Phase I Cultural Resource Assessment for the Tentative Tract Map 20525 Project, City of Victorville, San Bernardino County, California

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USGS 7.5′ Topographic Quadrangle: Victorville, California
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MANAGEMENT SUMMARY

Three Arch Investment Corporation, 1 (Developer) proposes the development of a 112 single-family residences on approximately 30 acres of vacant land in the city of Victorville, San Bernardino County, California. At the request of the Developer, Applied EarthWorks, Inc. (Æ) completed a Phase I cultural resource assessment for the Tentative Tract Map Number 20525 Project (Project) in accordance with the California Environmental Quality Act (CEQA). The City of Victorville is the lead agency for compliance with CEQA.

This report summarizes the methods and results of the Phase I cultural resource investigation of the Project area. Æ's assessment included a records search and literature review, communication with Native American tribal representatives, and an archaeological survey of the Project area. The purpose of the investigation was to determine the potential for the proposed Project to impact cultural resources eligible for or listed in the California Register of Historical Resources.

The literature and records search by the South Central Coastal Information Center of the California Historical Resources Information System indicates that 21 previous cultural resource investigations and 13 cultural resources are documented within a 0.5-mile radius of the Project area. None of these previously identified cultural resources is within the Project area.

As part of the cultural resource investigation, Æ sent a request to the Native American Heritage Commission for a search of their Sacred Lands File. Results of the search indicate that there are no known Native American cultural resources within the Project area. Æ contacted Native American individuals and organizations to elicit information on Native American resources or concerns within the Project area, if any. Of the seven groups and/or individuals contacted, Æ received responses from representatives of two—Quechan Tribe of the Fort Yuma Reservation and Yuhaaviatam of San Manuel Nation (formerly known as the San Manuel Band of Mission Indians).

Æ Associate Archaeologist Andrew DeLeon completed an intensive pedestrian survey of the Project area on April 21, 2022. No cultural resources were encountered within the Project area during this Phase I survey. The terrain throughout the entire Project area has been disturbed by modern dumping and off-road vehicles. No buried paleosols (Ab horizons) are projected for the soils mapped within the Project area, and the mapped soil series are thought to have a low sensitivity for buried archaeological sites. Therefore, intact and significant buried archaeological deposits are unlikely, and no further cultural resource management of the Project area is recommended.

Field notes documenting the current investigation are on file at Æ's Hemet office. A copy of the final report also will be submitted to the South Central Coastal Information Center.

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1
INTRODUCTION

Three Arch Investment Corporation, 1 (Developer) proposes the development of a single-family residential community on approximately 30 acres of vacant land in the city of Victorville, San Bernardino County, California. At the request of the Developer, Applied EarthWorks, Inc. (Æ) completed a Phase I cultural resource assessment for the Tentative Tract Map Number 20525 Project (Project) in accordance with the California Environmental Quality Act (CEQA). The City of Victorville (City) is the lead agency for compliance with CEQA.

M. Colleen Hamilton, M.A., Registered Professional Archaeologist (RPA 12588), served as Æ's principal investigator and was responsible for overall quality control. Æ Senior Archaeologist Joan George, B.S., Registered Archaeologist (RA 28093) served as project manager. Æ Associate Archaeologist Andrew DeLeon, M.A. (RPA 17087), conducted the fieldwork for the assessment.

1.1 PROJECT LOCATION AND DESCRIPTION

The Project is in the central portion of the city of Victorville (Figure 1-1) west of Interstate 15. Specifically, the Project is within Assessor's Parcel Number 0394-031-04, in the northeast quadrant of the intersection of Mojave Drive and Amethyst Road within the southwest quarter of Section 12, Township 5 North, Range 5 West, as shown on the Victorville, California, 7.5-minute U.S. Geological Survey (USGS) topographic quadrangle map (Figure 1-2). Elevation across the Project area ranges slightly between approximately 2,940 and 2,970 feet above mean sea level.

The Project entails the development of 112 single-family residential lots with an average lot size of 7,677 square feet. Five lettered lots also will be established: Lots A–C will be streetside landscaping totaling approximately 21,324 square feet. Lot D will be a water-quality management plan (WQMP) basin covering approximately 17,912 square feet, and Lot E will be a second WQMP basin of 9,984 square feet. Ancillary actions include half-width road improvements to Mojave Drive and Amethyst Road along the Project frontage. Primary access will be provided to the Project via two access points along Amethyst Road. Tawney Ridge Lane will be extended from its current terminus 1,203 feet west of the Project to intersect with Amethyst Road in order to provide secondary access for the fire department. Grading, excavation, and sediment removal for housing pads will occur to depths of approximately 4 feet. Excavation depths for utilities will average approximately 8 feet, and the WQMP basin in the northwest corner of the Project has an approximate depth of 12 feet below the existing ground surface.

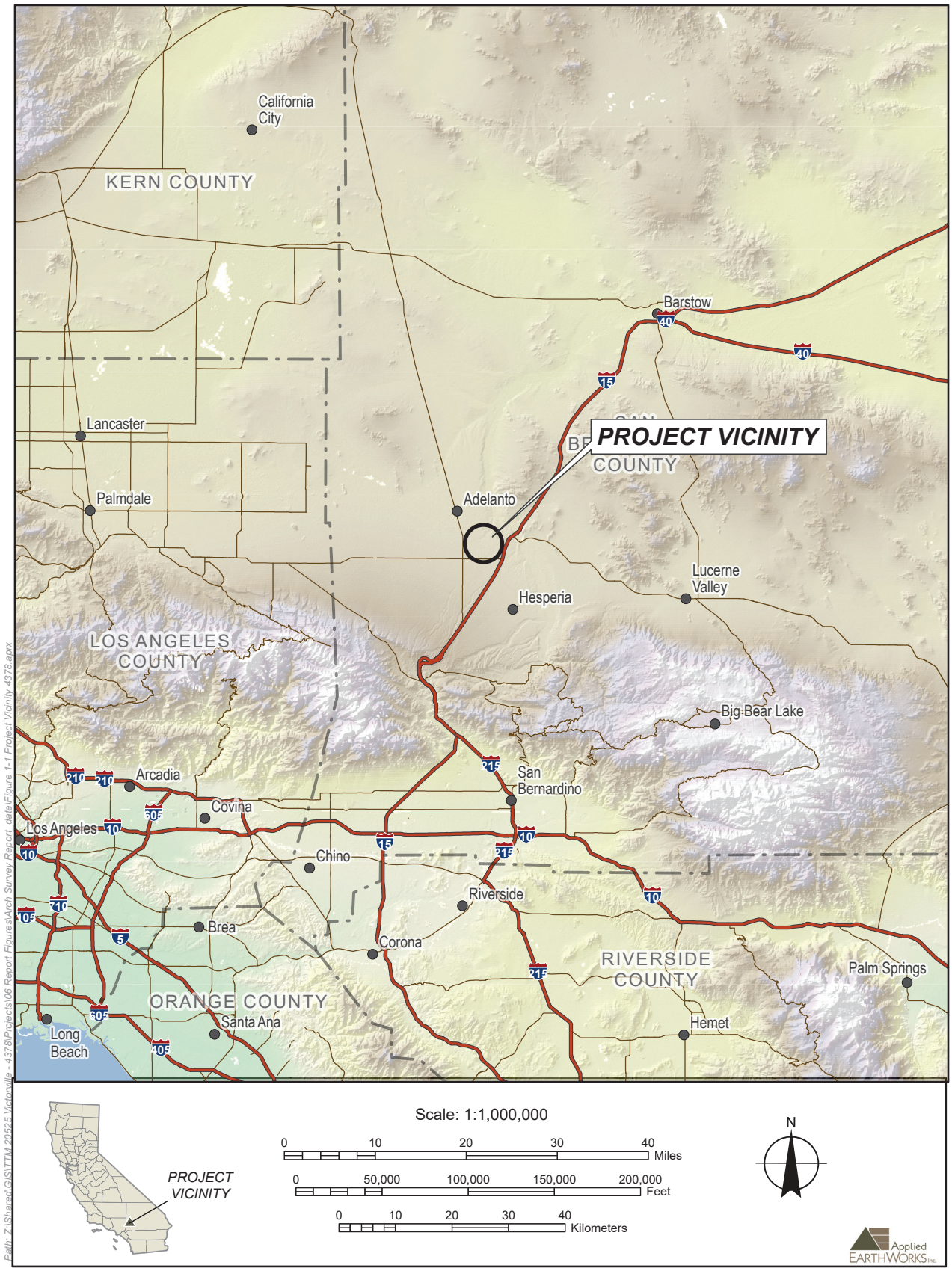


Figure 1-1 Project vicinity in San Bernardino County, California.

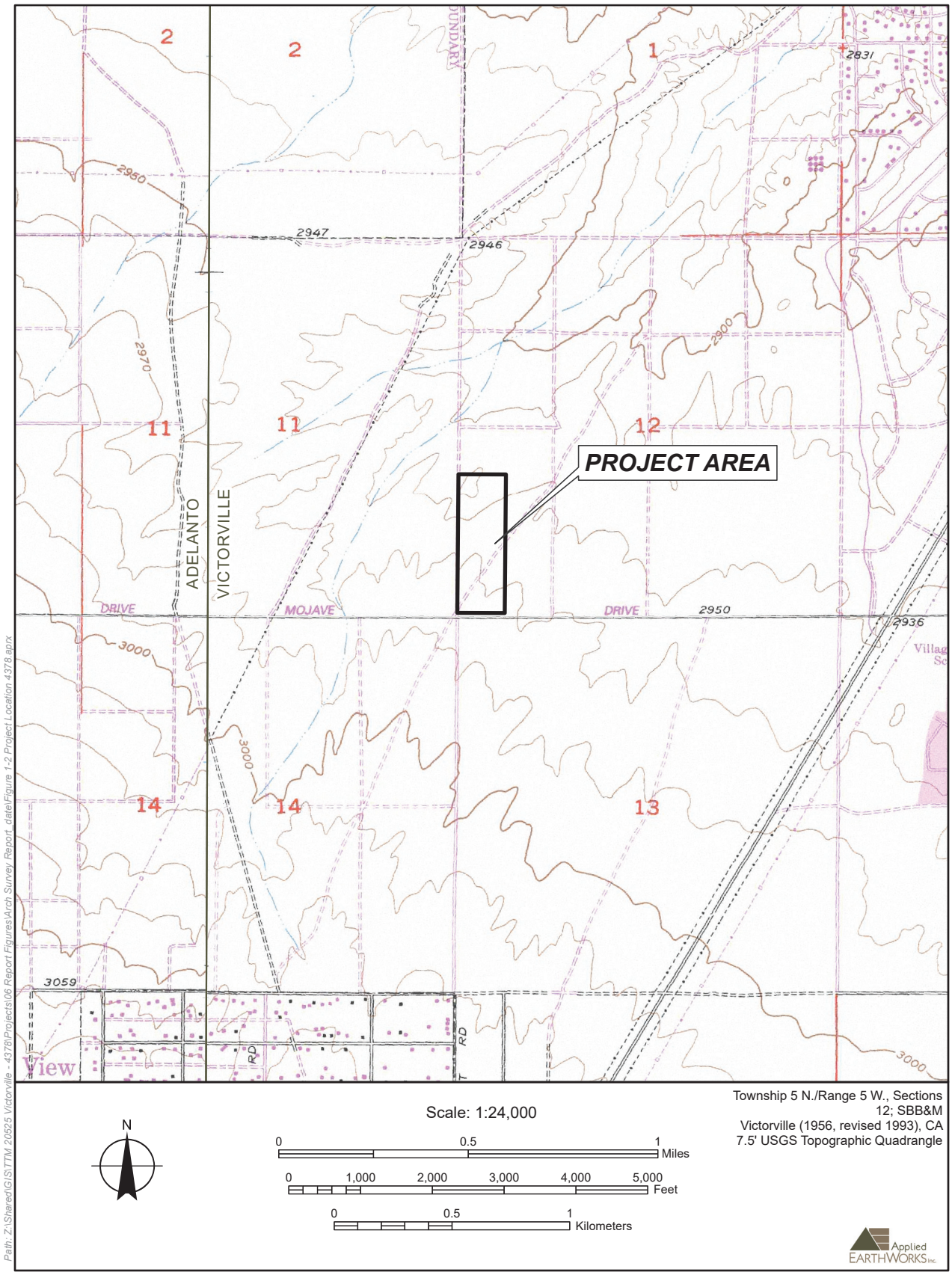


Figure 1-2 Project location on USGS Victorville 7.5-minute topographic quadrangle.

1.2 REGULATORY CONTEXT

The Project requires discretionary approval from the City 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 is considered historically significant if it is included in a local register of historical resources, is listed on or determined eligible for listing on the California Register of Historical Resources (CRHR), or if it meets the requirements for listing on the CRHR under any one of the following criteria of historical significance (Title 14, California Code of Regulations [CCR], Section 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. Prehistoric and historical archaeological sites, as well as standing structures, buildings, and objects deemed historically significant and sufficiently intact (i.e., qualified historical resources), must be considered in project planning and development.

A project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have an impact on the environment (14 CCR 15064.5[b]). The lead agency is responsible for identifying potentially feasible measures to reduce impacts to a less than significant level (14 CCR 15064.5[b]4).

1.3 REPORT ORGANIZATION

This report documents the results of a cultural resource investigation of the proposed Project area. Chapter 1 describes the Project and its location, defines the scope of cultural resource investigations, and states 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. Chapter 4 summarizes the results of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) search and Native American communications. The field survey methods and results are discussed in Chapter 5. Cultural resource management recommendations are provided in Chapter 6, and bibliographic references cited throughout the report are listed in Chapter 7. Results of the SLF search and correspondence with Native American groups are included as Appendix A.

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 resources 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 100–110 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 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 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, yucca, Mormon tea, bursage, range ratany, and galleta grass. 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, 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 1997). Mammals also include blacktail jackrabbit, desert cottontail, Botta's pocket gopher, Panamint kangaroo rat, Merriam's kangaroo rat, and coyote. Bird species include rock dove, lark, raven, and black-throated sparrow. In addition, desert tortoise is found in the Victor Valley, as are a variety of snakes and lizards.

The Project area includes four soil series (Table 2-1) as mapped by the U.S. Department of Agriculture Natural Resources Conservation Service. Bryman, Helendale, and Lavic soils are Aridisols, a taxonomic order of soils that lacks sufficient water to sustain mesophytic plants (Soil Survey Staff 2022). Kimberlina soils are Entisols, a taxonomic order of soils that consist mostly of minerals and are not in place long enough to form diagnostic horizons (Soil Survey Staff 1999).

Table 2-1
Soil Series and Sensitivity as Mapped in the Project Area

Name	Order	General Description	Buried Site Sensitivity
Bryman	Aridisol	Loamy fine sand, 2–5 percent slopes	Moderate
Helendale	Aridisol	Loamy sand, 2–5 percent slopes	Low
Kimberlina	Entisol	Loamy fine sand, 2–5 percent slopes	Low
Lavic	Aridisol	Fine sand, 0–5 percent slopes	Low

Based on the mapped soil data within the Project area, the archaeological sensitivity is low. Although the Bryman, Helendale, and Lavic soils contain well-defined B horizons, none of the

mapped soils contain buried A (Ab) horizons (Soil Survey Staff 2003, 2015a, 2015b, 2015c), which typically foster an environment conducive to intact buried archaeological deposits.

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 12,000 to 10,000 B.P.)

As the glaciers retreated under comparatively warm conditions between 12,100 B.P. and 10,100 calibrated years 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 (circa 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, although 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 (circa 10,000 to 8500 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, and hunt for large and small game. 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.

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. 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, gravers, perforators, and heavy core tools (Sutton et al. 2007:234).

2.2.3 Middle Holocene (circa 8500 to 4000 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 Pinto Complex

The Pinto Complex represents a broad continuity in the use of flaked stone technology, including less reliance on obsidian and cryptocrystalline silicates, 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 remain in 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 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 (circa 4000 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; 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-twig 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 cryptocrystalline silicates. Archaeological assemblages attributed to the Gypsum Complex have been radiocarbon dated to roughly 4000–1800 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 circa 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 circa 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 type 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 (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 1200–1000 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 Springs Period (Warren 1984:423).

The Rose Spring (Saratoga Springs) 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 Springs Period. Toward the end of the Rose Spring/Saratoga Springs 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), brown ware 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 cryptocrystalline silicates.

Evidence of large occupation sites, representing semipermanent and permanent villages, characterizes Late Prehistoric settlement strategies. Large, complex house pit 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 residents of 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, which first appeared 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 850–800 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 (Pigniolo 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 subfamily 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. 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 (2005:1) states:

> 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."

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 et al. 1978). The frequency of Mojave long-distance travel through the region created an unusual situation, as they often recognized sacred places that were 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 1985:III:167:20). Gifts of shell beads and other goods bestowed upon the Vanyumé as reciprocal exchanges for this hospitality 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 earliest 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 toward 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, natives attempted to escape missions by seeking refuge with interior tribes in the southern San Joaquin Valley or the Mojave Desert and adjacent mountains. This impacted the existing tribes in these areas because Spaniards from the mission sought to bring these people back to the mission.

2.4.2 Mexican (Rancho) Period: 1821 to 1848

During the years of Mexican rule (1821–1848), the Upper Mojave River region appears to have remained relatively beyond 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 overland. 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 1953:253), with warnings from the Mexican authorities to never return to California. Despite the warnings, Smith returned to the San Bernardino Valley in August 1827, again by way of the Cajon Pass. Detained for several months by the Mexican authorities and cautioned to 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 after war with Mexico ended in 1846 (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 Spanish American 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 (Elliott 1965:27). 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. Those Indians surviving on rancherías throughout the valley apparently experienced mainly a change of masters, from padre to Californio ranchero.

2.4.3 American Occupation: 1848 to Present

Developments in the middle Mojave River Valley during the period of increased American occupation is closely tied to its location along a major travel corridor. As discussed above, this area was used as a trade route during both prehistoric and early historic times. 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 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 at the site; the station was subsequently burned by the Paiute Indians in 1863.

A great impetus to increase population by Americans came with the arrival of the California Southern Railroad. A subsidiary of the Atchison, 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 locomotives 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-Roberts 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 became the scene of mining activity. Gold and silver were 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 needed to process the ore (Vredenburgh 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 1929:190–197, 381–384). In both 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).

2.4.4 Victor Valley and the City of Victorville

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 railroad 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 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 became 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 recreational 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. Under this desert homestead program, up to 5 acres of public land could be purchased for $10 per acre, and was classified as 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 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 135,000 and an area of approximately 74 square miles (City of Victorville 2022).

3
SOURCES CONSULTED

3.1 CULTURAL RESOURCE LITERATURE AND RECORDS SEARCH

On April 5 and April 12, 2022, prior to the field survey of the Project area, Æ staff conducted a literature and records search at the South Central Coastal Information Center (SCCIC) of the California Historical Resource Information System, 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 an area encompassing a 0.5-mile-wide radius around the Project area (Study Area).

Results of the records search indicated 21 cultural resource investigations have been conducted previously within the Study Area (Table 3-1). Two of those investigations specifically involved the western portion of the Project area (SB-03801 and SB-05508), but those previous surveys covered less than 10 percent of the Project area.

Table 3-1
Previous Cultural Resource Studies in the Study Area

SCCIC Reference #	Author(s)	Date	Title
SB-00612	San Bernardino County Museum Association	1978	An Archaeological/Historical Assessment for the Proposed System Improvements for a Water System Master Plan for Victor Valley County Water District
SB-00874	Barker, James P., Carol H. Rector, and Philip J. Wilke	1979	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-01219	Hall, Matthew C., Philip J. Wilke, Doran L. Cart, and James D. Swenson	1981	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-02421	Drover, Christopher	1991	Environmental Impact Evaluation: An Archaeological Assessment of the Community Facilities District 90-1 Northern Sewer Trunk Project, Victorville, California
SB-03799	Self, William	1999	Cultural Resource Assessment of High Desert Power Project, Victorville, San Bernardino County, CA
SB-03800	Self, William	2002	Archaeological Survey of Five Proposed Well Sites, San Bernardino County, California, High Desert Power Plant Project
SB-03801*	Estes, Allen, James Allan, and William Self	2002	Archaeological Survey of Proposed Well Sites H-N & Water Pipeline Extension, High Desert Power Project, Victorville, San Bernardino County, CA
SB-04437	Self, William	2001	Waterline Construction Corridor Survey

Table 3-1
Previous Cultural Resource Studies in the Study Area

SCCIC Reference #	Author(s)	Date	Title
SB-04438	Cotterman, Cary, Evelyn N. Chandler, Roger D. Mason, and E. Bruce Lander	2004	Archaeological and Paleontologic Monitoring of Brentwood Planned Community, Victorville, San Bernardino County, CA
SB-04440	Reynolds, Robert E., and Riordan Goodwin	2003	Cultural & Paleontological Resources Assessment: Lexington Tract 16479, City of Victorville, San Bernardino County, CA
SB-04443	Mckenna, Jeanette A.	2004	A Phase I Cultural Resources Investigation for the Taft Corporation Property in the City of Victorville, San Bernardino County, CA
SB-05158	Ahmet, Koral and Michael K. Lerch	2005	Deteriorated Pole Replacement Project Archaeological Survey of Ten Pole Locations on the Poco 33kV, Cement 33 kV, Rabbit 12 kV, Sky Hi 12 kV, and Cushenbury 33 kV Transmission Lines, San Bernardino County, CA
SB-05202	McKenna	2004	A Phase I Cultural Resource Investigation for the Taft Corporation Property in the City of Victorville, San Bernadino County, CA
SB-05334	Sander, Jay	2005	Cultural and Paleontological Resources Inventory of the Woodside House, Tracts 16439, 16828, 16955, and 16982 Victorville, San Bernardino County, California
SB-05508*	Estes, Allen, James Allan, and William Self	2003	Final Cultural Resources Report: High Desert Power Project, Victorville, San Bernardino County, California
SB-05766	Love, Bruce	1997	Cultural Resources Report: Bakersfield—Rialto Fiberoptic Line Project, Kern, Los Angeles and San Bernardino Counties, California
SB-06001	Austerman, Virginia	2007	Cultural Resources Assessment, Pleasant Valley Project (Tentative Tract #17809, 17810, 17811), City of Victorville, San Bernardino County, California
SB-06006	Orfila, Rebecca S., Marissa Guenther, and Matthew DeCarlo	2007	A Phase I Cultural Resources Assessment of a Portion of the Beeline 12kV Circuit Line near Victorville, San Bernardino County, California (Southern California Edison WO 6073-5349 7-5306)
SB-06500	Delu, Antonina	2009	Results of the Cultural Resource Assessment for the Circuit 15 12-Kilovolt Victor Substation Distribution Substation Planning Project (WO No. 6173-5319/9-5301; TD No. 323937; IO No. 306063), City of Victorville, San Bernardino County, California.
SB-06560	Stillwell, Larry N.	2009	Prado/300843
SB-07780	Travers, Aniela	2014	Cultural Resources Survey: Brentwood Park/CLV0189, 14026 Hook Park, Victorville, San Bernardino County, California 92392

*Study overlaps the Project area.

The archaeological records search also indicated 13 previously recorded cultural resources in the Study Area (Table 3-2). Twelve of the resources are archaeological and consist of four prehistoric sites, seven historical sites, and two isolated historical artifacts. One built environment resource, the Boulder Dam transmission line, is also documented within the Study Area. None of these resources are within the Project area.

Table 3-2
Cultural Resources in the Study Area

Primary	Trinomial	Description
Prehistoric Resources		
36-004441	CA-SBR-4441	Lithic scatter/ground stone
36-007043	CA-SBR-7043	Lithic scatter/milling stones (no longer present)
36-012191	CA-SBR-12182	Lithic scatter
36-012192	CA-SBR-12183	Lithic scatter
Historic-Era Resources		
36-026160	CA-SBR-16612H	Refuse scatter
36-026163	CA-SBR-16615H	Refuse scatter
36-026164	—	Refuse scatter
36-027468	CA-SBR-17880H	Refuse scatter
36-031657	—	Refuse scatter
36-031658	—	Can scatter
Isolated Finds		
36-027469	—	Two clear glass fragments & one sanitary can
36-031656	—	One church-key opened can
Built Environment Resources		
36-010315	CA-SBR-10315H	Boulder Dam transmission line

3.2 HISTORICAL MAP REVIEW

A series of historical maps was consulted to assess land use and development in the Study Area. Maps consulted include USGS topographic quadrangle maps: Barstow 30-minute (1932), Victorville 7.5-minute (1956), and San Bernardino 60-minute (1957 and 1966). All maps except for the San Bernardino 1957 quadrangle exhibit a historic road well north and outside the Project area. No additional structures, roads, or other features of interest are shown within or in the vicinity of the Project area on any of the historical maps reviewed.

4
NATIVE AMERICAN COMMUNICATIONS

Æ contacted the NAHC on February 22, 2022, for a review of the 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 April 13, 2022, stating the SLF search was completed with positive results. The NAHC requested Æ contact Native American individuals and organizations to elicit information regarding cultural resource issues related to the proposed Project, if any.

Upon review of the Native American contact list and after removing redundancies, Æ narrowed the list to seven individuals and organizations traditionally and culturally affiliated with the geographic area where the Project is located. Æ sent out Project scoping letters via email on April 22, 2022, describing the Project and asking these individuals and organizations for their input. Copies of the letters, the list of contacts, and responses are included in Appendix A. Æ sent follow-up email correspondence on May 6, 2022, to the organizations who had not responded to the initial request on April 22, 2022.

Individuals/organizations contacted include:

- Sierra Pencille, Chairperson of the Chemehuevi Indian Tribe
- Ann Brierty, Tribal Historic Preservation Officer for the Morongo Band of Mission Indians
- Jill McCormick, Historic Preservation Officer for the Quechan Tribe of the Fort Yuma Reservation
- Donna Yocum, Chairperson of the San Fernando Band of Mission Indians
- Ryan Nordness, Cultural Resource Analyst for the Yuhaaviatam of San Manuel Nation (formerly known as the San Manuel Band of Mission Indians)
- Wayne Walker and Mark Cochrane, Co-Chairpersons of the Serrano Nation of Mission Indians
- Anthony Madrigal, Tribal Historic Preservation Officer for the Twenty-Nine Palms Band of Mission Indians

As of the date of this report, Æ has received two responses. The Quechan Tribe of the Fort Yuma Reservation had no comments regarding the Project, deferred to the other local Tribes, and will support their decisions regarding the Project. The Yuhaaviatam of San Manuel Nation noted the Project is within 1 mile of known cultural resources. Therefore, the area is of great concern to the Tribe and the Tribe is interested in consulting with the City under Assembly Bill 52.

5
CULTURAL RESOURCE SURVEY METHODS AND RESULTS

The Project area was entirely accessible during the survey completed by Æ Associate Archaeologist Andrew DeLeon on April 22, 2022.

5.1 SURVEY METHODS

The survey started in the northwest corner of the Project area and was completed from west to east along north–south transects spaced 15 meters apart. DeLeon surveyed all portions of the Project area systematically, and survey included inspection of any unusual landforms, contours, soil changes, features (e.g., road cuts, drainages), and other potential cultural site markers. Careful attention was paid to rodent burrows or other forms of ground disturbance to observe subsurface soil stratigraphy if any.

5.2 SURVEY RESULTS

The topography of the Project is relatively level, sloping downward slightly to the north. Vegetation within the Project area is moderately abundant and consists of Mojave creosote bush scrub, ephedra, unidentified annual grasses, and sparse Joshua trees. The ground surface visibility was generally fair (50 percent visible). The entire Project area is littered with modern refuse and illegally dumped household materials, building materials, and other waste (Figure 4-1). Furthermore, off-road vehicle tracks indicate that the Project area is used for recreational activities (Figure 4-2). Coarse sands with quartz, quartzite, and granitic gravels were observed throughout the ground surface of the Project area. No cultural resources were observed during the survey of the Project area.

During the survey, DeLeon identified two aerial photography ground targets within the Project area. The targets were approximately 150 feet apart situated east to west located in the northern third of the Project area. The western target was in much better condition than the eastern target. Aerial photography targets are often used as reference points for mapping and map updating by land survey crews.

Figure 4-1 Modern refuse at northwest corner of the Project area, facing southeast.

Figure 4-2 Off-road path in the southern half of the Project area, facing southwest.

6
MANAGEMENT RECOMMENDATIONS

Results of the records search indicate that 13 previously recorded cultural resources have been identified within 0.5 miles of the Project area, but this cultural resource investigation identified no archaeological or built environment resources. The Project area is within undeveloped land moderately modified by modern activities and recreational use. Because the terrain has been disturbed previously by off-road use and modern dumping, Æ suggests a low sensitivity ranking based on the limited potential for intact and buried archaeological remains. Furthermore, the Bryman, Helendale, Kimberlina, and Lavic sands series soil maps do not illustrate the potential for buried paleosols (Ab horizons), which supports the assessment that the Project area has a low sensitivity for buried archaeological sites. Therefore, no further cultural resource management of the Project area is recommended.

It should be noted that the Quechan Tribe of the Fort Yuma Reservation had no comments regarding the Project, deferred to the other local Tribes, and will support their decisions regarding the Project. The Yuhaaviatam of San Manuel Nation noted the Project is within 1 mile of known cultural resources. Therefore, the area is of great concern to the Tribe and the Tribe is interested in consulting with the City under Assembly Bill 52.

In the event potentially significant archaeological materials are encountered 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 of the find. If 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 monitoring and treatment 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.

Finally, if the Project is expanded to include areas not covered by this survey or other recent cultural resource studies, additional cultural resource studies may be required.

7
REFERENCES

Ainsworth, Ed

1955 *Five Acres of Heaven: Story of the Great American Desert*. Homer H. Boelter Lithography, Los Angeles, California.

Altschul, Jeffrey H., William C. Johnson, and Matthew A. Sterner

1989 *The Deep Creek Site (CA-SBR-176): A Late Prehistoric Base Camp in the Mojave River Forks Region, San Bernardino County, California*. Statistical Research Technical Series 22. Tucson, Arizona.

Anderson, R. Scott

2001 The Paleoenvironment of Diamond and Domenigoni Valleys. In *Technical Studies*, edited by Melinda C. Horne and Susan E. Rapp, pp. 353–396. MWD Eastside Reservoir Project Final Report of Archaeological Investigations, Vol. V. Susan K. Goldberg, general editor. Applied EarthWorks, Inc., Hemet, California. Submitted to Metropolitan Water District of Southern California, Los Angeles.

Arnold, Jeanne E., Ann Q. Duffield, Roberta S. Greenwood, R. Paul Hampson, Thad M. Van Bueren, and Bruce E. Lander

1987 *Archaeological Resources of the Seven Oaks Dam Project, Upper Santa Ana River Locality*. Prepared for U.S. Army Corps of Engineers, Los Angeles District, Los Angeles, California.

Basgall, Mark E., Kelly R. McGuire, and Amy J. Gilreath

1986 *Archaeological Test Excavations at CA-INY-30; a Multi-Component Prehistoric Site near Lone Pine, Inyo County, California*. On file, California Department of Transportation, Sacramento.

Basgall, Mark E., and Delbert L. True

1985 *Archaeological Investigations in Crowder Canyon, 1973–1984: Excavations at Sites SBR-421B, SBR-421C, SBR-421D, and SBR-713*. 2 vols. Far Western Anthropological Research Group, Inc., Davis, California. Submitted to the USDA Forest Service, Inyo National Forest, Bishop, California.

Bean, Lowell J., Henry F. Dobyns, M. Kay Martin, Richard W. Stoffle, Sylvia B. Vane, and David R. M. White

1978 *Persistence and Power: A Study of Native American Peoples Inthe Sonoran Desert and the Devers-Palo Verde High Voltage Transmission Line*. Cultural Systems Research, Inc., Menlo Park, California. Prepared for Southern California Edison Company.

Bean, Lowell J., and Charles R. Smith
1978 Serrano. In *California*, edited by Robert F. Heizer, pp. 570–574. Handbook of North American Indians, Vol. 8, William C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Beattie, George William, and Helen Pruitt Beattie
1939 *Heritage of the Valley: San Bernardino's First Century*. San Pasqual Press, Pasadena, California.

Berger, John A.
1941 *The Franciscan Missions of California*. G.P. Putnam's Sons, New York.

Bettinger, Robert L., and Martin A. Baumhoff
1982 The Numic Spread: Great Basin Cultures in Competition. *American Antiquity* 47:485–503.

Campbell, Elizabeth W. C., William H. Campbell, Ernst Antevs, Charles A. Amsden, J. A. Barberie, and F. D. Bode
1937 *The Archaeology of Pleistocene Lake Mojave*. Southwest Museum Papers No. 11. Los Angeles, California.

City of Victorville
2022 Our History, https://www.victorvilleca.gov/our-city/about-victorville/our-history. Victorville, California.

Davis, Emma Lou
1970 Archaeology of the North Basin of Panamint Valley, Inyo County, California. *Nevada State Museum Anthropological Papers* 15:83–141.

Earle, David D.
1992 Prehistory of the Antelope Valley. Antelope Valley Reflections. *Journal of the Antelope Valley Heritage Foundation* 1(1):6.

1997 *Ethnohistoric Overview of the Edwards Air Force Base Region and the Western Mojave Desert*. Earle and Associates, Palmdale, California. Prepared for Environmental Management Office, Air Force Flight Test Center, Edwards Air Force Base, and U.S. Army Corps of Engineers, Los Angeles, California.

1998 *Legacy of Muroc Inventory and Community Study*. Computer Sciences Corporation, Tysons, Virginia. Submitted to Environmental Management Office, Air Force Flight Test Center, Edwards Air Force Base, California.

2005 The Mojave River and the Central Mojave Desert: Native Settlement, Travel, and Exchange in the Eighteenth and Nineteen Centuries. *Journal of California and Great Basin Anthropology* 25(1):1–38.

Earle, David D., Barry L. Boyer, Reid A. Bryson, Robert U. Bryson, Mark M. Campbell, James J. Johannesmeyer, Kelly A. Lark, Cle J. Parker, Matthew D. Pittman, Luz M. Ramirez, Margaret R. Ronning, and Jackson Underwood
1997 *Overview of Prehistoric Cultural Resources*. Cultural Resources Overview and Management Plan for Edwards AFB, California, Vol. I. On file, Environmental Management Office, Conservation Branch, Edwards AFB, California.

Elliott, Wallace W.
1965 *History of San Bernardino and San Diego Counties with Illustrations*. Riverside Museum Press, Riverside, California. Reprint of 1883 edition, Wallace W. Elliott & Co., San Francisco, California.

Gifford, Edward W.
1918 Clans and Moieties in Southern California. *University of California Publications in American Archaeology and Ethnology* 14(2):155–219.

Gilreath, Amy J., and William R. Hildebrandt
1991 *National Register of Historic Places Registration Form: Sugarloaf Archaeological District*. Far Western Anthropological Research Group, Inc., Davis, California. Prepared for U. S. Department of the Interior, National Park Service, Washington, D.C.

Grant, Campbell, J. W. Baird, and J. K. Pringle
1968 *Rock Drawings of the Coso Range, Inyo County, California*. Maturango Museum Publication, Vol. 4. Maturango Museum, China Lake, California.

Grayson, Donald K.
2011 *The Great Basin: A Natural Prehistory*. University of California Press, Berkeley.

Hall, Matthew C., and Mark E. Basgall
1994 Lessons to Learn from Newberry/Gypsum Period Archaeology of the Mojave Dessert. In *Kelso Conference Papers 1987–1992: A Collection of Papers and Abstracts from the First Five Kelso Conferences on the Prehistory of the Mojave Desert*, edited by G. D. Everson and Joan Schneider, pp. 84–94. Museum of Anthropology Occasional Papers in Anthropology 4. California State University, Bakersfield.

Harrington, John P.
1985 *The Papers of John Peabody Harrington in the Smithsonian Institution, 1907-1957, Vol. 3: Native American History, Language, and Culture of Southern California/Basin*. Krause International Publications, White Plains, New York.

Kroeber, Alfred L.
1925 *Handbook of the Indians of California*. Bureau of American Ethnology Bulletin 78. Smithsonian Institution, Washington, D.C.

Lamb, Sydney M.
1958 Linguistic Prehistory of the Great Basin. *International Journal of American Linguistics* 24:95.

Madsen, David B., and David Rhode (editors)
1994 *Across the West: Human Population Movement and the Expansion of the Numa.* University of Utah Press, Salt Lake City.

Mehringer, Peter J., Jr.
1967 Pleistocene Studies in Southern Nevada. In *Pollen Analysis of the Tule Springs Site, Nevada*, edited by H. M. Wormington and D. Ellis, pp. 130–200. Nevada State Museum Anthropological Papers No. 13.

Moffitt, Linda R., and Kyle B. Moffitt
1993 *Evidence of Prehistoric Conflict: An Osteological Analysis of a Vanyume Burial*. Report on file with site record for SCBM-3176 at South Central Coastal Information Center, California State University, Fullerton.

Morgan, Dale L.
1953 *Jedediah Smith and the Opening of the West*. University of Nebraska Press, Lincoln.

Onken, Jill A., and Melinda C. Horne
2001 Chronosequencing. In *Synthesis of Findings*, edited by Susan E. Rapp and Susan K. Goldberg, pp. 91–169. MWD Eastside Reservoir Project Final Report of Archaeological Investigations, Vol. Vol. IV. Susan K. Goldberg, general editor. Applied EarthWorks, Inc., Hemet, California. Prepared for Metropolitan Water District of Southern California, Los Angeles.

Parsons
2004 *Evaluation of Cultural Resources for Southern California Logistics Airport Rail Service Project*. Parsons, Sacramento, California. Prepared for the Federal Railroad Administration, City of Victorville, and Stirling Airports International, LLC.

Pigniolo, Andrew R.
2004 Points, Patterns, and People: Distribution of the Desert Side-Notched Point in San Diego County. *Proceedings of the Society for California Archaeology* 14:27–39.

Rogers, Malcolm J.
1939 *Early Lithic Industries of the Lower Basin of the Colorado River and Adjacent Areas*. San Diego Museum Papers No. 3. San Diego, California.

Sawyer, John O.
1994 *Draft Series Descriptions of California Vegetation*. California Native Plant Society, Sacramento, California.

Smith, Gerald A.
1963 *Archaeological Survey of the Mojave River Area and Adjacent Regions*. San Bernardino County Museum Association, San Bernardino, California.

Soil Survey Staff
1999 *Soil Taxonomy: A Basic System of Soil Classification for Making and Interpreting Soil Surveys*. 2nd ed. Agricultural Handbook, Vol. 436. U.S. Department of Agriculture, Natural Resources Conservation Service.

2003 *Kimberlina Series*. Official Series Description. Electronic document, https://soilseries.sc.egov.usda.gov/OSD_Docs/K/KIMBERLINA.html. U.S. Department of Agriculture, Natural Resource Conservation Service, National Cooperative Soil Survey.

2015a *Bryman Series*. Official Series Description. Electronic document, https://soilseries.sc.egov.usda.gov/OSD_Docs/B/BRYMAN.html. U.S. Department of Agriculture, Natural Resource Conservation Service, National Cooperative Soil Survey.

2015b *Helendale Series*. Official Series Description. Electronic document, https://soilseries.sc.egov.usda.gov/OSD_Docs/H/HELENDALE.html. U.S. Department of Agriculture, Natural Resource Conservation Service, National Cooperative Soil Survey.

2015c *Lavic Series*. Official Series Description. Electronic document, https://soilseries.sc.egov.usda.gov/OSD_Docs/L/LAVIC.html. U.S. Department of Agriculture, Natural Resource Conservation Service, National Cooperative Soil Survey.

2022 Tentative Tract Map 20525 Project Area of Interest, Soil Map—Mojave River Area, California. Web Soil Survey, accessed April 27, 2022. National Cooperative Soil Survey, U.S. Department of Agriculture, Natural Resources Conservation Service.

Spaulding, W. Geoffrey
2001 The Paleoenvironmental Context of the Study Area. In *Synthesis of Findings*, edited by Susan E. Rapp and Susan K. Goldberg, pp. 201–223. MWD Eastside Reservoir Project Final Report of Archaeological Investigations, Vol. IV. Susan K. Goldberg, general editor. Applied EarthWorks, Inc., Hemet, California. Prepared for Metropolitan Water District of Southern California, Los Angeles.

Speer, M.
1980 *Historical Report for the Proposed Crowder Canyon Controlled Access Highway (and Pine Lodge Railroad Grade, Separations Material Sites), San Bernardino County, California*. Report on file at California Department of Transportation, San Bernardino, California.

Stickel, E. Gary, and Lois J. Weinman-Roberts
1980 *An Overview of the Cultural Resources of the Western Mojave Desert*. Prepared for Bureau of Land Management–Riverside Office. Contract No. YA-512-CT8-106. On file, South Central Coastal Information Center, California State University, Fullerton.

Stringfellow, Kim
2009 *Jackrabbit Homestead: Tracing the Small Tract Act in the Southern California Landscape, 1938–2008*. University of Chicago Press and The Center for American Places at Columbia College, Chicago, Illinois.

Strong, William Duncan
1929 Aboriginal Society in Southern California. *University of California Publications in American Archaeology and Ethnology* 26(1):1–358.

Sutton, Mark Q.
1981 *Archaeology of the Antelope Valley, Western Mojave Desert, California*. Manuscript in possession of the author.

1988 *An Introduction to the Archaeology of the Western Mojave, California.* Archives of California Prehistory, Vol. 14. Coyote Press, Salinas, California.

1996 The Current Status of Archaeological Research in the Mojave Desert. *Journal of California and Great Basin Anthropology* 18(2):221–257.

Sutton, Mark Q., Mark E. Basgall, Jill K. Gardner, and Mark W. Allen
2007 Advances in Understanding the Mojave Desert Prehistory. In *California Prehistory: Colonization, Culture and Complexity*, edited by Terry L. Jones and Kathryn A. Klar, pp. 229–245. Altamira Press, Lanham, Maryland.

Sutton, Mark Q., and David D. Earle
2017 The Desert Serrano of the Mojave River. *Pacific Coast Archaeological Society Quarterly* 53(2&3):1–61.

Sutton, Mark Q., Joan S. Schneider, and Robert M. Yohe, II
1993 The Siphon Site (CA-SBR-6580): A Millingstone Horizon Site in Summit Valley, California. *San Bernardino County Museum Association Quarterly* 40(3).

Thomas, Tiffany Ann
2011 *A Landscape Approach to Late Prehistoric Settlement and Subsistence Patterns in the Mojave Sink*. Master's thesis, Department of Anthropology, University of Nevada. Las Vegas.

Thompson, David G.
1929 *The Mojave Desert Region, California: A Geographic, Geologic, and Hydrologic Reconnaissance*. United States Geological Survey Water Supply Paper 578. U.S. Department of the Interior, Geological Survey, U.S. Government Printing Office, Washington, D.C.

Van Devender, Thomas R., and W. Geoffrey Spaulding
1979 Development of Vegetation and Climate in the Western United States. *Science* 204:701–710.

Vasek, F. C., and Michael G. Barbour
1977 Mojave Desert Scrub Vegetation. In *Terrestrial Vegetation of California*, edited by Michael G. Barbour and Jack Major, pp. 835–867. John Wiley & Sons, New York.

Vredenburgh, Larry M.
1992 Mining in the Vicinity of Victorville. Paper presented at Victor Valley College. http://vredenburgh.org/mining_history/pages/oro_grande.html, accessed June 4, 2015.

Wallace, William J.
1955 A Suggested Chronology for Southern California Coastal Archaeology. *Southwestern Journal of Anthropology* 11:214–230.

Warren, Claude N.
1967 The San Dieguito Complex: A Review and Hypothesis. *American Antiquity* 32(2):168–185.

1980 The Archaeology and Archaeological Resources of the Amargosa-Mojave Basin Planning Units. In *A Cultural Resources Overview for the Amargosa-Mojave Basin Planning Units*, edited by Claude N. Warren, M. Knack, and Elizabeth von Till Warren. U.S. Bureau of Land Management, Cultural Resources Publications, Anthropology-History, Riverside, California.

1984 The Desert Region. In *California Archaeology*, pp. 339–430. Academic Press, New York.

Warren, Claude N., and Richard H. Crabtree
1986 Prehistory of the Southwestern Area. In *Great Basin*, edited by Warren L. D'Azevedo, pp. 183–193. Handbook of North American Indians, Vol. 11, William C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Wells, Stephen G., Roger Y. Anderson, Leslie D. McFadden, William J. Brown, Yehouda Enzel, and J. L. Miossec
1989 *Late Quaternary Paleohydrology of the Eastern Mojave River Drainage, Southern California:Quantitative Assessment of the Late Quaternary Hydrologic Cycle in Large Arid Watersheds*. New Mexico Water Resources Research Institute Report 242.

APPENDIX A

Native American Communication

LIST OF NATIVE AMERICAN CONTACTS AND RECORD OF RESPONSES

Name	Date & Time of Calls	Responses
Sierra Pencille Chairperson Chemehuevi Indian Tribe	April 22, 2022 May 6, 2022	Scoping letter sent via email. E-mailed follow-up effort for correspondence. No response received to date.
Ann Brierty Tribal Historic Preservation Officer Morongo Band of Mission Indians	April 22, 2022 May 6, 2022	Scoping letter sent via email. E-mailed follow-up effort for correspondence. No response received to date.
Jill McCormick Historic Preservation Officer Quechan Tribe of the Fort Yuma Reservation	April 22, 2022 April 22, 2022	Scoping letter sent via email. Email response received from the Tribe. The Tribe does not wish to comment on the Project and defers to more local Tribes and support their decisions regarding the Project.
Donna Yocum Chairperson San Fernando Band of Mission Indians	April 22, 2022 May 6, 2022	Scoping letter sent via email. E-mailed follow-up effort for correspondence. No response received to date.
Ryan Nordness Cultural Resources Analyst Yuhaaviatam of San Manuel Nation (formerly known as the San Manuel Band of Mission Indians)	April 22, 2022 May 6, 2022 May 16, 2022	Scoping letter sent via email. E-mailed follow-up effort for correspondence. Email response received from the Tribe. The proposed project is located within 1 mile of known cultural resources. Therefore, the area is of great concern to the Tribe and the Tribe is interested in consulting with the City under Assembly Bill 52.
Wayne Walker and Mark Cochrane Co-Chairpersons Serrano Nation of Mission Indians	April 22, 2022 May 6, 2022	Scoping letter sent via email. E-mailed follow-up effort for correspondence. No response received to date.
Anthony Madrigal Tribal Historic Preservation Officer Twenty-Nine Palms Band of Mission Indians	April 22, 2022 May 6, 2022	Scoping letter sent via email. E-mailed follow-up effort for correspondence. No response received to date.

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: 02/22/2022

Project: Tentative Tract No. 17839 AE#4378

County: San Bernardino

USGS Quadrangle Name: Victorville

Township: 5N **Range:** 5W **Section(s):** 12

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 (Ext. 523)

Fax: (951) 766-0020

Email: jgeorge@appliedearthworks.com

Project Description: The proposed Project will develop 30 acres of vacant land (APNs 0394-031-04) in the City of Victorville, San Bernardino County, California, for Tentative Tract No. 17839. Ground disturbance is expected as a result of construction activities associated with Project development.

NATIVE AMERICAN HERITAGE COMMISSION

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

April 13, 2022

Joan George
Applied EarthWorks, Inc.

Via Email to: jgeorge@appliedearthworks.com

Re: Tentative Tract No. 17839 AE#4378 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 submitted for the above referenced project. The results were positive. Please contact the Chemehuevi Indian Tribe on the attached list for information. Please note that tribes do not always record their sacred sites in the SLF, nor are they required to do so. A SLF search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with a project's geographic area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites, such as the appropriate regional California Historical Research Information System (CHRIS) archaeological Information Center for the presence of recorded archaeological sites.

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. Please contact all of those listed; if they cannot supply information, they may 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: Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green

Andrew Green
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
San Bernardino County
4/13/2022

Chemehuevi Indian Tribe
Sierra Pencille, Chairperson
P.O. Box 1976 1990 Palo Verde Drive — Chemehuevi
Havasu Lake, CA, 92363
Phone: (760) 858 - 4219
Fax: (760) 858-5400
chairman@cit-nsn.gov

Morongo Band of Mission Indians
Ann Brierty, THPO
12700 Pumarra Road — Cahuilla
Banning, CA, 92220 — Serrano
Phone: (951) 755 - 5259
Fax: (951) 572-6004
abrierty@morongo-nsn.gov

Morongo Band of Mission Indians
Robert Martin, Chairperson
12700 Pumarra Road — Cahuilla
Banning, CA, 92220 — Serrano
Phone: (951) 755 - 5110
Fax: (951) 755-5177
abrierty@morongo-nsn.gov

Quechan Tribe of the Fort Yuma Reservation
Jill McCormick, Historic Preservation Officer
P.O. Box 1899 — Quechan
Yuma, AZ, 85366
Phone: (760) 572 - 2423
historicpreservation@quechantribe.com

Quechan Tribe of the Fort Yuma Reservation
Manfred Scott, Acting Chairman
Kw'ts'an Cultural Committee
P.O. Box 1899 — Quechan
Yuma, AZ, 85366
Phone: (928) 750 - 2516
scottmanfred@yahoo.com

San Fernando Band of Mission Indians
Donna Yocum, Chairperson
P.O. Box 221838 — Kitanemuk
Newhall, CA, 91322 — Vanyume
Phone: (503) 539 - 0933 — Tataviam
Fax: (503) 574-3308
ddyocum@comcast.net

San Manuel Band of Mission Indians
Jessica Mauck, Director of Cultural Resources
26569 Community Center Drive — Serrano
Highland, CA, 92346
Phone: (909) 864 - 8933
Jessica.Mauck@sanmanuel-nsn.gov

Serrano Nation of Mission Indians
Wayne Walker, Co-Chairperson
P. O. Box 343 — Serrano
Patton, CA, 92369
Phone: (253) 370 - 0167
serranonation1@gmail.com

Serrano Nation of Mission Indians
Mark Cochrane, Co-Chairperson
P. O. Box 343 — Serrano
Patton, CA, 92369
Phone: (909) 528 - 9032
serranonation1@gmail.com

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

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 Tentative Tract No. 17839 AE#4378 Project, San Bernardino County.

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 Tentative Tract No. 17839 AE#4378 Project, San Bernardino County.

Applied EARTHWORKS Inc.

3550 E. Florida Ave., Suite H
Hemet, CA 92544-4937
O: (951) 766-2000 | F: (951) 766-0020
www.appliedearthworks.com

April 22, 2022

Ann Brierty
THPO
Morongo Band of Mission Indians
12700 Pumarra Road
Banning, CA, 92220

Re: Cultural Resource Assessment for Tentative Tract No. 17839 in the City of Victorville, San Bernardino County, California

Dear THPO Brierty:

On behalf of Three Arch Investment Corp, 1, Applied EarthWorks, Inc. (Æ) is conducting a cultural resource study for the proposed Tentative Tract No. 17839 Project in the City of Victorville (City), San Bernardino County, California (Project). The Project proposes to develop 30 acres of vacant land (APNs 0394-031-04) for Tentative Tract No. 17839. Ground disturbance is expected as a result of construction activities associated with Project, which is subject to the California Environmental Quality Act (CEQA). The City is the lead agency for compliance with CEQA. The Project area, located on the northeast corner of Mojave Drive and Amethyst Road, is within Section 12, Township 5 North, Range 5 West, as indicated on the attached map.

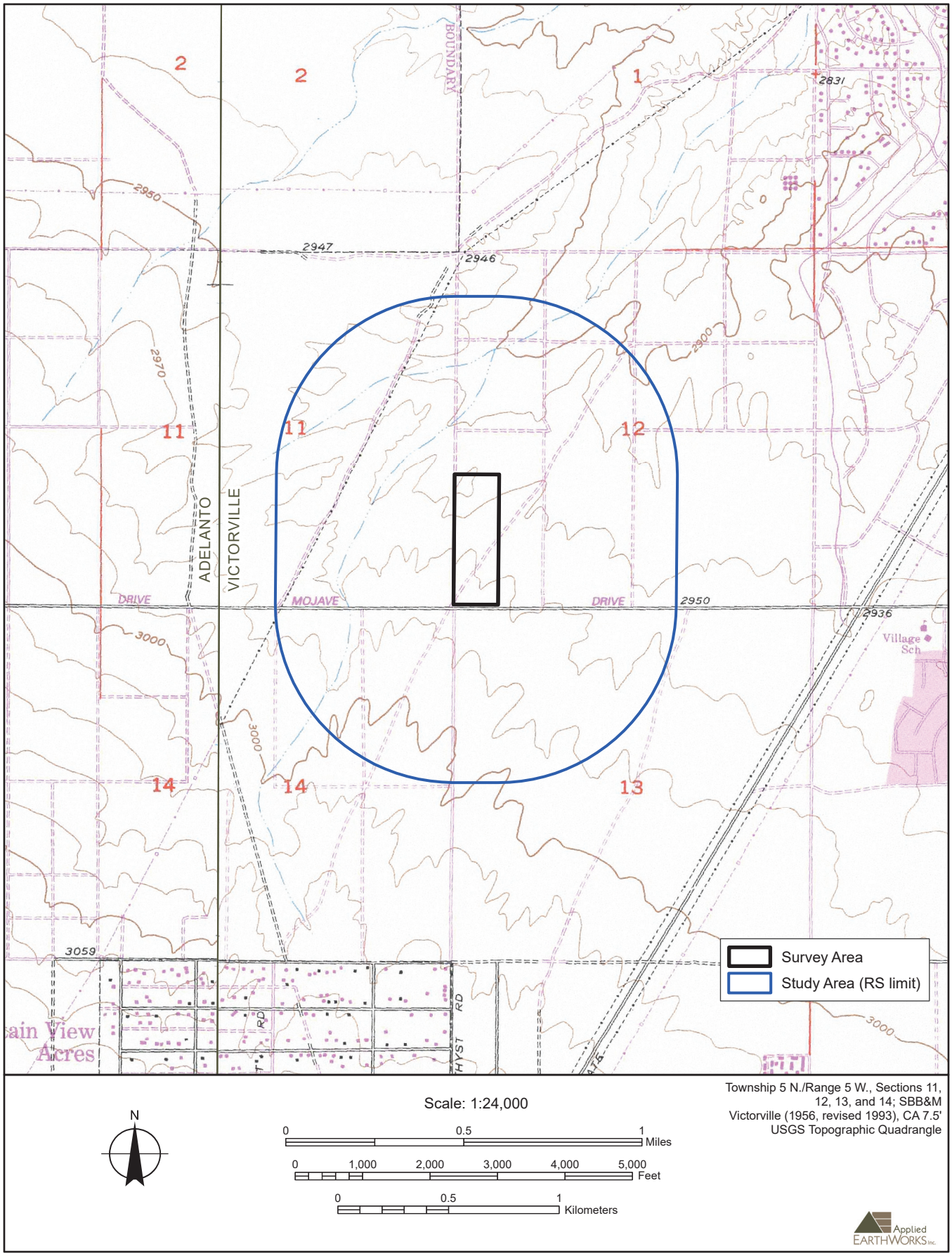
Æ conducted a literature and records search review which indicated 13 cultural resources within a half-mile radius of the Project area. None of these resources are documented within the Project area. Æ was contracted to perform an archaeological survey of the Project area which was completed on April 21, 2022. The Project area consists of disturbed vacant land and one potential historic resource, an aerial target, was identified during the survey. No other cultural resources were encountered.

As part of the cultural resource assessment of the Project area, Æ requested a search of the *Sacred Lands File* by the Native American Heritage Commission (NAHC) on February 22, 2022. The NAHC responded on April 13, 2022, noting the *Sacred Lands File* search was completed with positive results. Should your records show that cultural properties exist within or near the Project area shown on the enclosed map, or if you have any concerns regarding Native American issues related to the overall Project, please contact me at (951) 766-2000 or via letter expressing your concerns. You may also e-mail me at adeleon@appliedearthworks.com. If I do not hear from you within the next two weeks, I will contact you with a follow-up phone call or email.

Please be aware that your comments and concerns are very important to us, as well as to the successful completion of this Project. I look forward to hearing from you in the near future. Thank you, in advance, for taking the time to review this request.

Respectfully yours,

Andrew DeLeon, MA, RPA
Associate Archaeologist
Applied EarthWorks, Inc.



Record Search location map for the *TTM 20525 Victorville Project - AE4378*.

Applied EARTHWORKS Inc.

3550 E. Florida Ave., Suite H
Hemet, CA 92544-4937
O: (951) 766-2000 | F: (951) 766-0020
www.appliedearthworks.com

April 22, 2022

Anthony Madrigal
Tribal Historic Preservation Officer
Twenty-Nine Palms Band of Mission Indians
46-200 Harrison Place
Coachella, CA, 92236

Re: Cultural Resource Assessment for Tentative Tract No. 17839 in the City of Victorville, San Bernardino County, California

Dear Tribal Historic Preservation Officer Madrigal:

On behalf of Three Arch Investment Corp, 1, Applied EarthWorks, Inc. (Æ) is conducting a cultural resource study for the proposed Tentative Tract No. 17839 Project in the City of Victorville (City), San Bernardino County, California (Project). The Project proposes to develop 30 acres of vacant land (APNs 0394-031-04) for Tentative Tract No. 17839. Ground disturbance is expected as a result of construction activities associated with Project, which is subject to the California Environmental Quality Act (CEQA). The City is the lead agency for compliance with CEQA. The Project area, located on the northeast corner of Mojave Drive and Amethyst Road, is within Section 12, Township 5 North, Range 5 West, as indicated on the attached map.

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Please be aware that your comments and concerns are very important to us, as well as to the successful completion of this Project. I look forward to hearing from you in the near future. Thank you, in advance, for taking the time to review this request.

Respectfully yours,

Andrew DeLeon, MA, RPA
Associate Archaeologist
Applied EarthWorks, Inc.

Applied EARTHWORKS Inc.

3550 E. Florida Ave., Suite H
Hemet, CA 92544-4937
O: (951) 766-2000 | F: (951) 766-0020
www.appliedearthworks.com

April 22, 2022

Jill McCormick
Historic Preservation Officer
Quechan Tribe of the Fort Yuma Reservation
P.O. Box 1899
Yuma, AZ, 85366

Re: Cultural Resource Assessment for Tentative Tract No. 17839 in the City of Victorville, San Bernardino County, California

Dear Historic Preservation Officer McCormick:

On behalf of Three Arch Investment Corp, 1, Applied EarthWorks, Inc. (Æ) is conducting a cultural resource study for the proposed Tentative Tract No. 17839 Project in the City of Victorville (City), San Bernardino County, California (Project). The Project proposes to develop 30 acres of vacant land (APNs 0394-031-04) for Tentative Tract No. 17839. Ground disturbance is expected as a result of construction activities associated with Project, which is subject to the California Environmental Quality Act (CEQA). The City is the lead agency for compliance with CEQA. The Project area, located on the northeast corner of Mojave Drive and Amethyst Road, is within Section 12, Township 5 North, Range 5 West, as indicated on the attached map.

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April 22, 2022

Ryan Nordness
Cultural Resources Analyst
San Manual Band of Mission Indians
26569 Community Center Drive
Highland, CA, 92346

Re: Cultural Resource Assessment for Tentative Tract No. 17839 in the City of Victorville, San Bernardino County, California

Dear Analyst Nordness:

On behalf of Three Arch Investment Corp, 1, Applied EarthWorks, Inc. (Æ) is conducting a cultural resource study for the proposed Tentative Tract No. 17839 Project in the City of Victorville (City), San Bernardino County, California (Project). The Project proposes to develop 30 acres of vacant land (APNs 0394-031-04) for Tentative Tract No. 17839. Ground disturbance is expected as a result of construction activities associated with Project, which is subject to the California Environmental Quality Act (CEQA). The City is the lead agency for compliance with CEQA. The Project area, located on the northeast corner of Mojave Drive and Amethyst Road, is within Section 12, Township 5 North, Range 5 West, as indicated on the attached map.

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April 22, 2022

Sierra Pencille
Chairperson
Chemehuevi Indian Tribe
P.O. Box 1976 1990 Palo Verde Drive
Havasu Lake, CA, 92363

Re: Cultural Resource Assessment for Tentative Tract No. 17839 in the City of Victorville, San Bernardino County, California

Dear Chairperson Pencille:

On behalf of Three Arch Investment Corp, 1, Applied EarthWorks, Inc. (Æ) is conducting a cultural resource study for the proposed Tentative Tract No. 17839 Project in the City of Victorville (City), San Bernardino County, California (Project). The Project proposes to develop 30 acres of vacant land (APNs 0394-031-04) for Tentative Tract No. 17839. Ground disturbance is expected as a result of construction activities associated with Project, which is subject to the California Environmental Quality Act (CEQA). The City is the lead agency for compliance with CEQA. The Project area, located on the northeast corner of Mojave Drive and Amethyst Road, is within Section 12, Township 5 North, Range 5 West, as indicated on the attached map.

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April 22, 2022

Wayne Walker and Mark Cochrane
Co-Chairpersons
Serrano Nation of Mission Indians
P.O. Box 343
Patton, CA, 92369

Re: Cultural Resource Assessment for Tentative Tract No. 17839 in the City of Victorville, San Bernardino County, California

Dear Chairpersons Walker and Cochrane:

On behalf of Three Arch Investment Corp, 1, Applied EarthWorks, Inc. (Æ) is conducting a cultural resource study for the proposed Tentative Tract No. 17839 Project in the City of Victorville (City), San Bernardino County, California (Project). The Project proposes to develop 30 acres of vacant land (APNs 0394-031-04) for Tentative Tract No. 17839. Ground disturbance is expected as a result of construction activities associated with Project, which is subject to the California Environmental Quality Act (CEQA). The City is the lead agency for compliance with CEQA. The Project area, located on the northeast corner of Mojave Drive and Amethyst Road, is within Section 12, Township 5 North, Range 5 West, as indicated on the attached map.

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April 22, 2022

Donna Yocum
Chairperson
San Fernando Band of Mission Indians
P.O. Box 221838
Newhall, CA, 91322

Re: Cultural Resource Assessment for Tentative Tract No. 17839 in the City of Victorville, San Bernardino County, California

Dear Chairperson Yocum:

On behalf of Three Arch Investment Corp, 1, Applied EarthWorks, Inc. (Æ) is conducting a cultural resource study for the proposed Tentative Tract No. 17839 Project in the City of Victorville (City), San Bernardino County, California (Project). The Project proposes to develop 30 acres of vacant land (APNs 0394-031-04) for Tentative Tract No. 17839. Ground disturbance is expected as a result of construction activities associated with Project, which is subject to the California Environmental Quality Act (CEQA). The City is the lead agency for compliance with CEQA. The Project area, located on the northeast corner of Mojave Drive and Amethyst Road, is within Section 12, Township 5 North, Range 5 West, as indicated on the attached map.

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Respectfully yours,

Andrew DeLeon, MA, RPA
Associate Archaeologist
Applied EarthWorks, Inc.

Andrew DeLeon

From: Quechan Historic Preservation <historicpreservation@quechantribe.com> on behalf of Quechan Historic Preservation
Sent: Friday, April 22, 2022 5:21 PM
To: 'Andrew DeLeon'
Subject: RE: Cultural Resource Assessment for Tentative Tract Map 17839, City of Victorville

Flag Status: Flagged

This email is to inform you that we do not wish to comment on this project. We defer to the more local Tribes and support their determinations on this matter.

From: Andrew DeLeon [mailto:adeleon@appliedearthworks.com]
Sent: Friday, April 22, 2022 12:23 PM
To: historicpreservation@quechantribe.com
Cc: Joan George
Subject: Cultural Resource Assessment for Tentative Tract Map 17839, City of Victorville

Good Afternoon,

Attached please find a scoping letter and map for the Tentative Tract No. 17839 Project in the City Victorville, San Bernardino County, California.

Thank you,
Andrew

Andrew DeLeon, M.A., RPA (17087) **| Applied EarthWorks, Inc.**
Associate Archaeologist

3550 E. Florida Ave., Suite H
Hemet, CA. 92544-4937
951.766.2000 x-520 office
www.appliedearthworks.com

From: Ryan Nordness
To: Andrew DeLeon
Cc: Joan George
Subject: RE: Cultural Resource Assessment for Tentative Tract Map 17839, City of Victorville
Date: Monday, May 16, 2022 10:17:57 AM

Hello Andrew,
Thank you for reaching out to the Yuhaaviatam of San Manuel Nation (formerly known as the San Manuel Band of Mission Indians) concerning the proposed project area. YSMN appreciates the opportunity to review the project documentation received by the Cultural Resources Management Department on April 22nd. The proposed project is located within 1 mile of known cultural resources. The area is of great concern to YSMN and are very interested to consult whenever this project moves into AB52/CEQA territory.
Thank you again for your correspondence, if you have any additional questions or comments please reach out to me at your earliest convenience.
Respectfully,
Ryan Nordness

From: Andrew DeLeon <adeleon@appliedearthworks.com>
Sent: Friday, April 22, 2022 12:23 PM
To: Ryan Nordness <Ryan.Nordness@sanmanuel-nsn.gov>
Cc: Joan George <jgeorge@appliedearthworks.com>
Subject: Cultural Resource Assessment for Tentative Tract Map 17839, City of Victorville

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