

CULTURAL RESOURCES SURVEY UPDATE FOR THE JOSHUA TREE ESTATES PROJECT

COMMUNITY OF JOSHUA TREE,
SAN BERNARDINO COUNTY, CALIFORNIA

APN 0605-051-01

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Report Title: Cultural Resources Survey Update for the Joshua Tree Estates Project, Community of Joshua Tree, San Bernardino County, California

Type of Study: Cultural Resources Survey

USGS Quadrangle: Section 20, Township 1 North, Range 7 East of *Joshua Tree North, California* (7.5-minute) USGS Quadrangle

Acreage: 81.2 acres

Key Words: Survey updated; historic cistern and refuse scatter (Site Temp-1); historic refuse scatter (Site Temp-2); no CRHR-eligible resources; monitoring of future grading recommended.

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MANAGEMENT SUMMARY/ABSTRACT

In response to a request by the applicant, a cultural resources survey update was conducted by BFSA Environmental Services, a Perennial Company (BFSA), for the Joshua Tree Estates Project. The project consists of a proposed subdivision of an 81.2-acre parcel (Assessor's Parcel Number [APN] 0605-051-01), bounded by East Broadway, Laferney Avenue, and Sunever Road, in the Joshua Tree area of San Bernardino County, California. The project is situated within Section 20, Township 1 North, Range 7 East, as shown on the United States Geological Survey (USGS) (7.5-minute) *Joshua Tree North, California* topographic quadrangle. The property is currently vacant and was previously studied for cultural resources by BFSA in 2023 (see Garrison 2023).

The purpose of this investigation was to locate and record any cultural resources within the project and subsequently evaluate any resources as part of the County of San Bernardino environmental review process conducted in compliance with the California Environmental Quality Act (CEQA). The archaeological investigation of the project also includes the review of an archaeological records search performed at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton (CSU Fullerton) in order to assess previous archaeological studies and identify any previously recorded archaeological sites within the project or in the immediate vicinity. A Sacred Lands File (SLF) search was also requested from the Native American Heritage Commission (NAHC).

A review of an updated archaeological records search identified 10 cultural resources within one mile of the project, two of the resources, which consist of a historic trash scatter with a cistern (Site Temp-1) and a historic trash scatter (Site Temp-2), are located on the subject property. The remaining resources identified during the search include one prehistoric lithic scatter, three prehistoric isolates, one multicomponent site, one historic trash scatter, and two historic isolates. The records search results also identified seven cultural resources studies that have been conducted within one mile of the project. Of the previous studies, only the 2023 BFSA study, conducted in support of the current development, included the subject property. The 2023 BFSA study identified both sites Temp-1 and Temp-2 and conducted a Phase II testing and evaluation study. No significant intact cultural materials were recovered from the surface examinations or subsurface tests, and sites Temp-1 and Temp-2 were determined to be not CEQA-significant and not eligible for listing on the California Register of Historical Resources (CRHR) (Garrison 2023).

The updated cultural resources survey was conducted on June 4, 2025, under the direction of Principal Investigator Tracy A. Stropes, M.A., RPA. No previously unidentified resources were recorded during the survey. The two previously recorded historic trash scatters (Temp-1 and Temp-2) were located and found to be in the same condition as when previously evaluated by BFSA in 2023. As such, the updated survey has confirmed the 2023 results for the Joshua Tree Estates Project that no CRHR-eligible resources are located on the subject property.

The results of the cultural resources survey update for the Joshua Tree Estates Project are

consistent with the 2023 BFSA findings (Garrison 2023). Sites Temp-1 and Temp-2 within the subject property are not significant and ineligible for listing on the CRHR. Therefore, site-specific mitigation measures will not be required. However, the development of the subject property may impact cultural resources that have not been previously identified. Therefore, consistent with the 2023 BFSA recommendations, it is recommended that the project be conditioned with archaeological monitoring during ground-disturbing activities tied to the future residential development of the property. A copy of this report will be permanently filed with the SCCIC at CSU Fullerton. All notes, photographs, and other materials related to this project will be curated at the BFSA archaeological laboratory in Poway, California.

1.0 INTRODUCTION

1.1 Project Description

The archaeological survey update for the Joshua Tree Estates Project was conducted to comply with CEQA and the County of San Bernardino environmental requirements. The 81.2-acre project is bounded by East Broadway, Laferney Avenue, and Sunever Road in the Joshua Tree area of San Bernardino County, California (APN 0605-051-01) (Figure 1.1–1). The project is situated within Section 20, Township 1 North, Range 7 East, as shown on the USGS *Joshua Tree North, California* topographic quadrangle (Figure 1.1–2). The project proposes the subdivision of the property into 29 residential lots, which range in size between 2.01 and 2.36 acres, along with 11.00 acres dedicated for road development and improvements (Figure 1.1–3). The decision to request this investigation was based upon the cultural resource sensitivity of the locality as suggested by known site density and predictive modeling. Sensitivity for cultural resources in a given area is usually indicated by known settlement patterns, which, in southwestern San Bernardino County, were focused around freshwater resources and a food supply. The project was previously studied by BFSa in 2023 (see Garrison 2023). In response to comments for an updated review of the project, BFSa conducted this archaeological survey update.

1.2 Environmental Setting

The Joshua Tree Estates Project is located in the Mojave Desert Geomorphic Province of southern California. This area contains isolated mountain ranges separated by expanses of desert plains. The project is located within the Coyote Valley, south of the Bunker Mountains, east of the Bartlett Mountains, west of Coyote Lake, and north of Joshua Tree National Monument. A northeast-to-southwest trending ephemeral wash traverses the property. As shown on the geologic map by Thomas Dibblee (2008), most of the project is composed of Holocene-aged alluvium. The Holocene alluvium is comprised of gravel, sand, silt, and clay deposited within the valley in the last 11,700 years. The southwestern corner of the project is mapped as Pleistocene-aged older alluvium, consisting of gravels and sand. The older alluvial deposits underlie the younger Holocene deposits at the project at unknown but likely variable depths. The age of the older alluvial deposits is estimated anywhere between 11,700 years to perhaps as much as two million years old. Soils within the project have not been mapped by the National Resources Conservation Service Web Soil Survey (NRCS 2019). Elevations within the project range from approximately 2,475 to 2,519 feet above mean sea level.

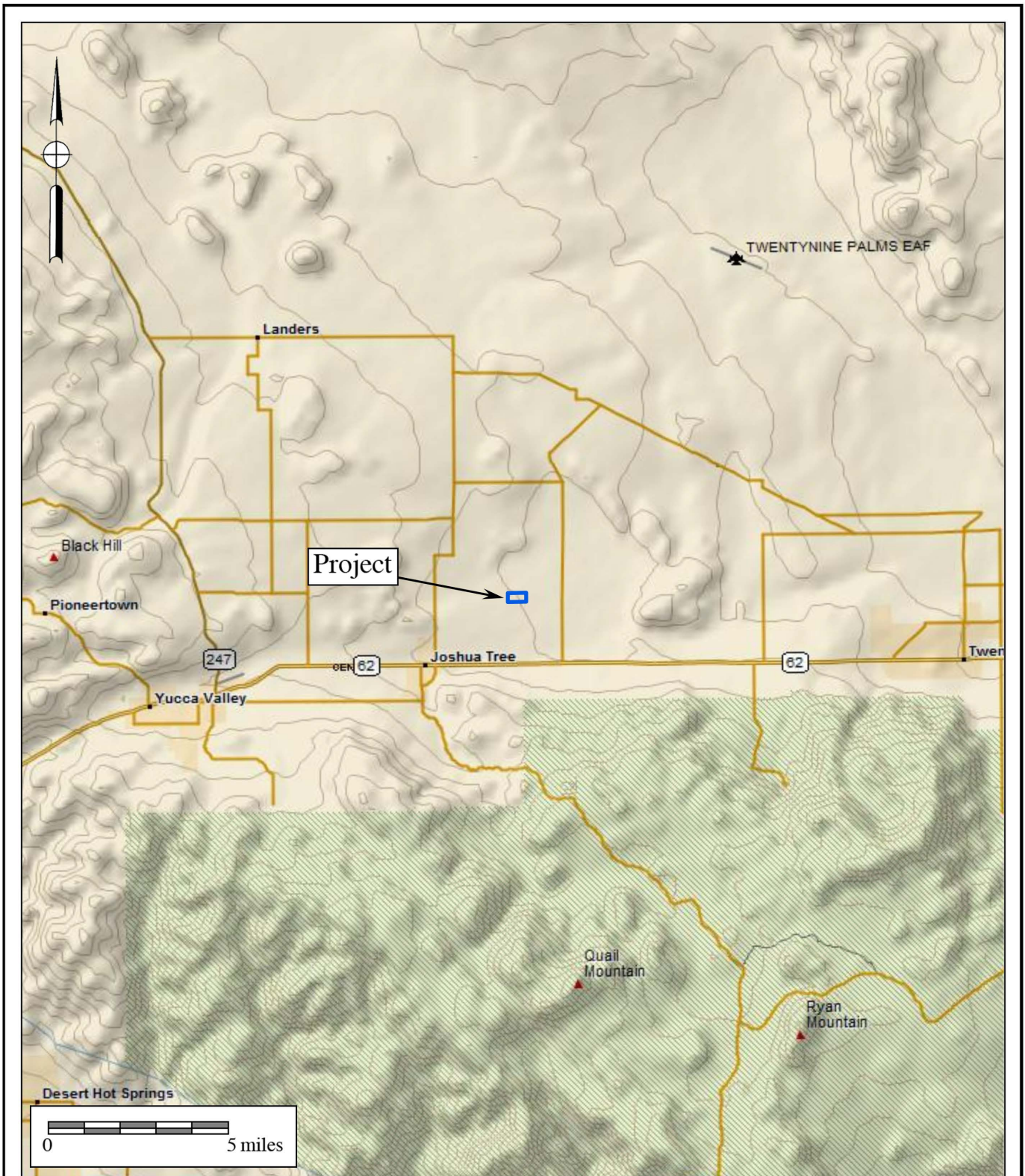


Figure 1.1-1
General Location Map
 The Joshua Tree Estates Project
 DeLorme (1:250,000 series)



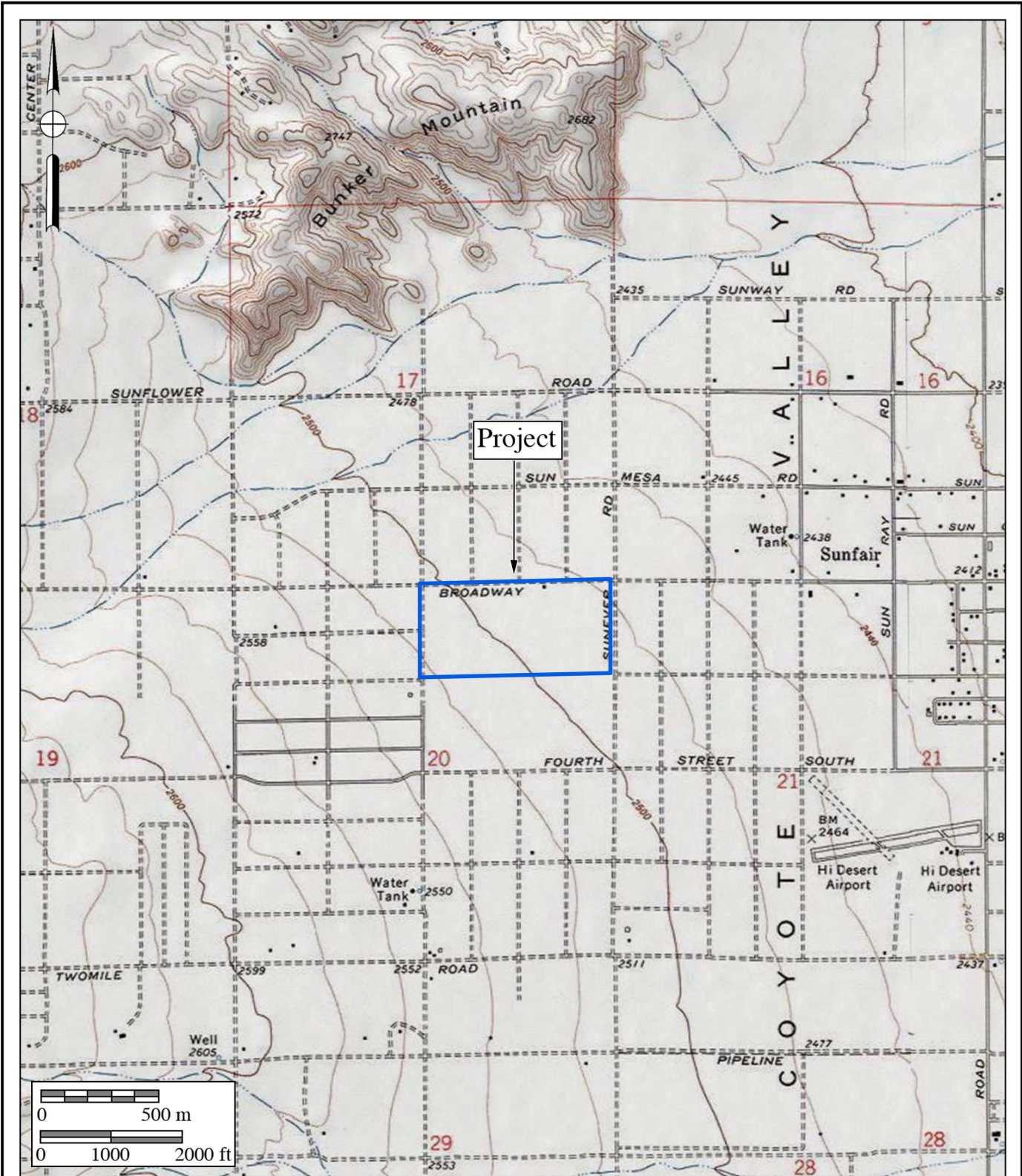
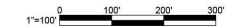
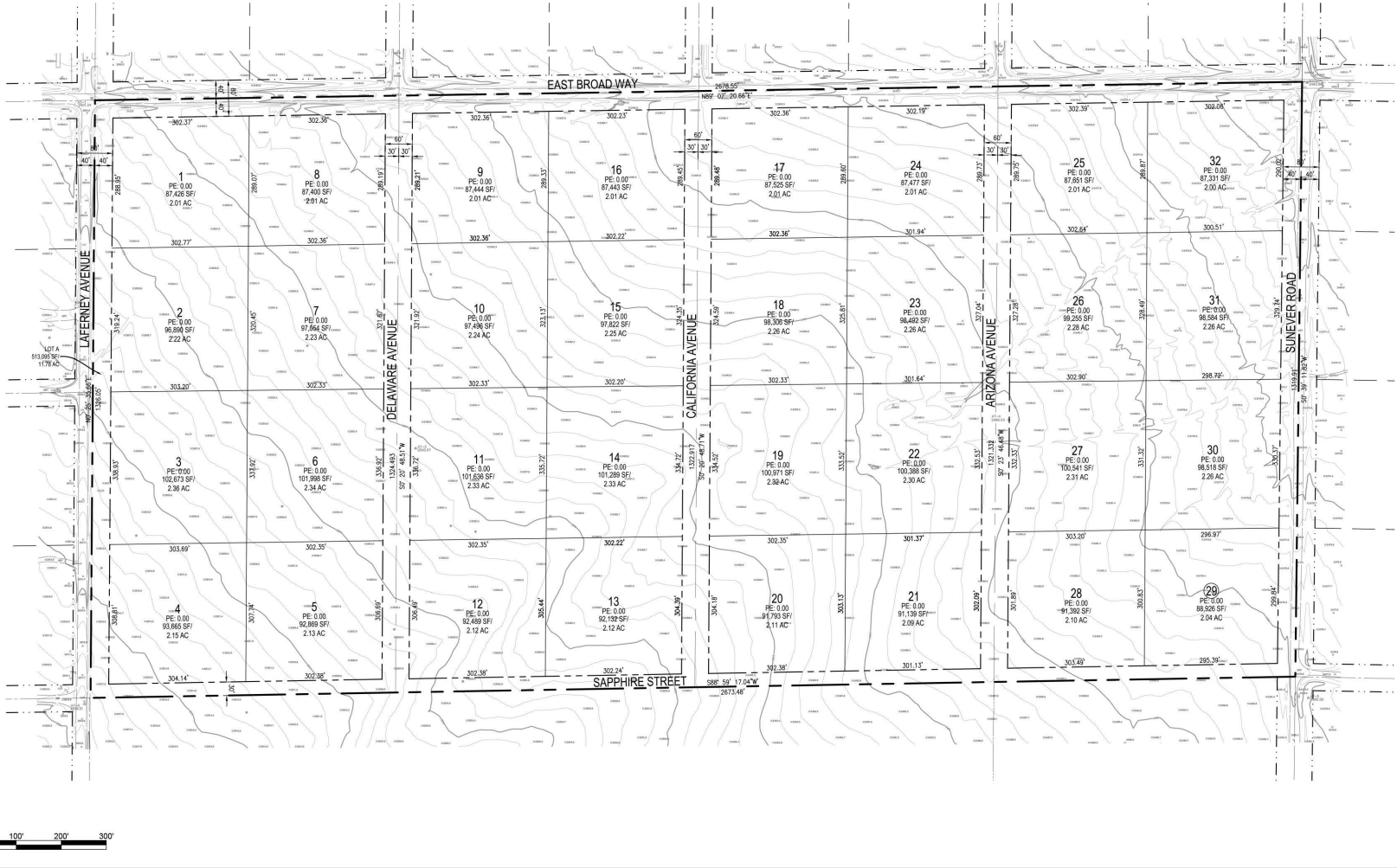


Figure 1.1–2
Project Location Map

The Joshua Tree Estates Project

USGS *Joshua Tree North Quadrangle* (7.5-minute series)





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Figure 1.1-3
Project Development Map
The Joshua Tree Estates Project

1.3 Cultural Setting

The subject property is located in the traditional territory primarily associated with the Serrano. Although the Mojave Desert is an area believed to have had limited prehistoric subsistence resources, it has historically supported a long and occasionally dense population. Evidence of villages and camps, burials, quarries, rock features, and bedrock mortars has been documented at archaeological sites across the desert, some of which contain evidence of a lengthy prehistoric time span. Although early archaeological remains are not found frequently, when they are, they are generally located along the margins of former pluvial lakes or in areas of dune deflation. In contrast, artifacts on the desert floor may be sparse, widely scattered, and mixed with the desert pavements. For the region, archaeologists have reached a broad consensus regarding the general cultural chronology. The identified sequence includes the Paleo Indian Period, the Lake Mojave Period, the Pinto Period, the Gypsum Period, the Saratoga Springs Period, and the Ethnohistoric Period.

1.3.1 Prehistoric Period

Paleo Indian Period (12,000 to circa 10,000 YBP)

Archaeologically, the Paleo Indian Period is associated with the terminus of the late Pleistocene (12,000 to 10,000 YBP). The environment during the late Pleistocene was cool and moist, which allowed for glaciation in the mountains and the formation of deep, pluvial lakes in the deserts and basin lands (Moratto 1984). However, by the terminus of the late Pleistocene, the climate became warmer, which caused the glaciers to melt, sea levels to rise, greater coastal erosion, large lakes to recede and evaporate, extinction of Pleistocene megafauna, and major vegetation changes (Moratto 1984; Martin 1967, 1973; Fagan 1991). The coastal shoreline at 10,000 YBP, depending upon the particular area of the coast, was near the 30-meter isobath, or two to six kilometers further west than its present location (Masters 1983).

Paleo Indians were likely attracted to multiple habitat types, including mountains, marshlands, estuaries, and lakeshores. These people likely subsisted using a more generalized hunting, gathering, and collecting adaptation utilizing a variety of resources including birds, mollusks, and both large and small mammals (Erlandson and Colten 1991; Moratto 1984; Moss and Erlandson 1995).

Lake Mojave Period (Late Pleistocene: 10,000 to 7,000 YBP)

The earliest documented evidence of human occupation in the Mojave Desert and surrounding areas comes from the Paleo Indian Period, a cultural expression referred to as the Western Pluvial Lakes Tradition (WPLT). The WPLT occurred in the western Great Basin and covered an area that stretched from the now arid lands of southern California to Oregon. A cultural adaptation to pluvial conditions (e.g., lakes, marshes, and grasslands) flourished for thousands of years after approximately 9000 B.C., but disappeared in response to the warming and drying trends of the Altithermal climatic period (Moratto 1984). One of the most well known expressions of the

WPLT is the Lake Mojave Complex, which is thought to have covered a vast area including parts of the southwestern Great Basin and the Mojave Desert, and may have reached as far south as the San Diego area. Artifacts indicative of the Lake Mojave Complex include foliated points and knives, Lake Mojave points, Silver Lake points, and flaked-stone crescents. Similar artifacts have been subsequently recorded along the shoreline of many other pluvial lakes in the Mojave Desert. Archaeological studies by Mark Sutton (1988) suggested that, at the time of the Lake Mojave Complex, much of Antelope and Fremont valleys may have been covered by Pleistocene Lake Thompson. In her 1978 work, Davis (1978) argues that the wetlands generated as a result of such Pleistocene lakes would have been a great attraction to the region's early occupants. This would result in an adaptive strategy that was more generalized, focusing on hunting and the overall exploitation of wetland resources. In general, it is clear that cultures across California adapted to wetland environments generated by pluvial lake ecological systems (Moratto 1984).

Pinto Period (7,000 to 4,000 YBP)

The Pinto Period dates to the end of the Pleistocene, when the severe and dramatic environmental change from pluvial to arid conditions began (Moratto 1984). Pinto Period sites are found mostly near ephemeral lakes and now dry streams and springs, suggesting that as the region began to dry, new subsistence adaptations were necessary. Projectile points associated with the Pinto Period are characterized as larger atlatl dart points, as opposed to arrowhead points, which were introduced later. This period has been described as a highly mobile desert economy, with an emphasis on hunting, supplemented by the use of processed seeds (Moratto 1984). However, the collections believed to represent the Pinto Period are largely lacking in well-developed milling technologies according to Moratto (1984). Pinto Period artifacts have been interpreted as indications of temporary or seasonal occupations by small groups of people. Sites of this period are generally small in scale and are typically absent of a developed midden. More recent studies (Sutton et al. 2007) suggest that the Pinto Period may have actually started in the early Holocene, overlapping the Lake Mojave Period. A series of radiocarbon dates from Little Lake, Pinto Basin, Twentynine Palms and Fort Irwin suggest Pinto sites with antiquity of upwards of 9,000 years (Sutton et al. 2007), indicating these sites may be of greater antiquity than previously suggested.

Gypsum Period (4,000 to 1,500 YBP)

The presence of Humboldt Concave Base, Gypsum Cave, Elko Eared, or Elko corner-notched points are believed to be indicative of the Gypsum Period (radiocarbon dated from 4,000 to 1,500 YBP). The Gypsum Period reflects a more intensive desert occupation as temperatures began to regulate during the First Neoglacial episode at the beginning of the late Holocene (Warren 1984; Sutton et al. 2007). During this time, indications of trade with coastal populations are evidenced by the presence of shell beads in the archaeological record. An increase in milling stones and manos has been found in association with this period, which indicates an increased use

of hard seeds (Moratto 1984; Warren 1984; Sutton et al. 2007). In comparison to sites from the preceding periods, Gypsum Period sites are generally smaller, higher in frequency, and distributed across a range of environments. Further, Gypsum Period sites also display evidence of exploitation of *artiodactyls*, rabbits, and rodents, as well as a wide range of seeds. Adaptations resulting from better adapted technologies combined with what was likely more complex social organization likely facilitated the ease of adaptation to the warming and drying conditions that initiated circa 2,000 years ago. The continued use of the region during the Gypsum Period indicates an overall more successful adaptation to the warm and dry conditions during this period (Warren 1984; Sutton et al. 2007).

Several scholars associate this period with the division of the Uto-Aztecan language, approximately 3,000 to 2,500 years ago (Moratto 1984; Warren 1984; Sutton et al. 2007). The major language groups that emerged from this division are Numic, spoken by the Kawaiisu and Piute; Takic, spoken by the Kitanemuk, Serrano, Gabrielino, and other southern California Shoshonean speakers; Hopic, spoken in the southwest; and Tubatulabalic, spoken by the Tubatulabal in the southern Sierra Nevada Mountains. A shift in settlement patterns toward a more sedentary lifestyle occurred during this period, characterized by the emergence of large permanent or semi-permanent village sites and associated cemeteries.

Saratoga Springs Period (1,500 to 800 YBP)

The Saratoga Springs Period is characterized by a transition from larger dart points to smaller arrow points. The presence of arrow points suggest that the bow and arrow were introduced to the Mojave Desert during the Saratoga Springs Period. This, combined with evidence from rock art motifs, leads scholars to argue for a shift from atlatls to use of the bow and arrow either during the end of the Gypsum Period or the beginning of the Saratoga Springs Period. This technological advancement likely improved overall hunting efficiency and possibly the carrying capacity for local population (Warren 1984). This in turn may have resulted in a significant increase in population as suggested by archaeological data. During this period, the development of large village sites with cemeteries and well-developed middens indicate long-term occupations in comparison to previous periods. This period saw an increase in trade with Arizona and other areas of the southwest. Evidence in the archaeological record shows that Brown and Buff wares (pottery styles), characteristic of Arizona, made their way to the California desert by 900 A.D. It is also believed that the Anasazi mined turquoise in the eastern California desert about this time. While the presence of Hakataya influence may have extended as far north and west as the eastern Antelope Valley (Warren 1984), influence in the western Mojave appear to have been minimal. During the second half of the Saratoga Springs Period, the rise in temperatures and return to xeric conditions around A.D. 700 likely led to population decline, and eventually the terminus of the Saratoga Springs complex circa A.D. 1100 (Sutton et al. 2007).

Ethnohistoric Period (800 YPB to the Time of European Contact)

Prior to European presence in North America, Native American groups subsisted along the shores of the no longer extant lakes of the Great Basin region that covered the major portion of the present-day Mojave Desert. It was along these shores that Native Americans made their homes, produced their tools, and left an indelible mark upon the landscape. However, by the time the first Spanish explorers ventured into what is now southern California in 1769, the pluvial lakes had long since vanished, leaving the Mojave River to support primarily the Paiute and the Mohave tribes. Ethnohistoric and ethnographic evidence indicates that prior to the arrival of the Spanish missionaries, the area around the project was inhabited by the Serrano (Moratto 1984; Sutton et al. 2007). Ethnographic data for the Serrano is presented below.

Serrano: An Archaeological and Ethnographic Perspective

Aboriginally, the Serrano occupied an area east of present-day Los Angeles. According to Bean and Smith (1978b), definitive boundaries are difficult to place for the Serrano due to their sociopolitical organization and a lack of reliable data:

The Serrano were organized into autonomous localized lineages occupying definite, favored territories, but rarely claiming any territory far removed from the lineage's home base. Since the entire dialectical group was neither politically united nor amalgamated into supralineage groups, as many of their neighbors were, one must speak in terms of generalized areas of usage rather than pan-tribal holdings. (Strong [1971] in Bean and Smith 1978b)

However, researchers place the Serrano in the San Bernardino Mountains, east of Cajon Pass, and at the base of and north of the mountains near Victorville, east to Twentynine Palms, and south to the Yucaipa Valley (Bean and Smith 1978b). Serrano has been used broadly for languages in the Takic family including Serrano, Kitanemuk, Vanyume, and Tataviam.

Subsistence and Settlement

Serrano village locations were typically located near water sources. Individual family dwellings were likely circular, domed structures. Daily household activities would either take place outside of the house out in the open, or under a ramada constructed of a thatched willow pole roof held up by four or more poles inserted into the ground. Families could consist of a husband, wife/wives, unmarried female children, married male children, the husband's parents, and/or widowed aunts and uncles. Rarely, an individual would occupy his own house, typically in the mountains. Serrano villages also included a large ceremonial house where the lineage leader would live, which served as the religious center for lineages or lineage-sets, granaries, and sweatshouses (Bean and Smith 1978b).

The Serrano were primarily hunters and gatherers. Vegetal staples varied with locality. Acorns and piñon nuts were found in the foothills, and mesquite, yucca roots, cacti fruits, and piñon nuts were found in or near the desert regions. Diets were supplemented with other roots, bulbs, shoots, and seeds (Heizer 1978). Deer, mountain sheep, antelopes, rabbits, and other small rodents were among the principal food packages. Various game birds, especially quail, were also hunted. The bow and arrow were used for large game, while smaller game and birds were killed with curved throwing sticks, traps, and snares. Occasionally, game was hunted communally, often during mourning ceremonies (Benedict 1924; Drucker 1937; Heizer 1978). Earth ovens were used to cook meat, bones were boiled to extract marrow, and blood was either drunk cold or cooked to a thicker consistency and then eaten. Some meat and vegetables were sun-dried and stored. Food acquisition and processing required the manufacture of additional items such as knives, stone, or bone scrapers, pottery trays and bowls, bone or horn spoons, and stirrers. Mortars, made of either stone or wood, and metates were also manufactured (Strong 1971; Drucker 1937; Benedict 1924).

Social Organization

The Serrano were part of “exogamous clans, which in turn were affiliated with one of two exogamous moieties, *tuk^wutam* (Wildcat) and *wahi?iam* (Coyote)” (Bean and Smith 1978b). According to Strong (1971), details such as number, structure, and function of the clans are unknown. Instead, he states that clans were not political, but were rather structured based upon “economic, marital, or ceremonial reciprocity, a pattern common throughout Southern California” (Bean and Smith 1978b). The Serrano formed alliances amongst their own clans and with Cahuilla, Chemehuevi, Gabrielino, and Cupeño clans (Bean and Smith 1978b). Clans were large, autonomous, political, and landholding units formed patrilineally, with all males descending from a common male ancestor, including all wives and descendants of the males. However, even after marriage, women would still keep their original lineage, and would still participate in those ceremonies (Bean and Smith 1978b).

According to Bean and Smith (1978b), the cosmogony and cosmography of the Serrano are very similar to those of the Cahuilla:

There are twin creator gods, a creation myth told in “epic poem” style, each local group having its own origin story, water babies whose crying foretells death, supernatural beings of various kinds and on various hierarchically arranged power-access levels, an Orpheus-like myth, mythical deer that no one can kill, and tales relating the adventures (and misadventures) of Coyote, a tragicomic trickster-transformer culture hero. (Bean [1962-1972] and Benedict [1924] in Bean and Smith 1978b)

The Serrano had a shaman, a person who acquired their powers through dreams, which were induced through ingestion of the hallucinogen datura. The shaman was mostly a curer/healer, using herbal remedies and “sucking out the disease-causing agents” (Bean and Smith 1978b).

Material Culture

The Serrano were very similar technologically to the Cahuilla. In general, manufactured goods included baskets, some pottery, rabbit-skin blankets, awls, arrow straighteners, sinew-backed bows, arrows, fire drills, stone pipes, musical instruments (rattles, rasps, whistles, bull-roarers, and flutes), feathered costumes, mats for floor and wall coverings, bags, storage pouches, cordage (usually comprised of yucca fiber), and nets (Heizer 1978).

1.3.2 Historic Period

Traditionally, the history of the state of California has been divided into three general periods: the Spanish Period (1769 to 1821), the Mexican Period (1822 to 1846), and the American Period (1848 to present) (Caughey 1970). The American Period is often further subdivided into additional phases: the nineteenth century (1848 to 1900), the early twentieth century (1900 to 1950), and the Modern Period (1950 to present). From an archaeological standpoint, all of these phases can be referred to together as the Ethnohistoric Period. This provides a valuable tool for archaeologists, as ethnohistory is directly concerned with the study of indigenous or non-Western peoples from a combined historical/anthropological viewpoint, which employs written documents, oral narrative, material culture, and ethnographic data for analysis.

European exploration along the California coast began in 1542 with the landing of Juan Rodriguez Cabrillo and his men at San Diego Bay. Sixty years after the Cabrillo expeditions, an expedition under Sebastian Viscaíno made an extensive and thorough exploration of the Pacific coast. Although the voyage did not extend beyond the northern limits of the Cabrillo track, Viscaíno had the most lasting effect upon the nomenclature of the coast. Many of his place names have survived, whereas practically every one of the names created by Cabrillo have faded from use. For instance, Cabrillo named the first (now) United States port he stopped at “San Miguel”; 60 years later, Viscaíno changed it to “San Diego” (Rolle 1969). The early European voyages observed Native Americans living in villages along the coast but did not make any substantial, long-lasting impact. At the time of contact, the Luiseño population was estimated to have ranged from 4,000 to as many as 10,000 individuals (Bean and Shipek 1978; Kroeber 1976).

The historic background of the project area began with the Spanish colonization of Alta California. The first Spanish colonizing expedition reached southern California in 1769 with the intention of converting and civilizing the indigenous populations, as well as expanding the knowledge of and access to new resources in the region (Brigandi 1998). As a result, by the late eighteenth century, a large portion of southern California was overseen by Mission San Luis Rey (San Diego County), Mission San Juan Capistrano (Orange County), and Mission San Gabriel (Los Angeles County), who began colonizing the region and surrounding areas (Chapman 1921).

Native Californians may have first coalesced with Europeans around 1769 when the first Spanish mission was established in San Diego. In 1771, Friar Francisco Graces first searched the Californian desert for potential mission sites. Interactions between local tribes and Franciscan priests occurred by 1774 when Juan Bautista De Anza made an exploration of Alta California.

Serrano contact with the Europeans may have occurred as early as 1771 or 1772, but it was not until approximately 1819 that the Spanish directly influenced the culture. The Spanish established *asistencias* in San Bernardino, Pala, and Santa Ysabel. Between the founding of the *asistencia* and secularization in 1834, most of the Serranos in the San Bernardino Mountains were removed to the nearby missions (Beattie and Beattie 1951:366) while the Cahuilla maintained a high level of autonomy from Spain (Bean 1978).

Each mission gained power through the support of a large, subjugated Native American workforce. As the missions grew, livestock holdings increased and became increasingly vulnerable to theft. To protect their interests, the southern California missions began to expand inland to try and provide additional security (Beattie and Beattie 1939; Caughey 1970). In order to meet their needs, the Spaniards embarked upon a formal expedition in 1806 to find potential locations within what is now the San Bernardino Valley. As a result, by 1810, Father Francisco Dumetz of Mission San Gabriel had succeeded in establishing a religious site, or *capilla*, at a Cahuilla rancheria called Guachama (Beattie and Beattie 1939). San Bernardino Valley received its name from this site, which was dedicated to San Bernardino de Siena by Father Dumetz. The Guachama rancheria was located in present-day Bryn Mawr in San Bernardino County.

These early colonization efforts were followed by the establishment of *estancias* at Puente (circa 1816) and San Bernardino (circa 1819) near Guachama (Beattie and Beattie 1939). These efforts were soon mirrored by the Spaniards from Mission San Luis Rey, who in turn established a presence in what is now Lake Elsinore, Temecula, and Murrieta (Chapman 1921). The indigenous groups who occupied these lands were recruited by missionaries, converted, and put to work in the missions (Pourade 1961). Throughout this period, the Native American populations were decimated by introduced diseases, a drastic shift in diet resulting in poor nutrition, and social conflicts due to the introduction of an entirely new social order (Cook 1976).

Mexico achieved independence from Spain in 1822 and became a federal republic in 1824. As a result, both Baja and Alta California became classified as territories (Rolle 1969). Shortly thereafter, the Mexican Republic sought to grant large tracts of private land to its citizens to begin to encourage immigration to California and to establish its presence in the region. Part of the establishment of power and control included the desecularization of the missions circa 1832. These same missions were also located on some of the most fertile land in California and, as a result, were considered highly valuable. The resulting land grants, known as “*ranchos*,” covered expansive portions of California and by 1846, more than 600 land grants had been issued by the Mexican government. Rancho Jurupa was the first rancho to be established and was issued to Juan Bandini in 1838. Although Bandini primarily resided in San Diego, Rancho Jurupa was located in what is now Riverside County (Pourade 1963). A review of Riverside County place names quickly illustrates that many of the ranchos in Riverside County lent their names to present-day locations, including Jurupa, El Rincon, La Sierra, El Sobrante de San Jacinto, La Laguna (Lake Elsinore), Santa Rosa, Temecula, Pauba, San Jacinto Nuevo y Potrero, and San Jacinto Viejo (Gunther 1984). As was typical of many ranchos, these were all located in the valley environments within western Riverside County.

The treatment of Native Americans grew worse during the Rancho Period. Most of the Native Americans were forced off their land or put to work on the now privately-owned ranchos, most often as slave labor. Considering the brutality of the ranchos, the degree to which Native Americans had become dependent upon the mission system is evident when, in 1838, a group of Native Americans from Mission San Luis Rey petitioned government officials in San Diego to relieve suffering at the hands of the rancheros:

We have suffered incalculable losses, for some of which we are in part to be blamed for because many of us have abandoned the Mission ... We plead and beseech you ... to grant us a Rev. Father for this place. We have been accustomed to the Rev. Fathers and to their manner of managing the duties. We labored under their intelligent directions, and we were obedient to the Fathers according to the regulations, because we considered it as good for us. (Brigandi 1998:21)

Native American culture had been disrupted to the point where they could no longer rely upon prehistoric subsistence and social patterns. Not only does this illustrate how dependent the Native Americans had become upon the missionaries, but it also indicates a marked contrast in the way the Spanish treated the Native Americans as compared to the Mexican and United States ranchers. Spanish colonialism (missions) is based upon utilizing human resources while integrating them into their society. The ranchers, both Mexican and American, did not accept Native Americans into their social order and used them specifically for the extraction of labor, resources, and profit. Rather than being incorporated, they were either subjugated or exterminated (Cook 1976).

In 1846, war erupted between Mexico and the United States. In 1848, with the signing of the Treaty of Guadalupe Hidalgo, the region was annexed as a territory of the United States, and in 1850, California became a state. These events generated a steady flow of settlers into the area, including gold miners, entrepreneurs, health-seekers, speculators, politicians, adventurers, seekers of religious freedom, and individuals desiring to create utopian colonies. As the non-native population increased through immigration, the indigenous population rapidly declined from the high morbidity of European diseases, low birth rates, and conflict and violence. California became a state in 1850 and was divided into 21 counties. The dwindling native populations were eventually displaced into reservations after California became a state.

By 1846, tensions between the United States and Mexico had escalated to the point of war (Rolle 1969). In order to reach a peaceful agreement, the Treaty of Guadalupe Hidalgo was put into effect in 1848, which resulted in the annexation of California to the United States. Once California opened to the United States, waves of settlers moved in searching for gold mines, business opportunities, political opportunities, religious freedom, and adventure (Rolle 1969; Caughey 1970). By 1850, California had become a state and was eventually divided into 27 separate counties. A much larger population was now settling in California, primarily in the central

valley, San Francisco, and the Gold Rush region of the Sierra Nevada mountain range (Rolle 1969; Caughey 1970). During this time, southern California grew at a much slower pace than northern California and was still dominated by the cattle industry that was established during the earlier rancho period.

By the late 1880s and early 1890s, there was growing discontent between San Bernardino and Riverside, its neighbor 10 miles to the south, due to differences in opinion concerning religion, morality, the Civil War, politics, and fierce competition to attract settlers. After a series of instances in which charges were claimed about unfair use of tax monies to the benefit of only the city of San Bernardino, several people from Riverside decided to investigate the possibility of a new county. In May 1893, voters living within portions of San Bernardino County (to the north) and San Diego County (to the south) approved the formation of Riverside County. Early business opportunities were linked to the agriculture industry, but commerce, construction, manufacturing, transportation, and tourism also provided a healthy local economy.

A Brief History of the Project Vicinity

In the early 1860s, as gold mining in the Sierra Nevada mountains began to decline, many miners looked to the Mojave Desert. However, it was not until the discovery of silver in Calico and the construction of the Southern Pacific Railroad from Mojave to Daggett in 1882 that the region became a mining center. This gave rise to the now famous 20-mule teams. Ten teams were hitched together with two wagons and a water wagon to haul ore from Daggett to the town of Calico. The rich silver deposits gave birth to Calico Mines, Waterman Mines, and Daggett Mills (Kyle 1990). One of the most prevalent mines in the Morongo Basin region was the Desert Queen Mine, where gold was discovered in the 1890s. The mine remained in operation until 1961 (Chappell 1971). Although many miners hoped to find gold or silver, these ventures also bolstered the non-metallic mining industry, which remains a significant portion of the Morongo Basin and greater Mojave Desert commercial industry (Fife 1988).

Transportation has also been instrumental in the development of the Morongo Basin. In the 1930s, State Route (SR) 62, also known as the Twentynine Palms Highway) replaced the Banning-Dale Road as the preferred route through the Morongo Basin. The Banning-Dale Road had emerged in the 1910s, but the general alignment had been utilized since the 1840s or 1850s as a wagon trail reportedly established by Powell “Paulino” Weaver (Grubbs 2007).

In 1936 Joshua Tree National Monument was established, which also increased travel and the popularity of the Morongo Basin region (NPS 2019). Not long after, in 1937, the Joshua Tree Townsite Company built offices along Twentynine Palms Road (Smith 1996). An article published on the z107.7fm radio station website states that:

From 1941-1944, the population grew from 49 to 227 people. The first business block of 5 stores was built in 1945 and the first Post Office was built in 1946. In 1949, the area shared filming sites with nearby Pioneer Town and boasted a thriving

turkey industry; and in 1950, villagers celebrated the completion of their self-built fire station. In 1963, the Hi-Desert Memorial Hospital District was established, and the then Joshua Tree Fire Protection District expanded. The population climbed to 3,800 people by 1967 and up to 4,500 people by 1969. By the 1970s, the area began to see more extensive development, including a Modern hospital on White Feather Road and the completion of the Joshua Tree Community Center in 1979. (Smith 1996)

As part of the Desert Protection Bill, Joshua Tree National Monument was elevated to park status on October 31, 1994, and 234,000 acres were added to the new park’s boundaries (NPS 2019).

1.4 Results of the Archaeological Records Search

BFSA conducted an updated archaeological records search for a one-mile radius around the project from the SCCIC at CSU Fullerton. The updated SCCIC records search identified 10 cultural resources within one mile of the project, two of the resources consisting of a historic trash scatter with cistern (Site Temp-1) and a historic trash scatter (Temp-2) are located within the subject property. The remaining resources identified during the search include one prehistoric lithic scatter, three prehistoric isolates, one multicomponent site, one historic trash scatter, and two historic isolates (Table 1.4–1).

Table 1.4–1
Cultural Resources Within One Mile of the Project

Site Number	Resource Type
P-36-009595	Prehistoric lithic scatter
P-36-025046, P-36-025048, and P-36-026907	Prehistoric isolate
P-36-028351	Multicomponent site containing two prehistoric lithic scatters, a prehistoric isolate, the historic Roy Williams Airport/Hi-Desert Airport, two historic trash scatters, and one historic isolate
Temp-1*	Historic trash scatter with cistern
P-36-025036; and Temp-2*	Historic trash scatter
P-36-025047 and P-36-025049	Historic isolate

* Located on the subject property

The records search results also identified seven cultural resources studies that have been conducted within one mile of the project. Of the previous studies, only the 2023 BFSA study, conducted in support of the current development, included the subject property, the results of which are presented below (Garrison 2023).

The 2023 BFSA survey of the property resulted in the identification of the two historic

archaeological sites (Temp-1 and Temp-2). Site Temp-1 consists of a cistern and a historic artifact scatter at the location where structures are visible on aerial photographs between 1953 and 1989. Site Temp-2 is a historic artifact scatter just northwest of the intersection of 3rd Street and Sunever Road. The site assemblage primarily consists of cans, metal, and glass fragments. Following identification of sites Temp-1 and Temp-2, BFSa conducted a Phase II testing and evaluation study of the resources (Garrison 2023). This included the detailed recordation of each site on Department of Parks and Recreation (DPR) site record forms, the collection of a representative sample of surface artifacts, and shovel test pit (STP) excavations at each of the sites. The artifact assemblage for Site Temp-1 was found to date between the late 1960s and 1970s. The assemblage for Site Temp-2 was found to date between the late 1950s and 1960s. No significant intact cultural materials were recovered from the 2023 surface examinations or subsurface tests, and sites Temp-1 and Temp-2 were determined to be not CEQA-significant and not eligible for listing on the CRHR (Garrison 2023). The complete records search results can be found in Appendix B.

In addition, BFSa reviewed the following historic sources:

- The National Register of Historic Places Index
- The Office of Historic Preservation (OHP), Archaeological Determinations of Eligibility
- The OHP, Built Environment Resource Directory
- Bureau of Land Management (BLM) General Land Office (GLO) records
- Historic USGS maps
- Historic aerial photographs (1953, 1970, 1983, 1989, 1995, 2005, 2009, 2010, 2012, 2014, 2016, 2018, 2021)

The BLM GLO records show a 1930 patent was issued to Laura Burns for the property and surrounding area, which comprised the entirety of the northeast quarter of Section 20, Township 1 North, Range 7 East. San Bernardino County Assessor's data on file with the Property Information Management System show the project parcel was acquired by Kenneth and Neva Claypool in 1965. According to the aerial photographs, one structure is visible in the northeast quarter of the property by 1953, approximately 50 feet south of East Broadway. This structure is also visible on the 1955 USGS 15' *Joshua Tree* quadrangle map. By 1970, an additional structure, possibly a shed, is also visible at this location. Although the images are blurry, it does appear that the structures are still present in the 1983 and 1989 photographs. By 1995, the structures are no longer visible; however, the location of the structures visible in the historic aerial photographs corresponds with Site Temp-1. Subsequent photographs show the project as a vacant desert landscape.

BFSa also requested a SLF search from the NAHC in 2023. The results were negative for the presence of any recorded Native American sacred sites or locations of religious or ceremonial importance within one mile of the project. All correspondence is provided in Appendix C.

1.5 Applicable Regulations

Resource importance is assigned to districts, sites, buildings, structures, and objects that possess exceptional value or quality illustrating or interpreting the heritage of San Bernardino County in history, architecture, archaeology, engineering, and culture. Several criteria are used in demonstrating resource importance. Specifically, the criteria outlined in CEQA, provide the guidance for making such a determination. The following sections detail the criteria that a resource must meet in order to be determined important.

1.5.1 California Environmental Quality Act

According to CEQA (§15064.5a), the term “historical resource” includes the following:

- 1) A resource listed in or determined to be eligible by the State Historical Resources Commission for listing in the CRHR (Public Resources Code SS5024.1, Title 14 CCR, Section 4850 et seq.).
- 2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- 3) Any object, building, structure, site, area, place, record, or manuscript, which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be “historically significant” if the resource meets the criteria for listing on the CRHR (Public Resources Code SS5024.1, Title 14, Section 4852) including the following:
 - a) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
 - b) Is associated with the lives of persons important in our past;
 - c) 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
 - d) Has yielded, or may be likely to yield, information important in prehistory or history.
- 4) The fact that a resource is not listed in, or determined eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to Section 5020.1[k] of

the Public Resources Code), or identified in a historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be a historical resource as defined in Public Resources Code Section 5020.1(j) or 5024.1.

According to CEQA (§15064.5b), 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 a significant effect on the environment. CEQA defines a substantial adverse change as:

- 1) Substantial adverse change in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.
- 2) The significance of a historical resource is materially impaired when a project:
 - a) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in the CRHR; or
 - b) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the Public Resources Code or its identification in a historical resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or,
 - c) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA.

Section 15064.5(c) of CEQA applies to effects on archaeological sites and contains the following additional provisions regarding archaeological sites:

- 1) When a project will impact an archaeological site, a lead agency shall first determine whether the site is a historical resource, as defined in subsection (a).
- 2) If a lead agency determines that the archaeological site is a historical resource, it shall refer to the provisions of Section 21084.1 of the Public Resources Code, Section 15126.4 of the guidelines, and the limits contained in Section 21083.2 of the Public Resources Code do not apply.

- 3) If an archaeological site does not meet the criteria defined in subsection (a), but does meet the definition of a unique archaeological resource in Section 21083.2 of the Public Resources Code, the site shall be treated in accordance with the provisions of Section 21083.2. The time and cost limitations described in Public Resources Code Section 21083.2 (c-f) do not apply to surveys and site evaluation activities intended to determine whether the project location contains unique archaeological resources.
- 4) If an archaeological resource is neither a unique archaeological nor historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment. It shall be sufficient that both the resource and the effect on it are noted in the Initial Study or Environmental Impact Report, if one is prepared to address impacts on other resources, but they need not be considered further in the CEQA process.

Sections 15064.5(d) and (e) contain additional provisions regarding human remains. Regarding Native American human remains, paragraph (d) states:

- (d) When an Initial Study identifies the existence of, or the probable likelihood of, Native American human remains within the project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC as provided in Public Resources Code SS5097.98. The applicant may develop an agreement for treating or disposing of, with appropriate dignity, the human remains, and any items associated with Native American burials with the appropriate Native Americans as identified by the NAHC. Action implementing such an agreement is exempt from:
 - 1) The general prohibition on disinterring, disturbing, or removing human remains from any location other than a dedicated cemetery (Health and Safety Code Section 7050.5).
 - 2) The requirements of CEQA and the Coastal Act.

2.0 **RESEARCH DESIGN**

The primary goal of the research design is to attempt to understand the way in which humans have used the land and resources within the project area through time, as well as to aid in the determination of resource significance. For the current project, the study area under investigation is southwestern San Bernardino County. The scope of work included the survey of the 81.2-acre study area and CEQA significance evaluations of any archaeological resources identified on the project that would be affected as a result of the development. Given the area involved and the recorded presence of archaeological sites, the research design for this project was focused upon realistic study options. Since the main objective of the investigation was to identify the presence of and potential impacts to cultural resources, the goal is not necessarily to answer wide-reaching theories regarding the development of early southern California, but to investigate the role and importance of the identified resources. Nevertheless, the assessment of the significance of a resource must take into consideration a variety of characteristics, as well as the ability of the resource to address regional research topics and issues. Several specific research questions were developed that could be used to guide an initial investigation of any observed cultural resources. The following research questions consider the small size and location of the project discussed above.

Research Questions:

- Can located cultural resources be associated with a specific time period, population, or individual?
- Do the types of any located cultural resources allow a site activity/function to be determined from a preliminary investigation? What are the site activities? What is the site function? What resources were exploited?
- How do located sites compare to others reported from different surveys conducted in the area?
- How do located sites fit existing models of settlement and subsistence for mountainous environments of the region?

Data Needs

At the survey level, the principal research objective is a generalized investigation of changing settlement patterns in both the prehistoric and historic periods within the study area. The overall goal is to understand settlement and resource procurement patterns of the project occupants. Therefore, adequate information on site function, context, and chronology from an archaeological perspective is essential for the investigation. The fieldwork and archival research were undertaken with the following primary research goals in mind:

- 1) To identify cultural resources occurring within the project;
- 2) To determine, if possible, site type and function, context of the resource(s), and chronological placement of each cultural resource identified;
- 3) To place each cultural resource identified within a regional perspective; and
- 4) To provide recommendations for the treatment of each cultural resource identified.

3.0 ANALYSIS OF PROJECT EFFECTS

The cultural resources assessment of the project consisted of an institutional records search, an archival research, an intensive cultural resource survey of the entire 81.2-acre study area, and the preparation of this technical report. This study was conducted in conformance with Section 21083.2 of the California Public Resources Code and CEQA. Statutory requirements of CEQA (Section 15064.5) were followed for the identification and evaluation of resources. Specific definitions for archaeological resource type(s) used in this report are those established by the State Historic Preservation Office (SHPO 1995).

3.1 Methods

3.1.1 Field Methodology

The updated cultural resources survey was conducted on June 4, 2025, under the direction of Principal Investigator Tracy A. Stropes, M.A., RPA. Methodology employed during the current investigation followed standard archaeological field procedures and was sufficient to accomplish a thorough survey of the project. The field methodology employed for the project included walking evenly spaced survey transects set approximately 10 to 15 meters apart while visually inspecting the ground surface. The archaeological survey was an intensive reconnaissance consisting of a series of survey transects across the project, the entirety of which was accessible. All potentially sensitive areas where cultural resources might be located were closely inspected. Photographs documenting survey areas and overall survey conditions were taken frequently.

3.2 Results of the Field Survey

The updated survey was conducted on June 4, 2025. The vegetation across the landscape primarily consisted of creosote bushes, wildflowers, and sage (Plates 3.2–1 and 3.2–2). Ground visibility during the survey was considered moderate to good. However, accumulated wind-swept soil hindered ground visibility around the bases of creosote bushes. No previously unidentified resources were identified during the survey. The two previously recorded historic trash scatters (Temp-1 and Temp-2) were located and found to be in the same condition as when previously evaluated by BFSa in 2023 (Plates 3.2–3 and 3.2–4, and Figures 3.2–1 and 3.2–2). As such, the updated survey has confirmed the 2023 results for the Joshua Tree Estates Project that no CRHR-eligible resources are located on the subject property.



Plate 3.2-1: Overview of the property, facing southeast.



Plate 3.2-2: Overview of the project, facing northwest.



Plate 3.2-3: Overview of Site Temp-1, facing west.



Plate 3.2-4: Overview of Site Temp-2, facing south.

Figure 3.2-1
Cultural Resource Location Map
(Deleted for Public Review; Bound Separately)

Figure 3.2-2
Cultural Resources Locations
Shown on an Aerial Photograph

(Deleted for Public Review; Bound Separately)

4.0 RECOMMENDATIONS

The results of the cultural resources survey update for the Joshua Tree Estates Project are consistent with the 2023 BFSA findings (Garrison 2023). Sites Temp-1 and Temp-2 within the subject property are not significant and ineligible for listing on the CRHR. Therefore, site-specific mitigation measures will not be required. However, based upon constraints resulting from partially limited ground visibility and the previously identified prehistoric and historic resources within the project vicinity, future grading within the subject property may impact cultural resources that have not been previously identified. Because the potential exists that inadvertent discoveries could be made during grading or earthwork, it is recommended that the project be conditioned with archaeological monitoring during ground-disturbing activities tied to the future residential development of the property. However, during grading, the consulting archaeologist shall have the authority to modify and reduce the monitoring program to either periodic spot-checks or suspension of the monitoring program if the potential for cultural resources appears to be less than anticipated. Should human remains be discovered, treatment of these remains shall follow California Public Resources Code 5097.9. Any human remains that are determined to be Native American shall be reported to the San Bernardino County Coroner and subsequently to the NAHC. These recommendations are consistent with the 2023 BFSA recommendations (Garrison 2023).

5.0 LIST OF PREPARERS AND ORGANIZATIONS CONTACTED

The archaeological survey updated program for the Joshua Tree Estates Project was directed by Principal Investigator Tracy A. Stropes, M.A., RPA. The report text was prepared by Andrew Garrison. Report graphics were provided by Emily Soong. Technical editing and report production were conducted by Danielle Del Castillo. The archaeological records search was conducted at the SCCIC at CSU Fullerton.

6.0 CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this archaeological report, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.



June 12, 2025

Andrew J. Garrison, M.A., RPA
Senior Archaeologist

Date

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APPENDIX A

Resumes of Key Personnel

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Master of Arts, Public History, University of California, Riverside	2009
Bachelor of Science, Anthropology, University of California, Riverside	2005
Bachelor of Arts, History, University of California, Riverside	2005

Professional Memberships

Register of Professional Archaeologists	Society of Primitive Technology
Society for California Archaeology	Lithic Studies Society
Society for American Archaeology	California Preservation Foundation
California Council for the Promotion of History	Pacific Coast Archaeological Society

Experience

Senior Archaeologist

BFSA Environmental Services, a Perennial Company

June 2017–Present

Poway, California

Project management of all phases of archaeological investigations for local, state, and federal agencies including National Register of Historic Places (NRHP) and California Environmental Quality Act (CEQA) level projects interacting with clients, sub-consultants, and lead agencies. Supervise and perform fieldwork including archaeological survey, monitoring, site testing, comprehensive site records checks, and historic building assessments. Perform and oversee technological analysis of prehistoric lithic assemblages. Author or co-author cultural resource management reports submitted to private clients and lead agencies.

Senior Archaeologist and GIS Specialist

Scientific Resource Surveys, Inc.

2009–2017

Orange, California

Served as Project Archaeologist or Principal Investigator on multiple projects, including archaeological monitoring, cultural resource surveys, test excavations, and historic building assessments. Directed projects from start to finish, including budget and personnel hours proposals, field and laboratory direction, report writing, technical editing, Native American consultation, and final report submittal. Oversaw all GIS projects including data collection, spatial analysis, and map creation.

Preservation Researcher

City of Riverside Modernism Survey

2009

Riverside, California

Completed DPR Primary, District, and Building, Structure and Object Forms for five sites for a grant-funded project to survey designated modern architectural resources within the City of Riverside.

Information Officer
Eastern Information Center (EIC), University of California, Riverside

2005, 2008–2009
Riverside, California

Processed and catalogued restricted and unrestricted archaeological and historical site record forms. Conducted research projects and records searches for government agencies and private cultural resource firms.

Reports/Papers

- 2019 Cultural Resource Monitoring Report for the Pipeline Rehabilitation AP-1 Project, City of San Diego, California. Brian F. Smith and Associates, Inc.
- 2019 Cultural Resources Study for the Pioneer Redlands Project, San Bernardino County, California. Brian F. Smith and Associates, Inc.
- 2019 Cultural Resource Report for the U.S. Allied Carriers Project, City of Riverside, Riverside County, California. Brian F. Smith and Associates, Inc.
- 2019 Phase I Cultural Resources Survey for the Go Fresh Gas Station Project, City of Moreno Valley, Riverside County, California. Brian F. Smith and Associates, Inc.
- 2019 A Negative Cultural Resources Survey Report for the Barnaba Soccer Fields and Event Space Project, San Diego County, California.
- 2019 Phase I Cultural Resource Survey for the 2608 South Escondido Boulevard Project, City of Escondido. Brian F. Smith and Associates, Inc.
- 2019 A Negative Cultural Resources Survey Report for the Quail Ridge Project, San Diego County, California. Brian F. Smith and Associates, Inc.
- 2019 A Phase I Cultural Resource Study for the Eastvale Self Storage Project, Eastvale, California. Brian F. Smith and Associates, Inc.
- 2019 A Class III Archaeological Study for the Tuscany Valley (TM 33725) Project National Historic Preservation Act Section 106 Compliance, Lake Elsinore, Riverside County, California. Contributing author. Brian F. Smith and Associates, Inc.
- 2019 A Phase I Cultural Resources Assessment for the Dudley Pomona Project, Pomona, California. Brian F. Smith and Associates, Inc.
- 2019 A Phase I and II Cultural Resources Assessment for the Jack Rabbit Trail Logistics Center Project, City of Beaumont, Riverside County, California. Brian F. Smith and Associates, Inc.
- 2019 A Phase I Cultural Resources Assessment for the 10575 Foothill Boulevard Project, Rancho Cucamonga, California. Brian F. Smith and Associates, Inc.
- 2019 A Phase I Cultural Resources Survey for the IDI Rider 2 & 4 High Cube Warehouses and PVSD Channel Improvement Project, Perris, California. Brian F. Smith and Associates, Inc.
- 2019 Cultural Resources Study for the County Road and East End Avenue Project, City of Chino, San Bernardino County, California. Brian F. Smith and Associates, Inc.

- 2019 A Phase I Cultural Resources Survey for the IPT Perris DC III Western/Nandina Project, Perris, California. Brian F. Smith and Associates, Inc.
- 2019 Phase II Cultural Resource Study for the McElwain Project, City of Murrieta, California. Contributing author. Brian F. Smith and Associates, Inc.
- 2019 A Section 106 (NHPA) Historic Resources Study for the McElwain Project, City of Murrieta, Riverside County, California. Brian F. Smith and Associates, Inc.
- 2019 A Phase I Cultural Resources Survey Report for the Commercial/Retail NWC Mountain and Lake Streets Project, City of Lake Elsinore, Riverside County, California. Brian F. Smith and Associates, Inc.
- 2019 A Section 106 (NHPA) Historic Resources Study for the Twin Channel Project, City of San Bernardino, San Bernardino County, California. Brian F. Smith and Associates, Inc.
- 2019 Cultural Resources Study for the 10407 Elm Avenue Project, City of Fontana, San Bernardino County, California. Brian F. Smith and Associates, Inc.
- 2019 A Phase I Cultural Resource Study for the Olivenhain Apartments Project, Encinitas, California. Brian F. Smith and Associates, Inc.
- 2019 A Phase I Cultural Resource Study for the Sanctuary Project, Encinitas, California. Brian F. Smith and Associates, Inc.
- 2019 A Cultural Resources Survey Report for the Borrego Springs 141 Project, San Diego County, California. Brian F. Smith and Associates, Inc.
- 2019 A Phase I Cultural Resources Survey for the Natwar Project, Perris, California. Brian F. Smith and Associates, Inc.
- 2019 A Phase I Cultural Resources Survey for the Morningstar Marguerite Project, Mission Viejo, California. Brian F. Smith and Associates, Inc.
- 2019 A Phase I Cultural Resources Assessment for the Anza Baptist Church Project, Riverside County. Brian F. Smith and Associates, Inc.
- 2019 A Phase I Cultural Resources Assessment for the Inland Propane Project, Riverside County, California. Brian F. Smith and Associates, Inc.
- 2019 A Phase I Cultural Resources Survey for the First Industrial Wilson Avenue Project, Perris, California. Brian F. Smith and Associates, Inc.
- 2018 A Class III Historic Resource Study for Phase 2 of the Atwell Project for Section 106 Compliance, Banning, California. Brian F. Smith and Associates, Inc.
- 2018 Cultural Resource Monitoring Report for the Sewer Group 818 Project, City of San Diego. Brian F. Smith and Associates, Inc.
- 2018 Phase I Cultural Resource Survey for the Stone Residence Project, 1525 Buckingham Drive, La Jolla, California 92037. Brian F. Smith and Associates, Inc.
- 2018 A Phase I Cultural Resources Assessment for the Hanna Banning Project, Banning, California. Brian F. Smith and Associates, Inc.

- 2018 Cultural Resources Negative Findings for the SNC Mixed Use Project, San Diego County, California. Brian F. Smith and Associates, Inc.
- 2018 Cultural Resources Study for the Perrin Oak Ranch Winery Project, San Diego County, California. Brian F. Smith and Associates, Inc.
- 2018 Phase I Cultural Resource Survey for the Stemley 42nd Street Project, San Diego, California. Brian F. Smith and Associates, Inc.
- 2018 Cultural Resource Monitoring Report for the 320 West Cedar Street Project, San Diego, California. Brian F. Smith and Associates, Inc.
- 2018 Cultural Resource Monitoring Report for the 8352 La Jolla Shores Drive Project, San Diego, California. Brian F. Smith and Associates, Inc.
- 2018 Phase I Cultural Resources Survey of APNs 316-210-032 and -033, City of Moreno Valley, County of Riverside. Contributing author. Brian F. Smith and Associates, Inc.
- 2018 A Cultural Resources Assessment for TR 37177, City of Riverside, Riverside County, California. Brian F. Smith and Associates, Inc.
- 2018 A Phase I Cultural Resources Assessment for the Seaton Commerce Center Project, Riverside County, California. Brian F. Smith and Associates, Inc.
- 2017 A Phase I Cultural Resources Assessment for the Marbella Villa Project, City of Desert Hot Springs, Riverside County, California. Brian F. Smith and Associates, Inc.
- 2017 Phase I Cultural Resources Survey for TTM 37109, City of Jurupa Valley, County of Riverside. Brian F. Smith and Associates, Inc.
- 2017 A Phase I Cultural Resources Survey for the Jefferson & Ivy Project, City of Murrieta, California. Brian F. Smith and Associates, Inc.
- 2017 A Phase I Cultural Resources Assessment for the Nuevo Dollar General Store Project, Riverside County, California. Brian F. Smith and Associates, Inc.
- 2017 A Phase I Cultural Resource Study for the Westmont Project, Encinitas, California. Brian F. Smith and Associates, Inc.
- 2017 A Phase I Cultural Resources Assessment for the Winchester Dollar General Store Project, Riverside County, California. Brian F. Smith and Associates, Inc.
- 2017 Phase I Cultural Resource Assessment for TTM 31810 (42.42 acres) Predico Properties Olive Grove Project. Scientific Resource Surveys, Inc.
- 2016 John Wayne Airport Jet Fuel Pipeline and Tank Farm Archaeological Monitoring Plan. Scientific Resource Surveys, Inc. On file at the County of Orange, California.
- 2016 Phase I Cultural Resources Assessment: All Star Super Storage City of Menifee Project, 2015-156. Scientific Resource Surveys, Inc. On file at the Eastern Information Center, University of California, Riverside.
- 2016 Historic Resource Assessment for 220 South Batavia Street, Orange, CA 92868 Assessor's Parcel Number 041-064-4. Scientific Resource Surveys, Inc. Submitted to the City of Orange as part of

Mills Act application.

- 2015 Historic Resource Report: 807-813 Harvard Boulevard, Los Angeles. Scientific Resource Surveys, Inc. On file at the South Central Coastal Information Center, California State University, Fullerton.
- 2015 Exploring a Traditional Rock Cairn: Test Excavation at CA-SDI-13/RBLI-26: The Rincon Indian Reservation, San Diego County, California. Scientific Resource Surveys, Inc.
- 2015 Class III Scientific Resource Surveys, Inc. Survey for The Lynx Cat Granite Quarry and Water Valley Road Widening Project County of San Bernardino, California, Near the Community of Hinkley. Scientific Resource Surveys, Inc. On file at the South Central Coastal Information Center, California State University, Fullerton.
- 2014 Archaeological Phase I: Cultural Resource Survey of the South West Quadrant of Fairview Park, Costa Mesa. Scientific Resource Surveys, Inc. On file at the South Central Coastal Information Center, California State University, Fullerton.
- 2014 Archaeological Monitoring Results: The New Los Angeles Federal Courthouse. Scientific Resource Surveys, Inc. On file at the South Central Coastal Information Center, California State University, Fullerton.
- 2012 Bolsa Chica Archaeological Project Volume 7, Technological Analysis of Stone Tools, Lithic Technology at Bolsa Chica: Reduction Maintenance and Experimentation. Scientific Resource Surveys, Inc.
- 2010 Phase II Cultural Resources Report Site CA-RIV-2160 PM No. 35164. Scientific Resource Surveys, Inc. On file at the Eastern Information Center, University of California, Riverside.
- 2009 Riverside Modernism Context Survey, contributing author. Available online at the City of Riverside.

Presentations

- 2017 "Repair and Replace: Lithic Production Behavior as Indicated by the Debitage Assemblage from CA-MRP-283 the Hackney Site." Presented at the Society for California Archaeology Annual Meeting, Fish Camp, California.
- 2016 "Bones, Stones, and Shell at Bolsa Chica: A Ceremonial Relationship?" Presented at the Society for California Archaeology Annual Meeting, Ontario, California.
- 2016 "Markers of Time: Exploring Transitions in the Bolsa Chica Assemblage." Presented at the Society for California Archaeology Annual Meeting, Ontario, California.
- 2016 "Dating Duress: Understanding Prehistoric Climate Change at Bolsa Chica." Presented at the Society for California Archaeology Annual Meeting, Ontario, California.
- 2015 "Successive Cultural Phasing Of Prehistoric Northern Orange County, California." Presented at the Society for California Archaeology Annual Meeting, Redding, California.
- 2015 "Southern California Cogged Stone Replication: Experimentation and Results." Presented at the Society for California Archaeology Annual Meeting, Redding, California.

- 2015 "Prehistoric House Keeping: Lithic Analysis of an Intermediate Horizon House Pit." Presented at the Society for California Archaeology Annual Meeting, Redding, California.
- 2015 "Pits and Privies: The Use and Disposal of Artifacts from Historic Los Angeles." Presented at the Society for California Archaeology Annual Meeting, Redding, California.
- 2015 "Grooving in the Past: A Demonstration of the Manufacturing of OGR beads and a look at Past SRS, Inc. Replicative Studies." Demonstration of experimental manufacturing techniques at the January meeting of The Pacific Coast Archaeological Society, Irvine, California.
- 2014 "From Artifact to Replication: Examining *Olivella* Grooved Bead Manufacturing." Presented at the Society for California Archaeology Annual Meeting, Visalia, California.
- 2014 "New Discoveries from an Old Collection: Comparing Recently Identified OGR Beads to Those Previously Analyzed from the Encino Village Site." Presented at the Society for California Archaeology Annual Meeting, Visalia, California.
- 2012 Bolsa Chica Archaeology: Part Seven: Culture and Chronology. Lithic demonstration of experimental manufacturing techniques at the April meeting of The Pacific Coast Archaeological Society, Irvine, California.
- 2012 "Expedient Flaked Tools from Bolsa Chica: Exploring the Lithic Technological Organization." Presented at the Society for California Archaeology Annual Meeting, San Diego, California.
- 2012 "Utilitarian and Ceremonial Ground Stone Production at Bolsa Chica Identified Through Production Tools." Presented at the Society for California Archaeology Annual Meeting, San Diego, California.
- 2012 "Connecting Production Industries at Bolsa Chica: Lithic Reduction and Bead Manufacturing." Presented at the Society for California Archaeology Annual Meeting, San Diego, California.
- 2011 Bolsa Chica Archaeology: Part Four: Mesa Production Industries. Co-presenter at the April meeting of The Pacific Coast Archaeological Society, Irvine, California.
- 2011 "Hammerstones from Bolsa Chica and Their Relationship towards Site Interpretation." Presented at the Society for California Archaeology Annual Meeting, Rohnert Park, California.
- 2011 "Exploring Bipolar Reduction at Bolsa Chica: Debitage Analysis and Replication." Presented at the Society for California Archaeology Annual Meeting, Rohnert Park, California.

APPENDIX B

Archaeological Records Search Results

(Deleted for Public Review; Bound Separately)

APPENDIX C

NAHC Sacred Lands File Search Results

(Deleted for Public Review; Bound Separately)

APPENDIX D

Confidential Maps

(Deleted for Public Review; Bound Separately)