

A PHASE I CULTURAL RESOURCES ASSESSMENT FOR THE SURFACE MINING PERMIT NO. 159, AMENDMENT NO. 2 PROJECT

SMP00159R2 RIVERSIDE COUNTY, CALIFORNIA

**APNs 421-200-001, 422-240-007,
423-240-018, -019, -020, -021, and -022**

**Project Site Location: Sections 25 and 36, Township 3 South, Range 2 West;
Section 30, Township 3 South, Range 1 West, San Bernardino Base and Meridian,
as shown on the *El Casco* USGS Quadrangle Topographic Map**

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January 18, 2018; Revised April 23, 2019

Fieldwork Performed: October 19, 2017

Key Words: 205.11 acres; archaeological survey; negative; no impacts to cultural resources.

Archaeological Report Summary Information

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Assessor's Parcel Numbers: 421-200-001, 422-240-007, 423-240-018, -019, -020, -021, and
-022

USGS Quadrangle: *El Casco, California* (7.5-minute)

Study Area: 205.11 acres

Key Words: Archaeological survey program; negative; County of Riverside;
El Casco USGS topographic quadrangle; no impacts to cultural
resources.

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1.0 MANAGEMENT SUMMARY/ABSTRACT

The following report describes the results of the cultural resources survey conducted by Brian F. Smith and Associates, Inc. (BFSA) for the Surface Mining Permit No. 159, Amendment No. 2 Project. The study area included 205.11 acres located in the Badlands foothills of the San Jacinto Mountains, just east of the city of Moreno Valley, in unincorporated Riverside County, California. The project applicant plans to expand the quarry operation of the established Chandler Aggregates' Gilman Springs limestone quarry to encompass an additional 54.68 acres, located west of the 150.43 acres of the site that are currently approved for mining activities. The project is located northeast of the intersection of Bridge Street and Gilman Springs Road in Sections 25 and 36, Township 3 South, Range 2 West and Section 30, Township 3 South, Range 1 West, San Bernardino Base and Meridian, as seen on the 7.5-minute *El Casco, California* topographic quadrangle map. The project includes Assessor's Parcel Numbers (APNs) 421-200-001, 422-240-007, and 423-240-018, -019, -020, -021, and -022. This study by BFSA was conducted in compliance with the California Environmental Quality Act (CEQA) and the environmental guidelines of the County of Riverside to locate and record any cultural resources present within the project.

BFSA conducted this assessment to locate and record any cultural resources identified within the project's Area of Potential Effect (APE) in compliance with CEQA and following County of Riverside Cultural Resource Guidelines (Draft). The archaeological investigation of the subject property included a review of an archaeological records search performed by the Eastern Information Center (EIC) at the University of California at Riverside (UCR) in order to assess previous archaeological studies and identify any previously recorded sites within the project boundaries, or in the immediate vicinity. The search results identified 13 cultural resources and 26 cultural resource studies recorded within a one-mile radius of the project. When combined, two of the previous studies cover the entire project APE. No archaeological sites have ever been recorded within the APE. The resources identified through the EIC records search consist mainly of food processing/bedrock milling sites associated with the seasonal drainages within Laborde Canyon, located southeast of the project, or artifact scatters and isolates located in the Eden Hot Springs, northwest of the APE.

The subject property is comprised of steep hills and narrow canyons known as the Badlands or Riverside Badlands. Currently, dirt roads and paths are located throughout the property. The roads mainly converge at the already active quarry, and disturbances on the APE appear to be connected to quarry activity. Piles of broken up boulders, cobbles, and dirt were observed along the dirt roads and within cleared turnouts. Visibility during the survey was good, except where the steep slopes and heavy vegetation prohibited systematic transects. During the survey, no artifacts or cultural resources were discovered; therefore, no further archaeological action is recommended as a condition of permit approval based upon the records search and the results of the field survey.

1.1 Purpose of Investigation

The purpose of this investigation was to complete a records search of previously recorded archaeological sites on or near the property, survey the project acreage, identify any archaeological resources within the project, and test and evaluate any cultural resources that may be impacted by the proposed development. The site plan (see Figure 2.0–3) shows the location of the Chandler Aggregates' Gilman Springs quarry and the APE comprised of vacant land proposed to be utilized for the expansion of the quarry.

1.2 Major Findings

The subject property is comprised of steep hills and narrow canyons known as the Badlands, with vegetation mostly comprised of coastal sage scrub and chaparral communities. Visibility throughout the property was generally good; however, some areas within the narrow canyons provided poor visibility and some of the steep slopes could not be safely traversed. No cultural resources were identified during the survey, and as a result, no further study is recommended for the project.

BFSA requested a Sacred Lands File (SLF) search by the Native American Heritage Commission (NAHC) to determine if any recorded Native American sacred sites or locations of religious or ceremonial importance are present within one mile of the project. The NAHC SLF did not indicate the presence of any sacred sites or locations of religious or ceremonial importance within the search radius. In accordance with the recommendations of the NAHC, BFSA contacted all Native American consultants listed in the NAHC response letter. BFSA provided the letters to Native American representatives at least two weeks before the initiation of the field survey and eight responses have been received as of the date of this report. None of the tribal responses received during the two-week period requested participation in the survey. The Viejas Band of Kumeyaay Indians and Kizh Nation deferred to other tribes in the area, while the San Manuel Band of Mission Indians, Pauma Band of Luiseño Indians, and Agua Caliente Band of Mission Indians deferred to the Soboba Band of Luiseño Indians. The Augustine Band of Cahuilla Indians and Twenty-Nine Palms Band of Mission Indians stated they were unaware of specific cultural resources that would be affected by the project. The Soboba Band of Luiseño Indians expressed interest in the project, and requested consultation on the project. All correspondence is provided in Appendix C.

1.3 Recommendation Summary

Based upon the survey and records search results, no site-specific mitigation measures are required because no significant cultural resources are situated within the project APE. Previous surveys of the property, as well as this study, did not identify any cultural resources within the property. The lack of documented prehistoric resources on the property is likely due to the terrain of the Badlands, making access to water within the steep narrow canyons a challenge. Due to the absence of recorded cultural resources within the project boundaries, there is little potential for

cultural resources to be present/disturbed by the proposed project. No further archaeological action is recommended as a condition of permit approval based upon the records search and the results of the field survey. A copy of this report will be permanently filed with the EIC at UCR. All notes, photographs, and other materials related to this project will be curated at the archaeological laboratory of BFSa in Poway, California.

2.0 INTRODUCTION

BFSA was retained by the applicant to conduct a cultural resources survey of the proposed Surface Mining Permit No. 159, Amendment No. 2 Project. The archaeological survey was conducted in order to comply with CEQA and County of Riverside Cultural Resource Guidelines (Draft) with regards to development-generated impacts to cultural resources. The project is located in an area of low cultural resource sensitivity, as is 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 Riverside County are focused around environments with accessible food and water.

The Surface Mining Permit No. 159, Amendment No. 2 Project proposes to expand the Chandler Aggregates' Gilman Springs quarry operations by 54.68 acres, located in the Badlands foothills of the San Jacinto Mountains, just east of the city of Moreno Valley, in unincorporated Riverside County, California (Figure 2.0–1). The project includes APNs 421-200-001, 422-240-007, 423-240-018, -019, -020, -021, and -022 and is located northeast of the intersection of Bridge Street and Gilman Springs Road in Sections 25 and 36, Township 3 South, Range 2 West and Section 30, Township 3 South, Range 1 West, San Bernardino Base and Meridian, as seen on the 7.5-minute *El Casco, California* topographic quadrangle map (Figure 2.0–2). The project, as proposed by the applicant, will expand the quarry operations of the already established Chandler Aggregates' Gilman Springs quarry (Figure 2.0–3).

Principal Investigator Brian F. Smith and Project Archaeologist Andrew Garrison directed the cultural resources study for the project. Andrew Garrison and Archaeological Field Director Clarence Hoff conducted the pedestrian survey on October 19, 2017. The survey was conducted in approximately 15-meter interval transects, when not hindered by steep terrain and heavy vegetation. Visibility was generally good, again only hindered at times by the vegetation and terrain. Andrew Garrison and Brian Smith prepared the technical report. Kris Reinicke created the report graphics and Caitlin Foote conducted technical editing and report production. Qualifications of key personnel are provided in Appendix A.

2.1 Previous Work

The records search results identified 13 cultural resources and 26 cultural resource studies recorded within a one-mile radius of the project. Two of the previous studies combined cover the entire project APE. No archaeological sites have ever been recorded within the APE. The resources identified through the EIC records search consist mainly of food processing/bedrock milling sites associated with the seasonal drainages within Laborde Canyon, located southeast of the project, or artifact scatters and isolates located in the Eden Hot Springs, northwest of the APE.

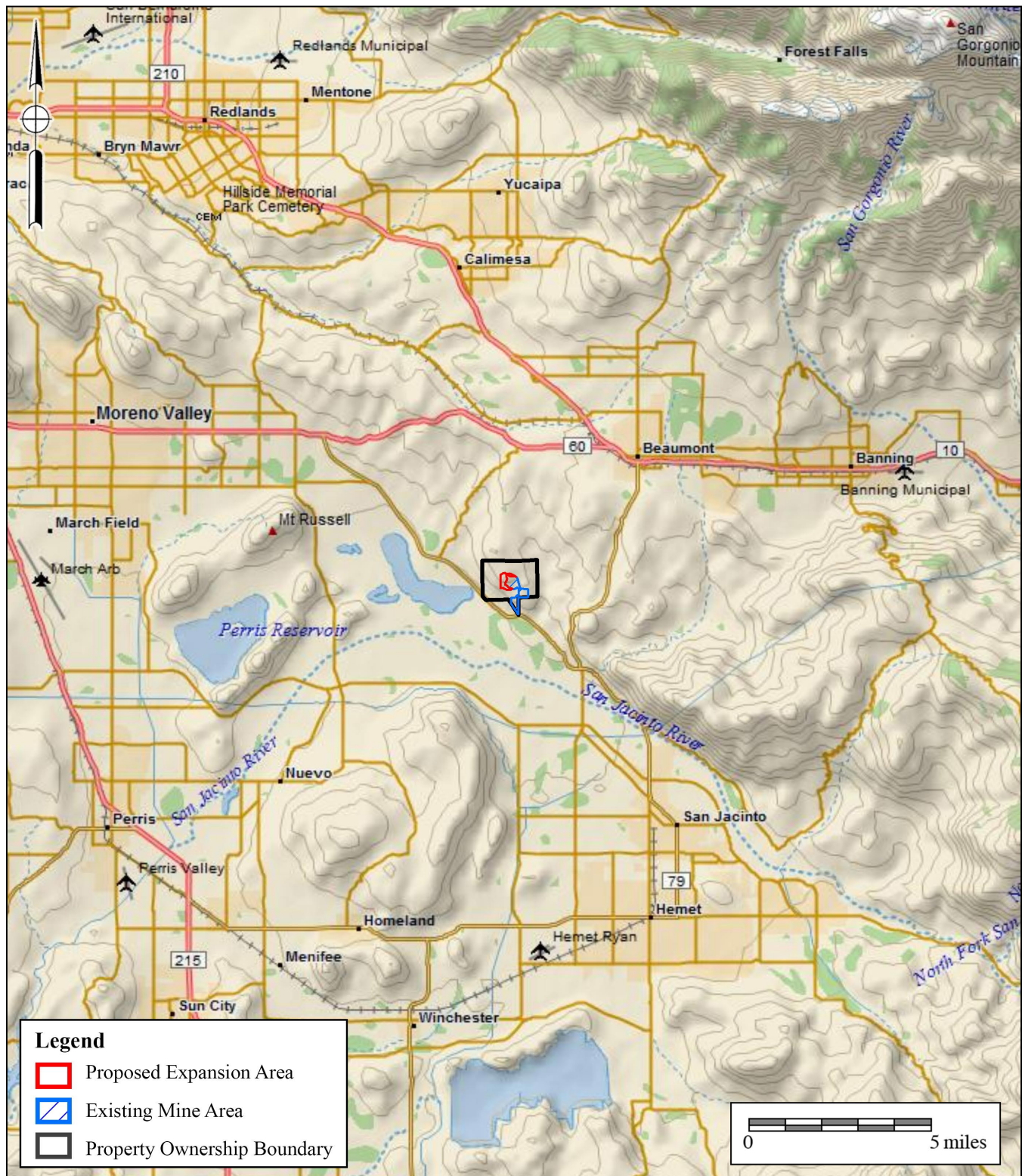


Figure 2.0-1
General Location Map

The Surface Mining Permit No. 159, Amendment No. 2 Project
 DeLorme (1:250,000)



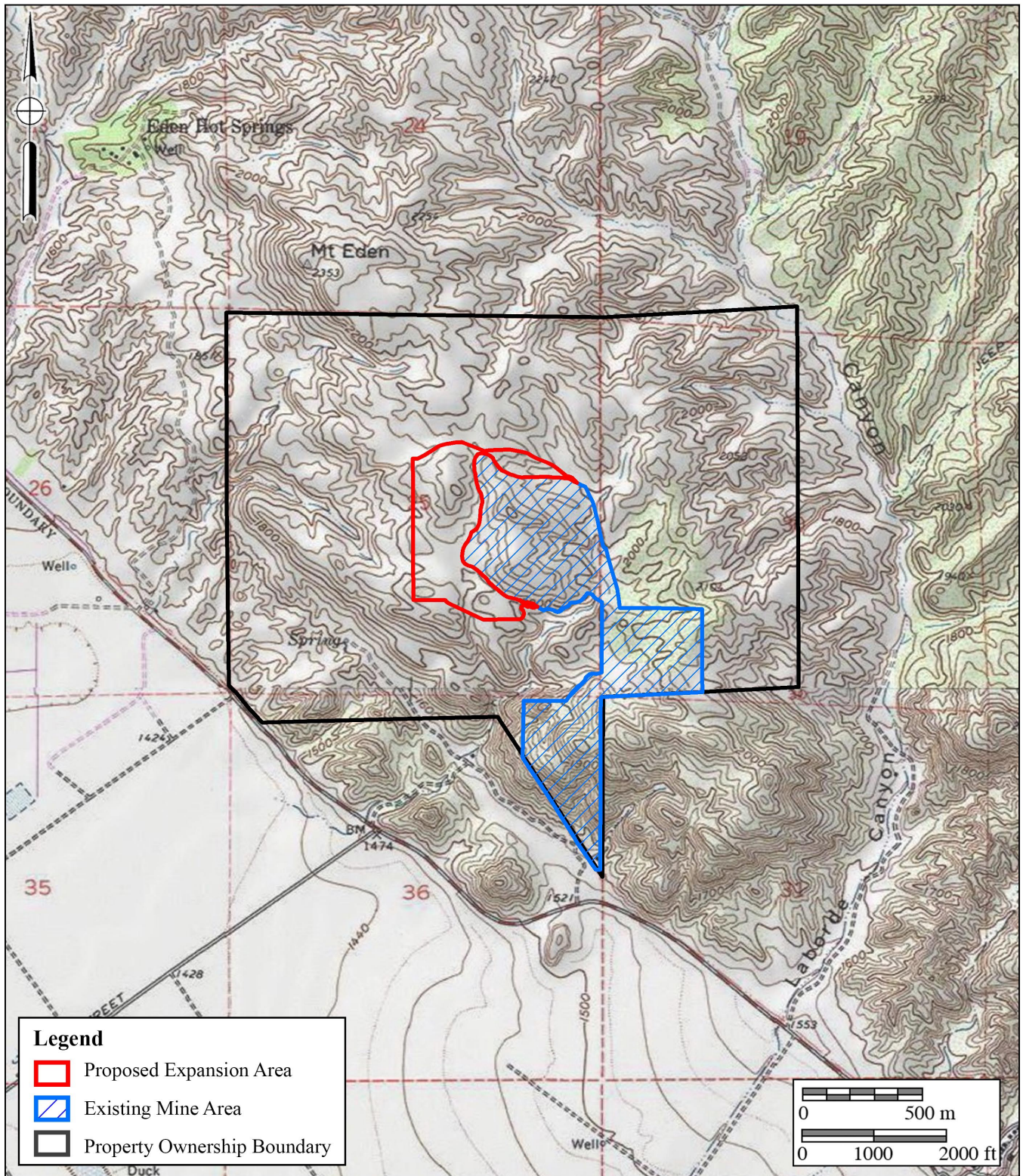


Figure 2.0–2

Project Location Map

The Surface Mining Permit No. 159, Amendment No. 2 Project
USGS *El Casco* and *Lakeview* Quadrangles (7.5-minute series)



2.2 Project Setting

Riverside County lies in the Peninsular Ranges Geologic Province of southern California. The range, which lies in a northwest to southeast trend through the county, extends some 1,000 miles from the Raymond-Malibu Fault Zone in western Los Angeles County to the southern tip of Baja California. The subject property is comprised of steep hills and narrow canyons with elevations that range between approximately 1,950 and 2,150 feet above mean sea level (AMSL). Currently, dirt roads and paths are located throughout the property. The roads mainly converge at the already active quarry, and disturbances on the APE appear to be connected to quarry activity. Piles of broken up boulders, cobbles, and dirt were observed along the dirt roads and within cleared turnouts.

The geology of the area is comprised of the Cretaceous granitic rocks (Granite of Mount Eden) and the associated undifferentiated gneissic metasedimentary rocks of probable Paleozoic age. Portions of the project also contain Miocene and Pliocene to Pleistocene sedimentary units of the Mount Eden and San Tioteo formations. The soils calssified within the western half of the project are Friant Rocky Sandy Loam (FyE2), while the eastern half is dominated by Badlands with some more easterly areas classified as San Timoteo Loam (SmE2).

Vegetation on the property mainly consists of a coastal sage scrub community; however, portions of the property also contained chaparral and native grasses four to 16 inches in height. During the prehistoric period, vegetation in the general area of the project provided sufficient food resources to support prehistoric human occupants. Animals that inhabited the project area during prehistoric times included mammals such as rabbits, squirrels, gophers, mice, rats, deer, and coyotes, in addition to a variety of reptiles and amphibians. The natural setting of the locale during prehistoric occupation offered a rich nutritional resource base. Natural drainages located within local canyons could have provided a source of water. Although the steep terrain and narrow canyons of the project would make most intermittent water sources within the APE difficult to access, a spring located less than a quarter-mile southwest, intermittent streams through the Laborde Canyon about half a mile east, and the San Jacinto River about two miles south would have provided easily accessible sources of fresh water. Historically, the property likely contained the same plant and animal species as are present today.

2.3 Cultural Setting

Paleo Indian, Archaic Period Milling Stone Horizon, and the Late Prehistoric Shoshonean groups are the three general cultural periods represented in Riverside County. The following discussion of the cultural history of Riverside County references the San Dieguito Complex, Encinitas Tradition, Milling Stone Horizon, La Jolla Complex, Pauma Complex, and San Luis Rey Complex, since these culture sequences have been used to describe archaeological manifestations in the region. The Late Prehistoric component present in the Riverside County area was represented by the Cahuilla, Gabrielino, and Luiseño Indians.

Absolute chronological information, where possible, will be incorporated into this discussion to examine the effectiveness of continuing to interchangeably use these terms. Reference will be made to the geological framework that divides the culture chronology of the area into four segments: the late Pleistocene (20,000 to 10,000 YBP [years before the present]), the early Holocene (10,000 to 6,650 YBP), the middle Holocene (6,650 to 3,350 YBP), and the late Holocene (3,350 to 200 YBP).

2.3.1 Paleo Indian Period (Late Pleistocene: 11,500 to circa 9,000 YBP)

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).

2.3.2 Archaic Period (Early and Middle Holocene: circa 9,000 to 1,300 YBP)

Between 9,000 and 8,000 YBP, a widespread complex was established in the southern California region, primarily along the coast (Warren and True 1961). This complex is locally known as the La Jolla Complex (Rogers 1939; Moriarty 1966), which is regionally associated with the Encinitas Tradition (Warren 1968) and shares cultural components with the widespread Milling Stone Horizon (Wallace 1955). The coastal expression of this complex appeared in the southern California coastal areas and focused upon coastal resources and the development of deeply stratified shell middens that were primarily located around bays and lagoons. The older sites associated with this expression are located at Topanga Canyon, Newport Bay, Agua Hedionda Lagoon, and some of the Channel Islands. Radiocarbon dates from sites attributed to this complex span a period of over 7,000 years in this region, beginning over 9,000 YBP.

The Encinitas Tradition is best recognized for its pattern of large coastal sites characterized by shell middens, grinding tools that are closely associated with the marine resources of the area, cobble-based tools, and flexed human burials (Shumway et al. 1961; Smith and Moriarty 1985). While ground stone tools and scrapers are the most recognized tool types, coastal Encinitas Tradition sites also contain numerous utilized flakes, which may have been used to pry open

shellfish. Artifact assemblages at coastal sites indicate a subsistence pattern focused upon shellfish collection and nearshore fishing. This suggests an incipient maritime adaptation with regional similarities to more northern sites of the same period (Koerper et al. 1986). Other artifacts associated with Encinitas Tradition sites include stone bowls, doughnut stones, discoidals, stone balls, and stone, bone, and shell beads.

The coastal lagoons in southern California supported large Milling Stone Horizon populations circa 6,000 YBP, as shown by numerous radiocarbon dates from the many sites adjacent to the lagoons. The ensuing millennia were not stable environmentally, and by 3,000 YBP, many of the coastal sites in central San Diego County had been abandoned (Gallegos 1987, 1992). The abandonment of the area is usually attributed to the sedimentation of coastal lagoons and resulting deterioration of fish and mollusk habitat, a situation well documented at Batiquitos Lagoon (Miller 1966; Gallegos 1987). Over a two-thousand-year period at Batiquitos Lagoon, dominant mollusk species occurring in archaeological middens shift from deep-water mollusks (*Argopecten* sp.) to species tolerant of tidal flat conditions (*Chione* sp.), indicating water depth and temperature changes (Miller 1966; Gallegos 1987). This situation likely occurred for other small drainages (Buena Vista, Agua Hedionda, San Marcos, and Escondido creeks) along the central San Diego coast where low flow rates did not produce sufficient discharge to flush the lagoons they fed (Buena Vista, Agua Hedionda, Batiquitos, and San Elijo lagoons) (Byrd 1998). Drainages along the northern and southern San Diego coastline were larger and flushed the coastal hydrological features they fed, keeping them open to the ocean and allowing continued human exploitation (Byrd 1998). Peñasquitos Lagoon exhibits dates as late as 2,355 YBP (Smith and Moriarty 1985) and San Diego Bay showed continuous occupation until the close of the Milling Stone Horizon (Gallegos and Kyle 1988). Data from several drainages in Camp Pendleton show a continued occupation of shell midden sites until the close of the period, indicating that coastal sites were not entirely abandoned during this time (Byrd 1998).

By 5,000 YBP, an inland expression of the La Jolla Complex is evident in the archaeological record, exhibiting influences from the Campbell Tradition from the north. These inland Milling Stone Horizon sites have been termed “Pauma Complex” (True 1958; Warren et al. 1961; Meighan 1954). By definition, Pauma Complex sites share a predominance of grinding implements (manos and metates), lack mollusk remains, have greater tool variety (including atlatl dart points, quarry-based tools, and crescentics), and seem to express a more sedentary lifestyle with a subsistence economy based upon the use of a broad variety of terrestrial resources. Although originally viewed as a separate culture from the coastal La Jolla Complex (True 1980), it appears that these inland sites may be part of a subsistence and settlement system utilized by the coastal peoples. Evidence from the 4S Ranch Project in inland San Diego County suggests that these inland sites may represent seasonal components within an annual subsistence round used by La Jolla Complex populations (Raven-Jennings et al. 1996). Including both coastal and inland sites of this time period in discussions of the Encinitas Tradition, therefore, provides a more complete appraisal of the settlement and subsistence system exhibited by this cultural complex.

2.3.3 Late Prehistoric Period (Late Holocene: 1,300 YBP to 1790)

Approximately 1,350 YBP, a Shoshonean-speaking group from the Great Basin region moved into Riverside County, marking the transition to the Late Prehistoric Period. This period is characterized by higher population densities and elaborations in social, political, and technological systems. Economic systems diversified and intensified during this period with the continued elaboration of trade networks, the use of shell-bead currency, and the appearance of more labor-intensive, yet effective, technological innovations. Technological developments during this period included the introduction of the bow and arrow between A.D. 400 and 600 and the introduction of ceramics. Atlatl darts were replaced by smaller arrow darts, including Cottonwood series points. Other hallmarks of the Late Prehistoric Period include extensive trade networks as far-reaching as the Colorado River Basin and cremation of the dead.

2.3.4 Protohistoric Period (Late Holocene: 1790 to Present)

Ethnohistoric and ethnographic evidence indicates that three Shoshonean-speaking groups occupied portions of Riverside County, including the Cahuilla, the Gabrielino, and the Luiseño. The geographic boundaries between these groups in pre- and proto-historic times is difficult to place; however, the project is located well within the borders of ethnographic Luiseño territory. This group was a seasonal hunting and gathering people with cultural elements that were very distinct from Archaic Period peoples. These distinctions include cremation of the dead, the use of the bow and arrow, and exploitation of the acorn as a main food staple (Moratto 1984). Along the coast, the Luiseño made use of available marine resources by fishing and collecting mollusks for food. Seasonally available terrestrial resources, including acorns and game, were also sources of nourishment for Luiseño groups. Elaborate kinship and clan systems between the Luiseño and other groups facilitated a wide-reaching trade network that included trade of Obsidian Butte obsidian and other resources from the eastern deserts, as well as steatite from the Channel Islands.

According to Charles Handley (1967), the primary settlements of Late Prehistoric Luiseño Indians in the San Jacinto Plain were represented by *Ivah* and *Soboba* near Soboba Springs, *Jusipah* near the town of San Jacinto, *Ararah* in Webster's Canyon en route to Idyllwild, *Pahsitha* near Big Springs Ranch southeast of Hemet, and *Corova* in Castillo Canyon. These locations share features such as the availability of food and water resources. Features of this land use include petroglyphs, pictographs, and widespread milling, which is evident in bedrock and portable implements. Groups in the vicinity of the project, neighboring the Luiseño, include the Cahuilla and the Gabrielino. Ethnographic data for the three groups is presented below.

Luiseño

When contacted by the Spanish in the sixteenth century, the Luiseño occupied a territory bounded on the west by the Pacific Ocean, on the east by the Peninsular Ranges mountains at San Jacinto (including Palomar Mountain to the south and Santiago Peak to the north), on the south by Agua Hedionda Lagoon, and on the north by Aliso Creek in present-day San Juan Capistrano. The

Luiŕeño were a Takic-speaking people more closely related linguistically and ethnographically to the Cahuilla, Gabrielino, and Cupeño to the north and east rather than the Kumeyaay who occupied territory to the south. The Luiŕeño differed from their neighboring Takic speakers in having an extensive proliferation of social statuses, a system of ruling families that provided ethnic cohesion within the territory, a distinct worldview that stemmed from the use of *datura* (a hallucinogen), and an elaborate religion that included the creation of sacred sand paintings depicting the deity *Chingichngish* (Bean and Shipek 1978; Kroeber 1976).

Subsistence and Settlement

The Luiŕeño occupied sedentary villages most often located in sheltered areas in valley bottoms, along streams, or along coastal strands near mountain ranges. Villages were located near water sources to facilitate acorn leaching and in areas that offered thermal and defensive protection. Villages were composed of areas that were publicly and privately (by family) owned. Publicly owned areas included trails, temporary campsites, hunting areas, and quarry sites. Inland groups had fishing and gathering sites along the coast that were used intensively from January to March when inland food resources were scarce. During October and November, most of the village would relocate to mountain oak groves to harvest acorns. The Luiŕeño remained at village sites for the remainder of the year, where food resources were within a day's travel (Bean and Shipek 1978; Kroeber 1976).

The most important food source for the Luiŕeño was the acorn, six different species of which were used (*Quercus californica*, *Quercus agrifolia*, *Quercus chrysolepis*, *Quercus dumosa*, *Quercus engelmannii*, and *Quercus wislizenii*). Seeds, particularly of grasses, composites, and mints, were also heavily exploited. Seed-bearing species were encouraged through controlled burns, which were conducted at least every third year. A variety of other stems, leaves, shoots, bulbs, roots, and fruits were also collected. Hunting augmented this vegetal diet. Animal species taken included deer, rabbit, hare, woodrat, ground squirrel, antelope, quail, duck, freshwater fish from mountain streams, marine mammals, and other sea creatures such as fish, crustaceans, and mollusks (particularly abalone, or *Haliotis* sp.). In addition, a variety of snakes, small birds, and rodents were eaten (Bean and Shipek 1978; Kroeber 1976).

Social Organization

Social groups within the Luiŕeño nation consisted of patrilinear families or clans, which were politically and economically autonomous. Several clans comprised a religious party, or *nota*, which was headed by a chief who organized ceremonies and controlled economics and warfare. The chief had assistants who specialized in particular aspects of ceremonial or environmental knowledge and who, with the chief, were part of a cultic social group with special access to supernatural power, particularly that of *Chingichngish*. The positions of chief and assistants were hereditary and the complexity and multiplicity of these specialists' roles likely increased in coastal and larger inland villages (Bean and Shipek 1978; Kroeber 1976; Strong 1971).

Marriages were arranged by the parents, often made to forge alliances between lineages. Useful alliances included those between groups of differing ecological niches and those that resulted in territorial expansion. Residence was patrilocal (Bean and Shipek 1978; Kroeber 1976). Women were primarily responsible for plant gathering, and men principally hunted, although at times, particularly during acorn and marine mollusk harvests, there was no division of labor. Elderly women cared for children and elderly men participated in rituals, ceremonies, and political affairs. They were also responsible for manufacturing hunting and ritual implements. Children were taught subsistence skills at the earliest age possible (Bean and Shipek 1978; Kroeber 1976).

Material Culture

House structures were conical, partially subterranean, and thatched with reeds, brush, or bark. Ramadas were rectangular, protected workplaces for domestic chores such as cooking. Ceremonial sweathouses were important in purification rituals; these were round and partially subterranean thatched structures covered with a layer of mud. Another ceremonial structure was the *wámkis* (located in the center of the village, serving as the place of rituals), where sand paintings and other rituals associated with the *Chingichngish* cult were performed (Bean and Shipek 1978; Kroeber 1976).

Clothing was minimal; women wore a cedar-bark and netted twine double apron and men wore a waist cord. In cold weather, cloaks or robes of rabbit fur, deerskin, or sea otter fur were worn by both sexes. Footwear included deerskin moccasins and sandals fashioned from yucca fibers. Adornments included bead necklaces and pendants made of bone, clay, stone, shell, bear claw, mica, deer hooves, and abalone shell. Men wore ear and nose piercings made from cane or bone, which were sometimes decorated with beads. Other adornments were commonly decorated with semiprecious stones including quartz, topaz, garnet, opal, opalite, agate, and jasper (Bean and Shipek 1978; Kroeber 1976).

Hunting implements included the bow and arrow. Arrows were tipped with either a carved, fire-hardened wooden tip or a lithic point, usually fashioned from locally available metavolcanic material or quartz. Throwing sticks fashioned from wood were used in hunting small game, while deer head decoys were used during deer hunts. Coastal groups fashioned dugout canoes for nearshore fishing and harvested fish with seines, nets, traps, and hooks made of bone or abalone shell (Bean and Shipek 1978; Kroeber 1976).

The Luiseño had a well-developed basket industry. Baskets were used in resource gathering, food preparation, storage, and food serving. Ceramic containers were shaped by paddle and anvil and fired in shallow, open pits to be used for food storage, cooking, and serving. Other utensils included wooden implements, steatite bowls, and ground stone manos, metates, mortars, and pestles (Bean and Shipek 1978; Kroeber 1976). Additional tools such as knives, scrapers, choppers, awls, and drills were also used. Shamanistic items include soapstone or clay smoking pipes and crystals made of quartz or tourmaline (Bean and Shipek 1978; Kroeber 1976).

2.3.5 Ethnohistoric Period (1769 to Present)

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 on the nomenclature of the coast. Many of the names he gave to various locations have survived, whereas practically all of the names assigned by Cabrillo have faded from use. For instance, Cabrillo gave the name “San Miguel” to the first port he stopped at in what is now the United States; 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).

2.3.6 Historic Period

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). In the late eighteenth century, the San Gabriel (Los Angeles County), San Juan Capistrano (Orange County), and San Luis Rey (San Diego County) missions began colonizing southern California and gradually expanded their use of the interior valley (into what is now western Riverside County) for raising grain and cattle to support the missions (Riverside County n.d.). The San Gabriel Mission claimed lands in what is now Jurupa, Riverside, San Jacinto, and the San Gorgonio Pass, while the San Luis Rey Mission claimed land in what is now Lake Elsinore, Temecula, and Murrieta (American Local History Network: Riverside County, California 1998). The indigenous groups who occupied these lands were recruited by missionaries, converted, and put to work in the missions (Pourade 1964). 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).

In the mid- to late 1770s, Juan Bautista de Anza passed through much of Riverside County while searching for an overland route from Sonora, Mexico to San Gabriel and Los Angeles, describing fertile valleys, lakes, and sub-desert areas (American Local History Network: Riverside County, California 1998; Riverside County n.d.). In 1797, Father Presidente Lausen, Father Norberto de Santiago, and Corporal Pedro Lisalde led an expedition from Mission San Juan Capistrano through southwestern Riverside County in search of a new mission site before constructing Mission San Luis Rey in northern San Diego County (Brigandi 1998).

While no missions were ever built in what would become Riverside County (American Local History Network: Riverside County, California 1998), many mission outposts, or

asistencias, were established in the early years of the nineteenth century to extend the missions' influence to the backcountry (Brigandi 1998). Two outposts located in Riverside County include San Jacinto and Temecula.

Mexico gained independence in 1822 and desecularized the missions in 1832, signifying the end of the Mission Period (Brigandi 1998; Riverside County n.d.). By this time, the missions owned some of the best and most fertile land in southern California. In order for California to develop, the land would have to be made productive enough to turn a profit (Brigandi 1998). The new government began distributing the vast mission holdings to wealthy and politically connected Mexican citizens. The "grants" were called "ranchos," of which 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 were located in present-day Riverside County. Many of these ranchos have lent their names to modern-day locales (American Local History Network: Riverside County, California 1998). Rancho Jurupa, the first grant in present-day Riverside County, was given to Juan Bandini in 1838. These ranchos were all located in the valley environments typical of western Riverside County.

The treatment of Native Americans grew worse during the Rancho Period. Most of the Native Americans were forced off of their land or put to work on the now privately owned ranchos, most often as slave labor. In light of the brutal 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 the San Luis Rey Mission 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 compared to the Mexican and United States ranchers. Spanish colonialism (missions) is based upon utilizing human resources while integrating them into their society. The Mexican and American ranchers 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, leading to California becoming a state in 1850. 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.

In early 1852, the Native Americans of southern Riverside County, including the Luiseño and the Cahuilla, thought they had signed a treaty resulting in their ownership of all lands from Temecula to Aguanga east to the desert, including the San Jacinto Valley and the San Geronimo Pass. The Temecula Treaty also included food and clothing provisions for the Native Americans. However, Congress never ratified the treaties, and the promise of one large reservation was rescinded (Brigandi 1998).

With the completion of the transcontinental railroad in 1869, land speculators, developers, and colonists began to invest in southern California. The first colony in what was to become Riverside County was Riverside itself. Judge John Wesley North, an abolitionist from Tennessee, brought a group of associates and co-investors out to southern California and founded Riverside on part of the Jurupa Rancho. A few years after, the navel orange was planted and found to be such a success that it quickly became the agricultural staple of the region (American Local History Network: Riverside County, California 1998).

By the late 1880s and early 1890s, there was growing discontent between Riverside and San Bernardino, its neighbor 10 miles to the north, 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 of 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. By the time of Riverside County's formation, Riverside had grown to become the wealthiest city per capita in the country due to the successful cultivation of the navel orange (American Local History Network: Riverside County, California 1998; Riverside County n.d.).

General History of the Riverside County Badlands

The project is located within an area of Riverside County historically known as the Badlands. Badlands are described as natural landscapes scored by closely spaced, v-shaped gullies with straight sides that intersect knife-edged ridges (Bloom 1969). Father Jose Sanchez first discussed the hills in which the project is contained in 1821. Sanchez noted in his diary that as he traveled from Mystic Lake, just west of the APE, to San Bernardino he went over hilly, exceedingly barren country covered in brushwood, having to ascend and descend the hilly terrain numerous times with much trouble (Gunther 1984). During the 1897-1898 field work conducted by the U.S. Geological Survey, the area from Reche Canyon to Lamb Canyon was given the

‘Badlands’ designation. In 1867, Henry Hancock stated that the Badlands were “too rough to measure” and “in fact a worthless territory with scarcely any grass or water and no timber” (Gunther 1984). Subsequent surveys conducted by John Goldsworthy Jr. in 1871, George Sandow in 1879, and W.A. Goodyear in 1888 describe the hills in similar language (Gunther 1984). The rough, inhospitable terrain likely deterred development of the area historically, as it was not until the late twentieth-century that the Badlands began to be utilized in the creation of the Riverside County Badlands Landfill and rock quarrying.

2.4 Research Goals

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 area under investigation is the western portion of Riverside County. The scope of work for the archaeological program conducted for the Surface Mining Permit No. 159, Amendment No. 2 Project included the survey of the 205.11-acre property. Given the area involved, and the narrow focus of the cultural resources study, the research design for this project was necessarily limited and general in nature. Since the main objective of the investigation was to identify the presence of and potential impacts to cultural resources, the goal here 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. Although survey-level investigations are limited in terms of the amount of information available, several specific research questions were developed that could be used to guide the initial investigations of any observed cultural resources. The following research questions take into account the size and location of the project.

Research Questions:

- Can located cultural resources be situated with a specific time period, population, or individual?
- Do the types of 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 the located sites compare to others reported from different surveys conducted in the area?
- How do the located sites fit existing models of settlement and subsistence for valley environments of the region?

Data Needs

At the survey level, the principle 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 area

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 these 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 deposit, 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 of the cultural resources identified.

3.0 METHODOLOGY

The archaeological program for the Surface Mining Permit No. 159, Amendment No. 2 Project consisted of an institutional records search, a SLF search, an intensive pedestrian survey of the 205.11-acre project parcel, and preparation of a technical study. This archaeological study conformed to County of Riverside Cultural Resource Guidelines (Draft). Statutory requirements of CEQA and subsequent legislation (Section 15064.5) were followed in evaluating the significance of cultural resources. Specific definitions for archaeological resource type(s) used in this report are those established by the State Historic Preservation Office (SHPO March, 1995).

3.1 Archaeological Records Search

The records search conducted by BFSa at the EIC at UCR was reviewed for an area of one mile surrounding the project in order to determine the presence of any previously recorded sites. Results of the records search are provided in Appendix B and discussed in Section 4.1. The EIC search also included a standard review of the National Register of Historic Places and the Office of Historic Preservation Historic Property Directory. Land patent records, held by the Bureau of Land Management (BLM) and accessible through the BLM General Land Office (GLO) website, were also reviewed for pertinent project information. In addition, the BFSa research library was consulted for any relevant historical information.

3.2 Field Methodology

In accordance with County CEQA review requirements, an intensive pedestrian reconnaissance was conducted that employed a series of parallel survey transects spaced at approximately 15-meter intervals to locate archaeological sites within the project, except where the steep slopes and heavy vegetation prohibited systematic transects. The archaeological survey of the project was conducted on October 19, 2017. The entire project was covered by the survey process and photographs were taken to document project conditions during the survey (see Section 4.2). The subject property is comprised of steep hills and narrow canyons with elevations that range between approximately 1,950 and 2,150 feet AMSL. Vegetation in the subject property mainly consisted of a coastal sage scrub community; however, portions of the property also contained chaparral and native grasses four to 16 inches in height. Visibility throughout the property was generally good; however, some areas within the narrow canyons provided poor visibility, while some of the steep slopes could not be safely traversed. No artifacts or cultural resources were observed as a result of the survey.

3.3 Report Preparation and Recordation

This report contains information regarding previous studies, statutory requirements for the project, a brief description of the setting, research methods employed, and the overall results of the survey. The report includes all appropriate illustrations and tabular information needed to

make a complete and comprehensive presentation of these activities, including the methodologies employed and the personnel involved. A copy of this report will be placed at the EIC at UCR. Any newly recorded sites or sites requiring updated information will be recorded on the appropriate Department of Parks and Recreation (DPR) site forms, which will be filed with the EIC.

3.4 Native American Consultation

BFSA also requested a records search of the SLF of the NAHC. The SLF did not indicate the presence of any sacred sites or locations of religious or ceremonial importance within the search radius. In accordance with the recommendations of the NAHC, BFSA contacted all Native American consultants listed in the NAHC response letter. BFSA provided the letters to Native American representatives at least two weeks before the initiation of the field survey and eight responses have been received as of the date of this report. None of the tribal responses received during the two-week period requested participation in the survey. The Viejas Band of Kumeyaay Indians and Kizh Nation deferred to other tribes in the area, while the San Manuel Band of Mission Indians, Pauma Band of Luiseño Indians, and Agua Caliente Band of Mission Indians deferred to the Soboba Band of Luiseño Indians. The Augustine Band of Cahuilla Indians and Twenty-Nine Palms Band of Mission Indians stated they were unaware of specific cultural resources that would be affected by the project. The Soboba Band of Luiseño Indians expressed interest in the project, and requested consultation on the project. All correspondence is provided in Appendix C.

3.5 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 Riverside County in history, architecture, archaeology, engineering, and culture. A number of criteria are used in demonstrating resource importance. Specifically, criteria outlined in CEQA provide the guidance for making such a determination. The following sections detail the CEQA criteria that a resource must meet in order to be determined important.

3.5.1 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 California Register of Historical Resources (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 an 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 an 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 California Register of Historical Resources (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 California Register of Historical Resources, not included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code), or identified in an 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 an 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 an 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 an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.
- 2) The significance of an historical resource is materially impaired when a project:
 - a) Demolishes or materially alters in an adverse manner those physical

characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; 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 an 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 an historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources 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 an historical resource, as defined in subsection (a).
- 2) If a lead agency determines that the archaeological site is an 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 21803.2 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 EIR, if one is prepared to address impacts on other resources, but they need not be considered further in the CEQA process.

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

(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 requirement of CEQA and the Coastal Act.

4.0 **RESULTS**

4.1 **Records Search Results**

An archaeological records search for the project and the surrounding area within a one-mile radius was conducted by the EIC at UCR. The search results identified 13 cultural resources within one mile of the project (Table 4.1–1). The EIC records indicated that none of these sites are located within the APE. The cultural resources identified during the records search are all prehistoric sites or artifacts. The resources identified through the EIC records search consist mainly of food processing/bedrock milling sites associated with the seasonal drainages within Laborde Canyon, located southeast of the project, or artifact scatters and isolates located in the Eden Hot Springs, northwest of the APE.

One resource, Site RIV-1744, located south of the project at the base of the foothills has been identified as the “Riverside Burial”/ “Riverside Skeleton” site. Bada et al. (1979) identified RIV-1744 as the location of a possible Pleistocene-era burial uncovered and removed by Harley Garbani in 1938. Garbani was a local self-taught archaeologist and paleontologist. The remains were subjected to aspartic acid racemization for dating purposes in the 1940s, and determined to date almost 37,000 years old (Taylor 1983). The remains were touted as proof of ‘Early Man’ in the New World (Bada et al. 1979). Reexamination of the find through c-14 analysis found the remains dated to 3020 years old +/-140, and that the dates initially associated with the find should be adjusted (Bada et al. 1979). When recorded by Payen and Taylor in 1979, minimal signs of an archaeological site were identified at this location and the site record was mostly filled out based on information provided Bada et al. in 1979 and personal communication with Garbani. Payen and Taylor noted that all site elements had been removed previously and that a ‘weathered millingstone, metate fragments, and manos had been removed previously by Garbani (1979).

Table 4.1–1
Archaeological Sites Located Within a One-Mile Radius of the
Surface Mining Permit No. 159, Amendment No. 2 Project

Site	Description	Distance From the Project (m)
RIV-1409	Prehistoric bedrock milling feature	536.02
RIV-1410		904.28
RIV-1411		835.81
RIV-1412		986.30
RIV-1413		956.56
RIV-1743	Prehistoric bedrock milling features with associated midden	195.04
RIV-1744	“Riverside Burial” / “Riverside Skeleton” Site	294.68

Site	Description	Distance From the Project (m)
RIV-2817	Prehistoric artifact scatter	1,751.11
RIV-2818		1,587.47
RIV-2819		1,271.13
P-33-011394	Prehistoric isolate(s)	683.61
P-33-012637		1,763.20
P-33-012638		1,551.96

The records search results also indicated that there has been a total of 26 cultural resource studies conducted within a one-mile radius of the project (Table 4.1–2). When combined, two of the previous studies cover the entire project APE.

The first survey to take place on portions of the project APE occurred in 1986 and was conducted by Michael Lerch and Associates (Lerch 1986). This survey failed to identify any cultural resources within the eastern third of the current project area. Lerch noted the large number of weathered outcrops on the parcel, postulating that the area was likely used prehistorically; however, no evidence of such use could be identified. The second study on the property was completed in 1991 by Chambers Group, Inc. (Weber and Parker 1991). This study included the western two-thirds of the current project APE. Weber and Parker did not identify any resources within the current APE during their survey, concluding that none likely exist within the current project boundary (1991).

Table 4.1–2

Previous Studies Conducted Within a One-Mile Radius of the
Surface Mining Permit No. 159, Amendment No. 2 Project

Ahmet, Koral

2007a Letter Report: Cultural Resources Constraints Analysis for Lockheed Martin Beaumont Facility in Laborde Canyon (Site 2), Riverside County. ECORP Consulting, Inc. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

2007b Letter Report: Cultural Resources Survey of Two Monitoring Well Sites Located South of Lockheed Martin's Beaumont Facility in Laborde Canyon (Site 2), Riverside County. ECORP Consulting, Inc. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Ambrose, T. and N. Carter

1971 A Report On The Survey Of The San Jacinto And Hemet Valleys. Archaeological Research Unit, U.C. Riverside. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Bouscaren, Stephen and Daniel McCarthy

- 1984 An Archaeological Assessment of the Proposed Devers-Valley 500 KV Transmission Line and Corridor and the Proposed Valley-Auld-Skylark 115 KV T/L Corridor, Riverside County, California. Archaeological Research Unit, U.C. Riverside. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Bowden-Renna, Cheryl

- 2005 Cultural Resources Survey for the Lockheed/Laborde Canyon Off-Highway Vehicle (OHV) Park, Riverside County, California. Edaw, Inc. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Cultural Systems Research, Inc.

- 2005 Ethnographic Overview Inland Feeder Pipeline Project. Cultural Systems Research, Inc. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Cunningham, Robert and Evelyn Chandler

- 2014 Cultural Resources Inventory of the Remedial Action Plan (RAP) Study Areas at the Lockheed Martin Corporation's Beaumont Site 2 (Laborde Canyon), Riverside County, California. TETRA Tech. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

DeCarlo, Matthew M., Scott C. Justus, and William T Eckhardt

- 2013 Summary Class III Cultural Resource Inventory, Proposed Southern California Edison Devers-Palo Verde 2 500kV Transmission Line Project, Riverside County, California. ASM Affiliates. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Dice, Michael H. and Kenneth J. Lord

- 2010 Phase I Cultural Resource Assessment of The Lamb Canyon Landfill Integrated Project, Riverside County, California. Michael Brandman Associates. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Drover, Christopher E.

- 1991 A Cultural Resource Assessment: Lamb Canyon Landfill Project Near Beaumont, Riverside County, California. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Eckhardt, William T. and Stacie Wilson

- 2009 Final Cultural Resources Inventory of the Proposed SCE Devers to Valley Substation Project, Riverside County, California. ICF Jones & Stokes. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Eckhardt, William T., Stacie Wilson, Carol Serr, and Karolina Chmiel

- 2009 Final Cultural Resources Inventory of the Proposed SCE Devers to Valley Substation Project Riverside County California: Volume I. ICF Jones & Stokes. Unpublished report on file at

the Eastern Information Center at the University of California at Riverside, Riverside, California.

George, Joan and Vanessa Mirro

- 2012 Phase I Cultural Resources Assessment for the Santa Ana Watershed Association's Wolfskill-Gilman Project, San Jacinto, Riverside County, California Permit Number: 2003-0094-CLM. Applied Earth Works, Inc. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Greenwood, Roberta S.

- 1975 Paleontological, Archaeological, Historical, and Cultural Resources, West Coast-Midwest Pipeline Project, Long Beach to Colorado River. Greenwood and Associates. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Lerch, Michael

- 1986 Archaeological Survey of Kennedy Reclamation Plan, Phases 3 and 4, Moreno Valley Area, Riverside County, California. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Lerch, Michael K., Sarah J. Van Galder, Marcy Rockman, and Jill Onken

- 2008 Phase I Archaeological Assessment of the McAnally Chicken Ranch, Riverside County, California. Statistical Research, Inc., Redlands, California. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

McCarthy, Daniel F.

- 1987 Cultural Resources Inventory for the City of Moreno Valley, Riverside County, California. Archaeological Research Unit, U.C. Riverside. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

McCarthy, Daniel F. and Stephen Bouscaren

- 1984 An Archaeological Assessment of TP 19938, Eden Hot Springs, Riverside County, California. Archaeological Research Unit, U.C. Riverside. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

McIntosh, Beverly C.

- 1991 The Juan Bautista De Anza Trail: Past Present and Future; Baja to Riverside, California. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Parker, Cole

- 1991 Cultural Resources Assessment of Gilman Springs Road Realignment. Chambers Group. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Rogers, Malcolm J.

- 1953 Miscellaneous Field Notes – Riverside County. San Diego Museum of Man. Unpublished

report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Weber, Carmen and Cole Parker

- 1991 Mount Eden Cultural Resources Survey. Chambers Group, Inc. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Wilmoth, Stand

- 1978 Environmental Impact Evaluation: Archeological Assessment of Tentative Parcel Map 12945, Lakeview Area of Riverside County, California. Archaeological Research Unit, U.C. Riverside. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Wlodarski, Robert J. and John M. Foster

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Workman, James E.

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York, Andrew and Jane E. Wooley

- 1987 Cultural Resources Evaluation of Oak Valley, Riverside County, California. Dames & Moore. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

The EIC also reviewed the following historic sources:

- The National Register of Historic Places (NRHP) Index
- The Office of Historic Preservation (OHP), Archaeological Determinations of Eligibility (ADOE)
- The OHP, Directory of Properties in the Historic Property Data File (HPD)
- The 15' USGS *Perris* topographic map (1943)

No properties listed in the NRHP, the ADOE, or the HPD are located within the boundaries of the project. The complete records search results are provided in Appendix B.

An in-house records check included online BLM GLO records and historic aerial photographs and maps. No GLO records for the property could be located online from the BLM. Historic aerial photographs ranging between 1966 and 2016 were consulted, along with the 1901

Elsinore, California 30-minute, 1943 *Perris, California* 15-minute, and the 1953 *El Casco, California* 7.5-minute USGS quadrangles. The maps do not show any building ever located on the property historically, while aerial photographs indicate the APE has remained mostly vacant and undisturbed with the exception of dirt roads that traverse the ridge tops. The only development in the area is visible after 1996, when the Chandler Aggregates' Gilman Springs quarry began operations.

BFSA also requested a records search of the SLF of the NAHC. The SLF did not indicate the presence of any sacred sites or locations of religious or ceremonial importance within the search radius. In accordance with the recommendations of the NAHC, BFSA contacted all Native American consultants listed in the NAHC response letter. BFSA provided the letters to Native American representatives at least two weeks before the initiation of the field survey and eight responses have been received as of the date of this report. None of the tribal responses received during the two-week period requested participation in the survey. The Viejas Band of Kumeyaay Indians and Kizh Nation deferred to other tribes in the area, while the San Manuel Band of Mission Indians, Pauma Band of Luiseño Indians, and Agua Caliente Band of Mission Indians deferred to the Soboba Band of Luiseño Indians. The Augustine Band of Cahuilla Indians and Twenty-Nine Palms Band of Mission Indians stated they were unaware of specific cultural resources that would be affected by the project. The Soboba Band of Luiseño Indians expressed interest in the project, and requested consultation on the project. All correspondence is provided in Appendix C.

The records search and literature review suggest that there is a low potential for historic sites to be contained within the boundaries of the property, as none have been recorded within one mile of the APE. There is a low to moderate potential for prehistoric sites or artifacts to be identified within the APE. Prehistoric sites located within one mile of the project are generally found to the southeast in Laborde Canyon, or northwest closer to the Eden Hot Springs area. Sites in the area tend to be situated near easily accessible water sources and bedrock outcrops. The current APE contains bedrock outcrops and seasonal drainages; however, previous surveys have failed to identify resources within the property. The lack of documented prehistoric resources is likely due to the terrain of the Badlands making access to water within the steep narrow canyons a challenge. Therefore, there is a low potential for primary prehistoric sites within the project APE, and if prehistoric resources do exist they will likely be isolated artifacts.

4.2 Results of the Field Survey

Principal Investigator Brian F. Smith and Project Archaeologist Andrew Garrison directed the pedestrian survey of the project on October 19, 2017 with the assistance of Archaeological Field Director Clarence Hoff. Aerial photographs, maps, and a compass permitted orientation and location of project boundaries. The property was surveyed in 15-meter transects, except where the steep slopes and heavy vegetation prohibited systematic transects. BFSA staff carefully inspected all exposed ground surfaces, including rodent burrows and disturbed areas. A survey form, field notes, and photographs documented the survey work undertaken. Overviews of the project can be

found in Plates 4.2–1 through 4.2–3.

During the survey, bedrock outcroppings were noted throughout the property. All accessible outcroppings were checked for signs of prehistoric use. The outcroppings were mainly located within the west/southwest section of the property and were very eroded and friable. It was also noted that although intermittent sources of water would be located at the base of the hills within the canyons, investigations of these areas did not reveal the presence of any cultural resources. Disturbances to the property are mainly tied to the Chandler Aggregates' Gilman Springs quarry operations. Dirt roads and trails extending from the quarry out along the ridges of the APE appear to be regularly maintained, often terminating at turnouts. There were cleared areas along the dirt roads and turnouts, as well as piles of busted stone and pushed dirt.

No cultural resources, either historic or prehistoric, were discovered during the survey. The lack of prehistoric sites is likely due to the steep terrain and lack of easily accessible dependable water sources on or near the property.



Plate 4.2–1: Overview of the southwest corner of the property, facing northeast.



Plate 4.2-2: Overview of the northeast corner of the property, facing south.



Plate 4.2-3: Overview of the southeast corner of the property, facing northwest.

5.0 RECOMMENDATIONS

The cultural resources study for the Surface Mining Permit No. 159, Amendment No. 2 Project was negative for the presence of cultural resources. The EIC records search indicated that while 13 cultural resource sites have been recorded within a one-mile radius of the project, no cultural resources have ever been recorded within the APE. Further, 26 studies have been conducted within one mile of the project, two of which combined cover the entire project APE. As shown within the records search, resources near the project are mainly of food processing/bedrock milling sites associated with the seasonal drainages within Laborde Canyon, located southeast of the project, or artifact scatters and isolates located in the Eden Hot Springs, northwest of the APE. Ground visibility during the survey was generally good, and although the current APE contains bedrock outcrops and seasonal drainages, no resources were identified during the survey. The bedrock outcroppings present within the APE were all eroded and friable with no signs of prehistoric use. Further, the intermittent sources of water that would be located at the base of the hills within the canyons are at the bottom of slopes that are steep and difficult to access, making them a poor location for prehistoric habitation sites. The lack of documented prehistoric resources is likely due to the terrain of the Badlands, making access to water within the steep narrow canyons a challenge. Therefore, based on the results of the records search and field survey, it is unlikely that any cultural resources exist on the property.

Given that no archaeological sites, features, or artifacts were identified during the field reconnaissance, no potential impacts to cultural resources are associated with the proposed project. The archaeological study was completed in accordance with County of Riverside report guidelines and CEQA significance evaluation criteria. Based upon the absence of any cultural resources on the property, site-specific mitigation measures will not be required for this project. Further, as a result of inhospitable terrain, disturbance from the cutting and clearing of dirt roads and turnouts, and the absence of recorded cultural resources within the project boundaries, there is little potential for cultural resources to be present/disturbed by the proposed project. Monitoring of grading by archaeologists and Native American representatives will not be recommended as a Condition of Approval. No further archaeological investigations are recommended for project approval based upon the records search and the results of the field survey.

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.



Brian F. Smith

Principal Investigator

County of Riverside Registration #168

April 23, 2019

Date

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APPENDIX A

Qualifications of Key Personnel

Brian F. Smith, MA

Owner, Principal Investigator

Brian F. Smith and Associates, Inc.

14010 Poway Road • Suite A •

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Education

Master of Arts, History, University of San Diego, California

1982

Bachelor of Arts, History, and Anthropology, University of San Diego, California

1975

Professional Memberships

Society for California Archaeology

Experience

Principal Investigator

Brian F. Smith and Associates, Inc.

**1977–Present
Poway, California**

Brian F. Smith is the owner and principal historical and archaeological consultant for Brian F. Smith and Associates. Over the past 32 years, he has conducted over 2,500 cultural resource studies in California, Arizona, Nevada, Montana, and Texas. These studies include every possible aspect of archaeology from literature searches and large-scale surveys to intensive data recovery excavations. Reports prepared by Mr. Smith have been submitted to all facets of local, state, and federal review agencies, including the US Army Corps of Engineers, the Bureau of Land Management, the Bureau of Reclamation, the Department of Defense, and the Department of Homeland Security. In addition, Mr. Smith has conducted studies for utility companies (Sempra Energy) and state highway departments (CalTrans).

Professional Accomplishments

These selected major professional accomplishments represent research efforts that have added significantly to the body of knowledge concerning the prehistoric life ways of cultures once present in the Southern California area and historic settlement since the late 18th century. Mr. Smith has been principal investigator on the following select projects, except where noted.

Downtown San Diego Mitigation and Monitoring Reporting Programs: Large numbers of downtown San Diego mitigation and monitoring projects submitted to the Centre City Development Corporation, some of which included Strata (2008), Hotel Indigo (2008), Lofts at 707 10th Avenue Project (2007), Breeza (2007), Bayside at the Embarcadero (2007), Aria (2007), Icon (2007), Vantage Pointe (2007), Aperture (2007), Sapphire Tower (2007), Lofts at 655 Sixth Avenue (2007), Metrowork (2007), The Legend (2006), The Mark (2006), Smart Corner (2006), Lofts at 677 7th Avenue (2005), Aloft on Cortez Hill (2005), Front and

Beech Apartments (2003), Bella Via Condominiums (2003), Acqua Vista Residential Tower (2003), Northblock Lofts (2003), Westin Park Place Hotel (2001), Parkloft Apartment Complex (2001), Renaissance Park (2001), and Laurel Bay Apartments (2001).

Archaeology at the Padres Ballpark: Involved the analysis of historic resources within a seven-block area of the "East Village" area of San Diego, where occupation spanned a period from the 1870s to the 1940s. Over a period of two years, BFSa recovered over 200,000 artifacts and hundreds of pounds of metal, construction debris, unidentified broken glass, and wood. Collectively, the Ballpark Project and the other downtown mitigation and monitoring projects represent the largest historical archaeological program anywhere in the country in the past decade (2000-2007).

4S Ranch Archaeological and Historical Cultural Resources Study: Data recovery program consisted of the excavation of over 2,000 square meters of archaeological deposits that produced over one million artifacts, containing primarily prehistoric materials. The archaeological program at 4S Ranch is the largest archaeological study ever undertaken in the San Diego County area and has produced data that has exceeded expectations regarding the resolution of long-standing research questions and regional prehistoric settlement patterns.

Charles H. Brown Site: Attracted international attention to the discovery of evidence of the antiquity of man in North America. Site located in Mission Valley, in the city of San Diego.

Del Mar Man Site: Study of the now famous Early Man Site in Del Mar, California, for the San Diego Science Foundation and the San Diego Museum of Man, under the direction of Dr. Spencer Rogers and Dr. James R. Moriarty.

Old Town State Park Projects: Consulting Historical Archaeologist. Projects completed in the Old Town State Park involved development of individual lots for commercial enterprises. The projects completed in Old Town include Archaeological and Historical Site Assessment for the Great Wall Cafe (1992), Archaeological Study for the Old Town Commercial Project (1991), and Cultural Resources Site Survey at the Old San Diego Inn (1988).

Site W-20, Del Mar, California: A two-year-long investigation of a major prehistoric site in the Del Mar area of the city of San Diego. This research effort documented the earliest practice of religious/ceremonial activities in San Diego County (circa 6,000 years ago), facilitated the projection of major non-material aspects of the La Jolla Complex, and revealed the pattern of civilization at this site over a continuous period of 5,000 years. The report for the investigation included over 600 pages, with nearly 500,000 words of text, illustrations, maps, and photographs documenting this major study.

City of San Diego Reclaimed Water Distribution System: A cultural resource study of nearly 400 miles of pipeline in the city and county of San Diego.

Master Environmental Assessment Project, City of Poway: Conducted for the City of Poway to produce a complete inventory of all recorded historic and prehistoric properties within the city. The information was used in conjunction with the City's General Plan Update to produce a map matrix of the city showing areas of high, moderate, and low potential for the presence of cultural resources. The effort also included the development of the City's Cultural Resource Guidelines, which were adopted as City policy.

Draft of the City of Carlsbad Historical and Archaeological Guidelines: Contracted by the City of Carlsbad to produce the draft of the City's historical and archaeological guidelines for use by the Planning Department of the City.

The Mid-Bayfront Project for the City of Chula Vista: Involved a large expanse of undeveloped agricultural land situated between the railroad and San Diego Bay in the northwestern portion of the city. The study included the analysis of some potentially historic features and numerous prehistoric sites.

Cultural Resources Survey and Test of Sites Within the Proposed Development of the Audie Murphy Ranch, Riverside County, California: Project manager/director of the investigation of 1,113.4 acres and 43 sites, both prehistoric and historic—including project coordination; direction of field crews; evaluation of sites for significance based on County of Riverside and CEQA guidelines; assessment of cupule, pictograph, and rock shelter sites, co-authoring of cultural resources project report. February-September 2002.

Cultural Resources Evaluation of Sites Within the Proposed Development of the Otay Ranch Village 13 Project, San Diego County, California: Project manager/director of the investigation of 1,947 acres and 76 sites, both prehistoric and historic—including project coordination and budgeting; direction of field crews; assessment of sites for significance based on County of San Diego and CEQA guidelines; co-authoring of cultural resources project report. May-November 2002.

Cultural Resources Survey for the Remote Video Surveillance Project, El Centro Sector, Imperial County: Project manager/director for a survey of 29 individual sites near the U.S./Mexico Border for proposed video surveillance camera locations associated with the San Diego Border barrier Project—project coordination and budgeting; direction of field crews; site identification and recordation; assessment of potential impacts to cultural resources; meeting and coordinating with U.S. Army Corps of Engineers, U.S. Border Patrol, and other government agencies involved; co-authoring of cultural resources project report. January, February, and July 2002.

Cultural Resources Survey and Test of Sites Within the Proposed Development of the Menifee West GPA, Riverside County, California: Project manager/director of the investigation of nine sites, both prehistoric and historic—including project coordination and budgeting; direction of field crews; assessment of sites for significance based on County of Riverside and CEQA guidelines; historic research; co-authoring of cultural resources project report. January-March 2002.

Mitigation of An Archaic Cultural Resource for the Eastlake III Woods Project for the City of Chula Vista, California: Project archaeologist/ director—including direction of field crews; development and completion of data recovery program including collection of material for specialized faunal and botanical analyses; assessment of sites for significance based on CEQA guidelines; management of artifact collections cataloging and curation; data synthesis; co-authoring of cultural resources project report, in prep. September 2001-March 2002.

Cultural Resources Survey and Test of Sites Within the Proposed French Valley Specific Plan/EIR, Riverside County, California: Project manager/director of the investigation of two prehistoric and three historic sites—including project coordination and budgeting; survey of project area; Native American consultation; direction of field crews; assessment of sites for significance based on CEQA guidelines; cultural resources project report in prep. July-August 2000.

Cultural Resources Survey and Test of Sites Within the Proposed Lawson Valley Project, San Diego County, California: Project manager/director of the investigation of 28 prehistoric and two historic sites—including project coordination; direction of field crews; assessment of sites for significance based on CEQA guidelines; cultural resources project report in prep. July-August 2000.

Cultural Resource Survey and Geotechnical Monitoring for the Mohyi Residence Project, La Jolla, California: Project manager/director of the investigation of a single-dwelling parcel—including project coordination; field survey; assessment of parcel for potentially buried cultural deposits; monitoring of geotechnical borings; authoring of cultural resources project report. Brian F. Smith and Associates, San Diego, California. June 2000.

Enhanced Cultural Resource Survey and Evaluation for the Prewitt/Schmucker/Cavadias Project, La Jolla, California: Project manager/director of the investigation of a single-dwelling parcel—including project coordination; direction of field crews; assessment of parcel for potentially buried cultural deposits; authoring of cultural resources project report. June 2000.

Cultural Resources Survey and Test of Sites Within the Proposed Development of the Meniffee Ranch, Riverside County, California: Project manager/director of the investigation of one prehistoric and five historic sites—included project coordination and budgeting; direction of field crews; feature recordation; historic structure assessments; assessment of sites for significance based on CEQA guidelines; historic research; co-authoring of cultural resources project report. February-June 2000.

Salvage Mitigation of a Portion of the San Diego Presidio Identified During Water Pipe Construction for the City of San Diego, California: Project archaeologist/director—included direction of field crews; development and completion of data recovery program; management of artifact collections cataloging and curation; data synthesis and authoring of cultural resources project report in prep. April 2000.

Enhanced Cultural Resource Survey and Evaluation for the Tyrian 3 Project, La Jolla, California: Project manager/director of the investigation of a single-dwelling parcel—included project coordination; assessment of parcel for potentially buried cultural deposits; authoring of cultural resources project report. April 2000.

Enhanced Cultural Resource Survey and Evaluation for the Lamont 5 Project, Pacific Beach, California: Project manager/director of the investigation of a single-dwelling parcel—included project coordination; assessment of parcel for potentially buried cultural deposits; authoring of cultural resources project report. April 2000.

Enhanced Cultural Resource Survey and Evaluation for the Reiss Residence Project, La Jolla, California: Project manager/director of the investigation of a single-dwelling parcel—included project coordination; assessment of parcel for potentially buried cultural deposits; authoring of cultural resources project report. March-April 2000.

Salvage Mitigation of a Portion of Site SDM-W-95 (CA-SDI-211) for the Poinsettia Shores Santalina Development Project and Caltrans, Carlsbad, California: Project archaeologist/ director—included direction of field crews; development and completion of data recovery program; management of artifact collections cataloging and curation; data synthesis and authoring of cultural resources project report in prep. December 1999-January 2000.

Survey and Testing of Two Prehistoric Cultural Resources for the Airway Truck Parking Project, Otay Mesa, California: Project archaeologist/director—included direction of field crews; development and completion of testing recovery program; assessment of site for significance based on CEQA guidelines; authoring of cultural resources project report, in prep. December 1999-January 2000.

Cultural Resources Phase I and II Investigations for the Tin Can Hill Segment of the Immigration and Naturalization Services Triple Fence Project Along the International Border, San Diego County, California: Project manager/director for a survey and testing of a prehistoric quarry site along the border—NRHP eligibility assessment; project coordination and budgeting; direction of field crews; feature recordation; meeting and coordinating with U.S. Army Corps of Engineers; co-authoring of cultural resources project report. December 1999-January 2000.

Mitigation of a Prehistoric Cultural Resource for the Westview High School Project for the City of San Diego, California: Project archaeologist/ director—included direction of field crews; development and completion of data recovery program including collection of material for specialized faunal and botanical analyses; assessment of sites for significance based on CEQA guidelines; management of artifact collections cataloging and curation; data synthesis; co-authoring of cultural resources project report, in prep. October 1999-January 2000.

Mitigation of a Prehistoric Cultural Resource for the Otay Ranch SPA-One West Project for the City of Chula Vista, California: Project archaeologist/director—included direction of field crews; development of data recovery program; management of artifact collections cataloging and curation; assessment of

site for significance based on CEQA guidelines; data synthesis; authoring of cultural resources project report, in prep. September 1999-January 2000.

Monitoring of Grading for the Herschel Place Project, La Jolla, California: Project archaeologist/monitor—included monitoring of grading activities associated with the development of a single-dwelling parcel. September 1999.

Survey and Testing of a Historic Resource for the Osterkamp Development Project, Valley Center, California: Project archaeologist/ director—included direction of field crews; development and completion of data recovery program; budget development; assessment of site for significance based on CEQA guidelines; management of artifact collections cataloging and curation; data synthesis; authoring of cultural resources project report. July-August 1999.

Survey and Testing of a Prehistoric Cultural Resource for the Proposed College Boulevard Alignment Project, Carlsbad, California: Project manager/director —included direction of field crews; development and completion of testing recovery program; assessment of site for significance based on CEQA guidelines; management of artifact collections cataloging and curation; data synthesis; authoring of cultural resources project report, in prep. July-August 1999.

Survey and Evaluation of Cultural Resources for the Palomar Christian Conference Center Project, Palomar Mountain, California: Project archaeologist—included direction of field crews; assessment of sites for significance based on CEQA guidelines; management of artifact collections cataloging and curation; data synthesis; authoring of cultural resources project report. July-August 1999.

Survey and Evaluation of Cultural Resources at the Village 2 High School Site, Otay Ranch, City of Chula Vista, California: Project manager/director —management of artifact collections cataloging and curation; assessment of site for significance based on CEQA guidelines; data synthesis; authoring of cultural resources project report. July 1999.

Cultural Resources Phase I, II, and III Investigations for the Immigration and Naturalization Services Triple Fence Project Along the International Border, San Diego County, California: Project manager/director for the survey, testing, and mitigation of sites along border—supervision of multiple field crews, NRHP eligibility assessments, Native American consultation, contribution to Environmental Assessment document, lithic and marine shell analysis, authoring of cultural resources project report. August 1997-January 2000.

Phase I, II, and III Investigations for the Scripps Poway Parkway East Project, Poway California: Project archaeologist/project director—included recordation and assessment of multicomponent prehistoric and historic sites; direction of Phase II and III investigations; direction of laboratory analyses including prehistoric and historic collections; curation of collections; data synthesis; coauthorship of final cultural resources report. February 1994; March-September 1994; September-December 1995.

Archaeological Evaluation of Cultural Resources Within the Proposed Corridor for the San Elijo Water Reclamation System Project, San Elijo, California: Project manager/director —test excavations; direction of artifact identification and analysis; graphics production; coauthorship of final cultural resources report. December 1994-July 1995.

Evaluation of Cultural Resources for the Environmental Impact Report for the Rose Canyon Trunk Sewer Project, San Diego, California: Project manager/Director —direction of test excavations; identification and analysis of prehistoric and historic artifact collections; data synthesis; co-authorship of final cultural resources report, San Diego, California. June 1991-March 1992.

Reports/Papers

Author, coauthor, or contributor to over 2,500 cultural resources management publications, a selection of which are presented below.

- 2015 An Archaeological/Historical Study for the Safari Highlands Ranch Project, City of Escondido, County of San Diego.
- 2015 A Phase I and II Cultural Resources Assessment for the Decker Parcels II Project, Planning Case No. 36962, Riverside County, California.
- 2015 A Phase I and II Cultural Resources Assessment for the Decker Parcels I Project, Planning Case No. 36950, Riverside County, California.
- 2015 Cultural Resource Data Recovery and Mitigation Monitoring Program for Site SDI-10,237 Locus F, Everly Subdivision Project, El Cajon, California.
- 2015 Phase I Cultural Resource Survey for the Woodward Street Senior Housing Project, City of San Marcos, California (APN 218-120-31).
- 2015 An Updated Cultural Resource Survey for the Box Springs Project (TR 33410), APNs 255-230-010, 255-240-005, 255-240-006, and Portions of 257-180-004, 257-180-005, and 257-180-006.
- 2015 A Phase I and II Cultural Resource Report for the Lake Ranch Project, TR 36730, Riverside County, California.
- 2015 A Phase II Cultural Resource Assessment for the Munro Valley Solar Project, Inyo County, California.
- 2014 Cultural Resources Monitoring Report for the Diamond Valley Solar Project, Community of Winchester, County of Riverside.
- 2014 National Historic Preservation Act Section 106 Compliance for the Proposed Saddleback Estates Project, Riverside County, California.
- 2014 A Phase II Cultural Resource Evaluation Report for RIV-8137 at the Toscana Project, TR 36593, Riverside County, California.
- 2014 Cultural Resources Study for the Estates at Del Mar Project, City of Del Mar, San Diego, California (TTM 14-001).
- 2014 Cultural Resources Study for the Aliso Canyon Major Subdivision Project, Rancho Santa Fe, San Diego County, California.
- 2014 Cultural Resources Due Diligence Assessment of the Ocean Colony Project, City of Encinitas.
- 2014 A Phase I and Phase II Cultural Resource Assessment for the Citrus Heights II Project, TTM 36475, Riverside County, California.
- 2013 A Phase I Cultural Resource Assessment for the Modular Logistics Center, Moreno Valley, Riverside County, California.

- 2013 A Phase I Cultural Resources Survey of the Ivey Ranch Project, Thousand Palms, Riverside County, California.
- 2013 Cultural Resources Report for the Emerald Acres Project, Riverside County, California.
- 2013 A Cultural Resources Records Search and Review for the Pala Del Norte Conservation Bank Project, San Diego County, California.
- 2013 An Updated Phase I Cultural Resources Assessment for Tentative Tract Maps 36484 and 36485, Audie Murphy Ranch, City of Menifee, County of Riverside.
- 2013 El Centro Town Center Industrial Development Project (EDA Grant No. 07-01-06386); Result of Cultural Resource Monitoring.
- 2013 Cultural Resources Survey Report for the Renda Residence Project, 9521 La Jolla Farms Road, La Jolla, California.
- 2013 A Phase I Cultural Resource Study for the Ballpark Village Project, San Diego, California.
- 2013 Archaeological Monitoring and Mitigation Program, San Clemente Senior Housing Project, 2350 South El Camino Real, City of San Clemente, Orange County, California (CUP No. 06-065; APN-060-032-04).
- 2012 Mitigation Monitoring Report for the Los Peñasquitos Recycled Water Pipeline.
- 2012 Cultural Resources Report for Menifee Heights (Tract 32277).
- 2012 A Phase I Cultural Resource Study for the Altman Residence at 9696 La Jolla Farms Road, La Jolla, California 92037.
- 2012 Mission Ranch Project (TM 5290-1/MUP P87-036W3): Results of Cultural Resources Monitoring During Mass Grading.
- 2012 A Phase I Cultural Resource Study for the Payan Property Project, San Diego, California.
- 2012 Phase I Archaeological Survey of the Rieger Residence, 13707 Durango Drive, Del Mar, California 92014, APN 300-369-49.
- 2011 Mission Ranch Project (TM 5290-1/MUP P87-036W3): Results of Cultural Resources Monitoring During Mass Grading.
- 2011 Mitigation Monitoring Report for the 1887 Viking Way Project, La Jolla, California.
- 2011 Cultural Resource Monitoring Report for the Sewer Group 714 Project.
- 2011 Results of Archaeological Monitoring at the 10th Avenue Parking Lot Project, City of San Diego, California (APNs 534-194-02 and 03).
- 2011 Archaeological Survey of the Pelberg Residence for a Bulletin 560 Permit Application; 8335 Camino Del Oro; La Jolla, California 92037 APN 346-162-01-00 .
- 2011 A Cultural Resources Survey Update and Evaluation for the Robertson Ranch West Project and an Evaluation of National Register Eligibility of Archaeological sites for Sites for Section 106 Review (NHPA).
- 2011 Mitigation Monitoring Report for the 43rd and Logan Project.

- 2011 Mitigation Monitoring Report for the Sewer Group 682 M Project, City of San Diego Project #174116.
- 2011 A Phase I Cultural Resource Study for the Nooren Residence Project, 8001 Calle de la Plata, La Jolla, California, Project No. 226965.
- 2011 A Phase I Cultural Resource Study for the Keating Residence Project, 9633 La Jolla Farms Road, La Jolla, California 92037.
- 2010 Mitigation Monitoring Report for the 15th & Island Project, City of San Diego; APNs 535-365-01, 535-365-02 and 535-392-05 through 535-392-07.
- 2010 Archaeological Resource Report Form: Mitigation Monitoring of the Sewer and Water Group 772 Project, San Diego, California, W.O. Nos. 187861 and 178351.
- 2010 Pottery Canyon Site Archaeological Evaluation Project, City of San Diego, California, Contract No. H105126.
- 2010 Archaeological Resource Report Form: Mitigation Monitoring of the Racetrack View Drive Project, San Diego, California; Project No. 163216.
- 2010 A Historical Evaluation of Structures on the Butterfield Trails Property.
- 2010 Historic Archaeological Significance Evaluation of 1761 Haydn Drive, Encinitas, California (APN 260-276-07-00).
- 2010 Results of Archaeological Monitoring of the Heller/Nguyen Project, TPM 06-01, Poway, California.
- 2010 Cultural Resource Survey and Evaluation Program for the Sunday Drive Parcel Project, San Diego County, California, APN 189-281-14.
- 2010 Archaeological Resource Report Form: Mitigation Monitoring of the Emergency Garnet Avenue Storm Drain Replacement Project, San Diego, California, Project No. B10062
- 2010 An Archaeological Study for the 1912 Spindrift Drive Project
- 2009 Cultural Resource Assessment of the North Ocean Beach Gateway Project City of San Diego #64A-003A; Project #154116.
- 2009 Archaeological Constraints Study of the Morgan Valley Wind Assessment Project, Lake County, California.
- 2008 Results of an Archaeological Review of the Helen Park Lane 3.1-acre Property (APN 314-561-31), Poway, California.
- 2008 Archaeological Letter Report for a Phase I Archaeological Assessment of the Valley Park Condominium Project, Ramona, California; APN 282-262-75-00.
- 2007 Archaeology at the Ballpark. Brian F. Smith and Associates, San Diego, California. Submitted to the Centre City Development Corporation.
- 2007 Result of an Archaeological Survey for the Villages at Promenade Project (APNs 115-180-007-3, 115-180-049-1, 115-180-042-4, 115-180-047-9) in the City of Corona, Riverside County.
- 2007 Monitoring Results for the Capping of Site CA-SDI-6038/SDM-W-5517 within the Katzer Jamul Center Project; P00-017.
- 2006 Archaeological Assessment for The Johnson Project (APN 322-011-10), Poway, California.

- 2005 Results of Archaeological Monitoring at the El Camino Del Teatro Accelerated Sewer Replacement Project (Bid No. K041364; WO # 177741; CIP # 46-610.6.
- 2005 Results of Archaeological Monitoring at the Baltazar Draper Avenue Project (Project No. 15857; APN: 351-040-09).
- 2004 TM 5325 ER #03-14-043 Cultural Resources.
- 2004 An Archaeological Survey and an Evaluation of Cultural Resources at the Salt Creek Project. Report on file at Brian F. Smith and Associates.
- 2003 An Archaeological Assessment for the Hidden Meadows Project, San Diego County, TM 5174, Log No. 99-08-033. Report on file at Brian F. Smith and Associates.
- 2003 An Archaeological Survey for the Manchester Estates Project, Coastal Development Permit #02-009, Encinitas, California. Report on file at Brian F. Smith and Associates.
- 2003 Archaeological Investigations at the Manchester Estates Project, Coastal Development Permit #02-009, Encinitas, California. Report on file at Brian F. Smith and Associates.
- 2003 Archaeological Monitoring of Geological Testing Cores at the Pacific Beach Christian Church Project. Report on file at Brian F. Smith and Associates.
- 2003 San Juan Creek Drilling Archaeological Monitoring. Report on file at Brian F. Smith and Associates.
- 2003 Evaluation of Archaeological Resources Within the Spring Canyon Biological Mitigation Area, Otay Mesa, San Diego County, California. Brian F. Smith and Associates, San Diego, California.
- 2002 An Archaeological/Historical Study for the Otay Ranch Village 13 Project (et al.). Brian F. Smith and Associates, San Diego, California.
- 2002 An Archaeological/Historical Study for the Audie Murphy Ranch Project (et al.). Brian F. Smith and Associates, San Diego, California.
- 2002 Results of an Archaeological Survey for the Remote Video Surveillance Project, El Centro Sector, Imperial County, California. Brian F. Smith and Associates, San Diego, California.
- 2002 A Cultural Resources Survey and Evaluation for the Proposed Robertson Ranch Project, City of Carlsbad. Brian F. Smith and Associates, San Diego, California.
- 2002 Archaeological Mitigation of Impacts to Prehistoric Site SDI-7976 for the Eastlake III Woods Project, Chula Vista, California. Brian F. Smith and Associates, San Diego, California.
- 2002 An Archaeological/Historical Study for Tract No. 29777, Menifee West GPA Project, Perris Valley, Riverside County. Brian F. Smith and Associates, San Diego, California.
- 2002 An Archaeological/Historical Study for Tract No. 29835, Menifee West GPA Project, Perris Valley, Riverside County. Brian F. Smith and Associates, San Diego, California.
- 2001 An Archaeological Survey and Evaluation of a Cultural Resource for the Moore Property, Poway. Brian F. Smith and Associates, San Diego, California.
- 2001 An Archaeological Report for the Mitigation, Monitoring, and Reporting Program at the Water and Sewer Group Job 530A, Old Town San Diego. Brian F. Smith and Associates, San Diego, California.

- 2001 A Cultural Resources Impact Survey for the High Desert Water District Recharge Site 6 Project, Yucca Valley. Brian F. Smith and Associates, San Diego, California.
- 2001 Archaeological Mitigation of Impacts to Prehistoric Site SDI-13,864 at the Otay Ranch SPA-One West Project. Brian F. Smith and Associates, San Diego, California.
- 2001 A Cultural Resources Survey and Site Evaluations at the Stewart Subdivision Project, Moreno Valley, County of San Diego. Brian F. Smith and Associates, San Diego, California.
- 2000 An Archaeological/Historical Study for the French Valley Specific Plan/EIR, French Valley, County of Riverside. Brian F. Smith and Associates, San Diego, California.
- 2000 Results of an Archaeological Survey and the Evaluation of Cultural Resources at The TPM#24003–Lawson Valley Project. Brian F. Smith and Associates, San Diego, California.
- 2000 Archaeological Mitigation of Impacts to Prehistoric Site SDI-5326 at the Westview High School Project for the Poway Unified School District. Brian F. Smith and Associates, San Diego, California.
- 2000 An Archaeological/Historical Study for the Meniffee Ranch Project. Brian F. Smith and Associates, San Diego, California.
- 2000 An Archaeological Survey and Evaluation of Cultural Resources for the Bernardo Mountain Project, Escondido, California. Brian F. Smith and Associates, San Diego, California.
- 2000 A Cultural Resources Impact Survey for the Nextel Black Mountain Road Project, San Diego, California. Brian F. Smith and Associates, San Diego, California.
- 2000 A Cultural Resources Impact Survey for the Rancho Vista Project, 740 Hilltop Drive, Chula Vista, California. Brian F. Smith and Associates, San Diego, California.
- 2000 A Cultural Resources Impact Survey for the Poway Creek Project, Poway, California. Brian F. Smith and Associates, San Diego, California.
- 2000 Cultural Resource Survey and Geotechnical Monitoring for the Mohyi Residence Project. Brian F. Smith and Associates, San Diego, California.
- 2000 Enhanced Cultural Resource Survey and Evaluation for the Prewitt/Schmucker/ Cavadias Project. Brian F. Smith and Associates, San Diego, California.
- 2000 Enhanced Cultural Resource Survey and Evaluation for the Lamont 5 Project. Brian F. Smith and Associates, San Diego, California.
- 2000 Salvage Excavations at Site SDM-W-95 (CA-SDI-211) for the Poinsettia Shores Santalina Development Project, Carlsbad, California. Brian F. Smith and Associates, San Diego, California.
- 2000 Enhanced Cultural Resource Survey and Evaluation for the Reiss Residence Project, La Jolla, California. Brian F. Smith and Associates, San Diego, California.
- 2000 Enhanced Cultural Resource Survey and Evaluation for the Tyrian 3 Project, La Jolla, California. Brian F. Smith and Associates, San Diego, California.
- 2000 A Report for an Archaeological Evaluation of Cultural Resources at the Otay Ranch Village Two SPA, Chula Vista, California. Brian F. Smith and Associates, San Diego, California.
- 2000 An Archaeological Evaluation of Cultural Resources for the Airway Truck Parking Project, Otay Mesa, County of San Diego. Brian F. Smith and Associates, San Diego, California.

- 2000 Results of an Archaeological Survey and Evaluation of a Resource for the Tin Can Hill Segment of the Immigration and Naturalization and Immigration Service Border Road, Fence, and Lighting Project, San Diego County, California. Brian F. Smith and Associates, San Diego, California.
- 1999 An Archaeological Survey of the Home Creek Village Project, 4600 Block of Home Avenue, San Diego, California. Brian F. Smith and Associates, San Diego, California.
- 1999 An Archaeological Survey for the Sgobassi Lot Split, San Diego County, California. Brian F. Smith and Associates, San Diego, California.
- 1999 An Evaluation of Cultural Resources at the Otoy Ranch Village 11 Project. Brian F. Smith and Associates, San Diego, California.
- 1999 An Archaeological/Historical Survey and Evaluation of a Cultural Resource for The Osterkamp Development Project, Valley Center, California. Brian F. Smith and Associates, San Diego, California.
- 1999 An Archaeological Survey and Evaluation of Cultural Resources for the Palomar Christian Conference Center Project, Palomar Mountain, California. Brian F. Smith and Associates, San Diego, California.
- 1999 An Archaeological Survey and Evaluation of a Cultural Resource for the Proposed College Boulevard Alignment Project. Brian F. Smith and Associates, San Diego, California.
- 1999 Results of an Archaeological Evaluation for the Anthony's Pizza Acquisition Project in Ocean Beach, City of San Diego (with L. Pierson and B. Smith). Brian F. Smith and Associates, San Diego, California.
- 1996 An Archaeological Testing Program for the Scripps Poway Parkway East Project. Brian F. Smith and Associates, San Diego, California.
- 1995 Results of a Cultural Resources Study for the 4S Ranch. Brian F. Smith and Associates, San Diego, California.
- 1995 Results of an Archaeological Evaluation of Cultural Resources Within the Proposed Corridor for the San Elijo Water Reclamation System. Brian F. Smith and Associates, San Diego, California.
- 1994 Results of the Cultural Resources Mitigation Programs at Sites SDI-11,044/H and SDI-12,038 at the Salt Creek Ranch Project. Brian F. Smith and Associates, San Diego, California.
- 1993 Results of an Archaeological Survey and Evaluation of Cultural Resources at the Stallion Oaks Ranch Project. Brian F. Smith and Associates, San Diego, California.
- 1992 Results of an Archaeological Survey and the Evaluation of Cultural Resources at the Ely Lot Split Project. Brian F. Smith and Associates, San Diego, California.
- 1991 The Results of an Archaeological Study for the Walton Development Group Project. Brian F. Smith and Associates, San Diego, California.

Andrew J. Garrison, M.A., RPA

Senior Project Archaeologist

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Education

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 for California Archaeology
Society for American Archaeology
California Council for the Promotion of History

Society of Primitive Technology
Lithic Studies Society
California Preservation Foundation
Pacific Coast Archaeological Society

Experience

Senior Project Archaeologist Brian F. Smith and Associates, Inc.

**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

- 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)