with the California Environmental Quality Act (CEQA).

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Phone: (916) 373-3710
Email: nahc@nahc.ca.gov
Website: <http://www.nahc.ca.gov>
Twitter: @CA_NAHC



January 28, 2019

Joan George
Applied EarthWorks

VIA Email to: jgeorge@appliedearthworks.com

RE: So Cal Logistics Center Project, San Bernardino County

Dear Ms. George:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our lists contain current information. If you have any questions or need additional information, please contact me at my email address: steven.quinn@nahc.ca.gov.

Sincerely,

A handwritten signature in blue ink that reads "Steven Quinn".

Steven Quinn
Associate Governmental Program Analyst

Attachment

**Native American Heritage Commission
Native American Contact List
San Bernardino County
1/28/2019**

Chemehuevi Indian Reservation

Charles Wood, Chairperson
P.O. Box 1976 1990 Palo Verde Drive Chemehuevi
Havasupai Lake, CA, 92363
Phone: (760) 858 - 4219
Fax: (760) 858-5400
chairman@cit-nsn.gov

Colorado River Indian Tribes

Dennis Patch, Chairman
26600 Mojave Road Chemehuevi
Parker, AZ, 85344 Mojave
Phone: (928) 669 - 9211
Fax: (928) 669-1925
amanda.barrera@crit-nsn.gov

Kern Valley Indian Community

Robert Robinson, Chairperson
P.O. Box 1010 Kawaiisu
Lake Isabella, CA, 93283 Tubatulabal
Phone: (760) 378 - 2915 Western
bbutterbredt@gmail.com Shoshone

Kern Valley Indian Community

Julie Turner, Secretary
P.O. Box 1010 Kawaiisu
Lake Isabella, CA, 93240 Tubatulabal
Phone: (661) 340 - 0032 Western
Shoshone

Morongo Band of Mission Indians

Robert Martin, Chairperson
12700 Pumarra Road Cahuilla
Banning, CA, 92220 Serrano
Phone: (951) 849 - 8807
Fax: (951) 922-8146
dtorres@morongo-nsn.gov

Morongo Band of Mission Indians

Denisa Torres, Cultural Resources Manager
12700 Pumarra Road Cahuilla
Banning, CA, 92220 Serrano
Phone: (951) 849 - 8807
Fax: (951) 922-8146
dtorres@morongo-nsn.gov

San Fernando Band of Mission Indians

Donna Yocum, Chairperson
P.O. Box 221838 Kitanemuk
Newhall, CA, 91322 Serrano
Phone: (503) 539 - 0933 Tataviam
Fax: (503) 574-3308
ddyocum@comcast.net

San Manuel Band of Mission Indians

Lee Clauss, Director of Cultural Resources
26569 Community Center Drive Serrano
Highland, CA, 92346
Phone: (909) 864 - 8933
Fax: (909) 864-3370
lclauss@sanmanuel-nsn.gov

San Manuel Band of Mission Indians

Lynn Valbuena, Chairwoman
26569 Community Center Drive Serrano
Highland, CA, 92346
Phone: (909) 864 - 8933
jcoin@sanmanuel-nsn.gov

Serrano Nation of Mission Indians

Goldie Walker, Chairperson
P.O. Box 343 Serrano
Patton, CA, 92369
Phone: (909) 528 - 9027

Tubatulabals of Kern Valley

Robert L. Gomez, Chairperson
P.O. Box 226 Tubatulabal
Lake Isabella, CA, 93240
Phone: (760) 379 - 4590
Fax: (760) 379-4592

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed So Cal Logistics Center Project, San Bernardino County.

**Native American Heritage Commission
Native American Contact List
San Bernardino County
1/28/2019**

***Twenty-Nine Palms Band of
Mission Indians***

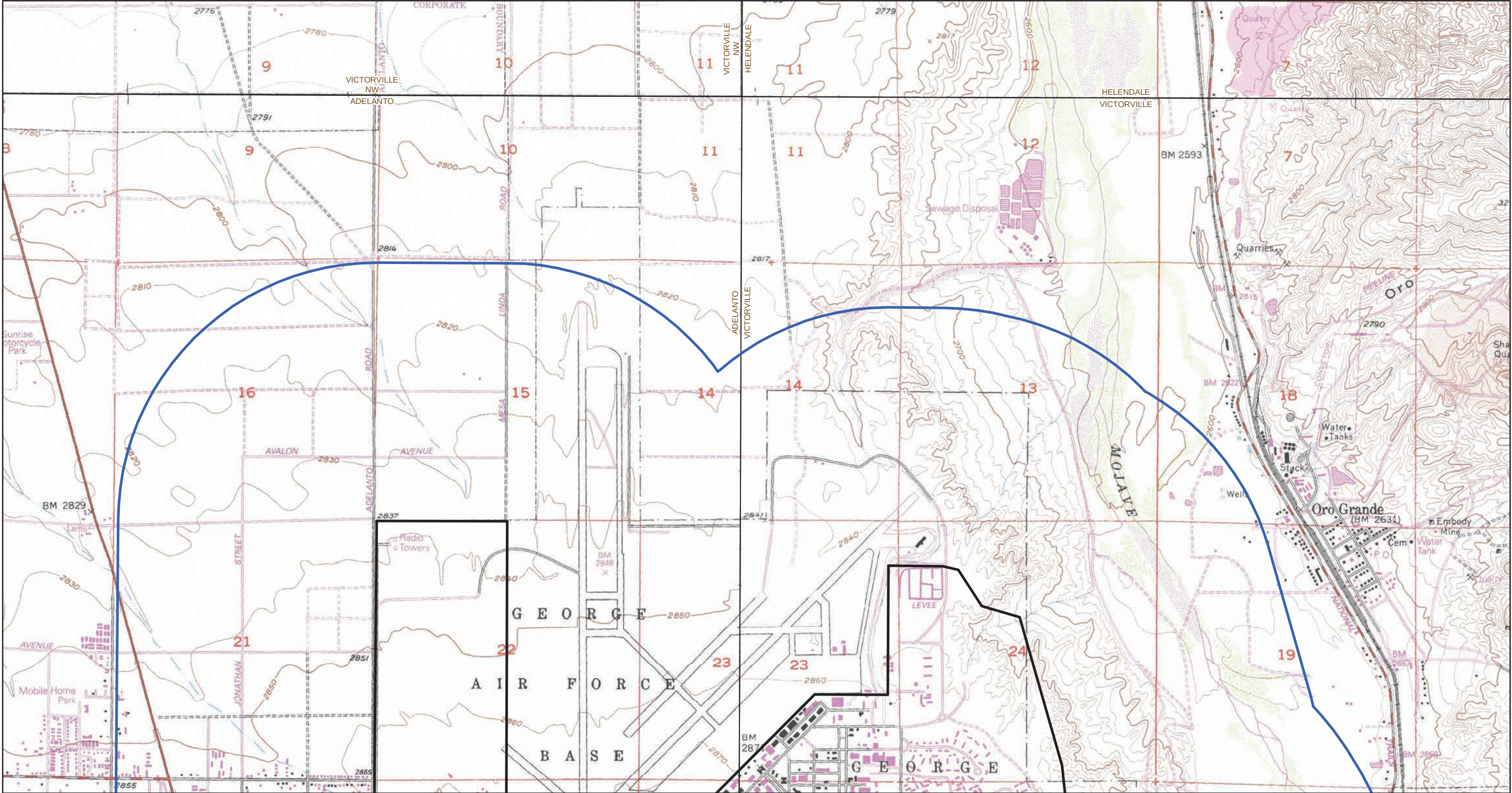
Darrell Mike, Chairperson
46-200 Harrison Place Chemehuevi
Coachella, CA, 92236
Phone: (760) 863 - 2444
Fax: (760) 863-2449
29chairman@29palmsbomi-
nsn.gov

***Twenty-Nine Palms Band of
Mission Indians***

Anthony Madrigal, Tribal Historic
Preservation Officer
46-200 Harrison Place Chemehuevi
Coachella, CA, 92236
Phone: (760) 775 - 3259
amadrigal@29palmsbomi-nsn.gov

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

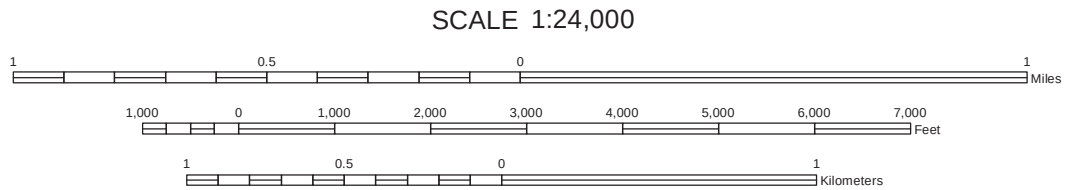
This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed So Cal Logistics Center Project, San Bernardino County.



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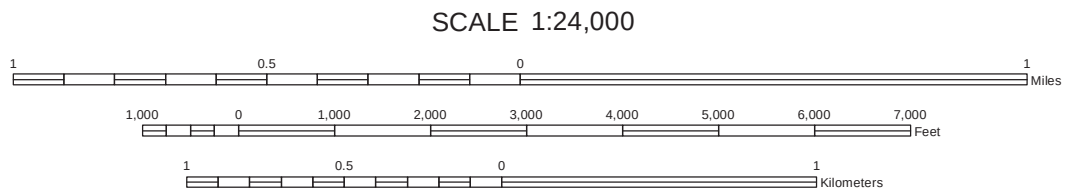
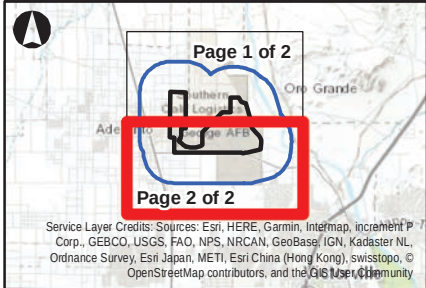
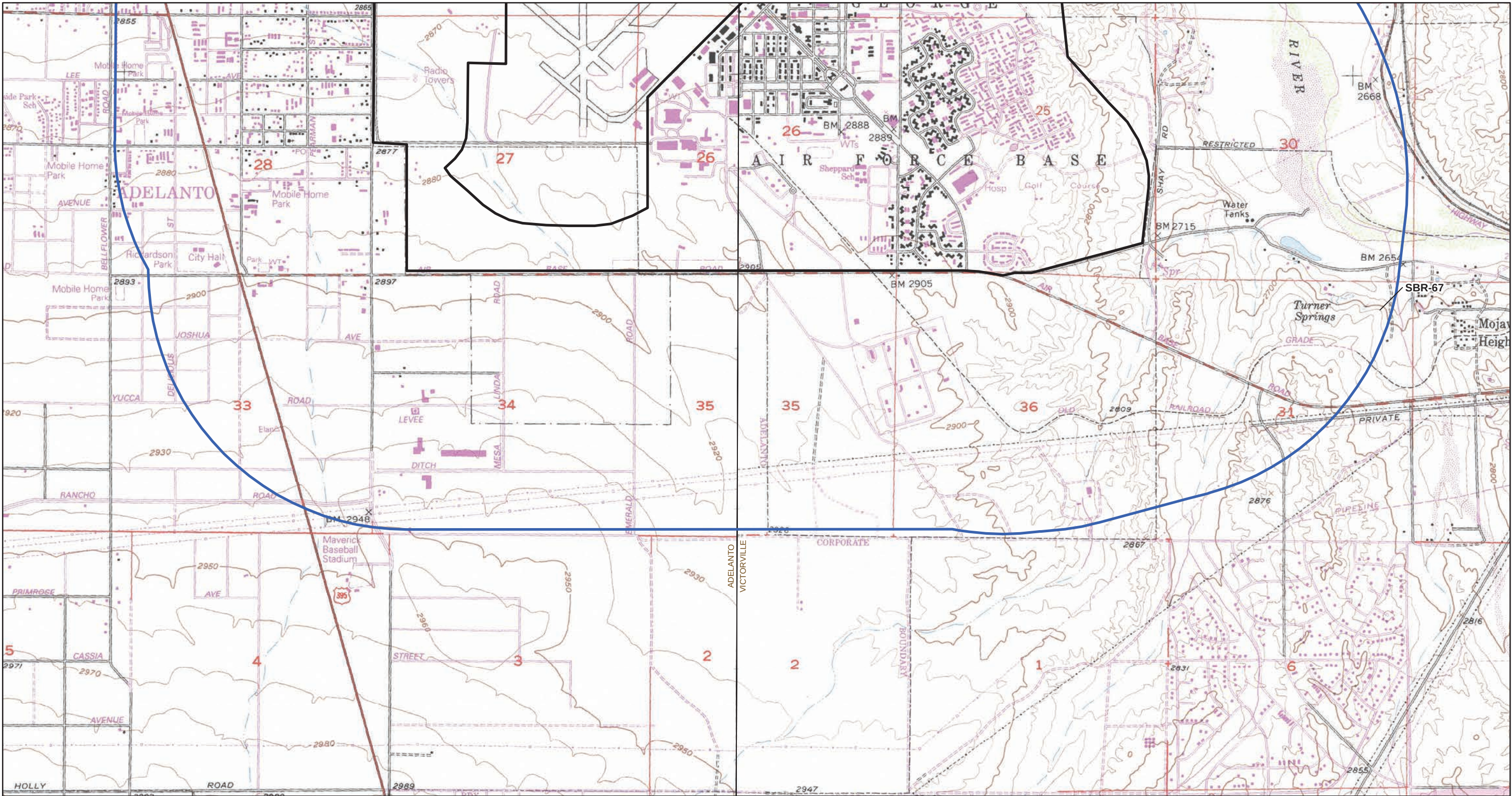
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- Legend**
- Survey Area
 - Study Area (RS limit)

T. 6 N./R. 4 W., Sections 18, 19, 30, and 31; T.6 N./R. 5 W., Sections 10, 13-16, 21-28, and 33-36; SBB&M Adelanto and Victorville (both 1956, revised 1993), CA 7.5' USGS Topographic Quadrangles



- Legend**
- Survey Area
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T. 6 N./R. 4 W., Sections 18, 19, 30, and 31; T.6 N./R. 5 W., Sections 10, 13-16, 21-28, and 33-36; SBB&M Adalanto and Victorville (both 1956, revised 1993), CA 7.5' USGS Topographic Quadrangles