

**Sycamore Hills Distribution Center Project**

**Draft Environmental Impact Report (DEIR)**

**Appendix E – Phase I and Phase II Cultural Resource Investigations**

# **Phase I and Phase II Cultural Resource Investigations for the Sycamore Hills Distribution Center Project, City of Riverside, Riverside County, California**

Joan George and Kholood Abdo-Hintzman

Prepared By



**Applied EarthWorks, Inc.**  
3550 East Florida Avenue, Suite H  
Hemet, CA 92544-4937

Prepared For

**Ruth Villalobos & Associates, Inc.**  
3602 Inland Empire Boulevard, Suite C310  
Ontario, CA 91764

September 2020

## **National Archaeological Database (NADB)**

*Type of Study:* Literature Search, Intensive Pedestrian Survey, Testing

*USGS 7.5' Quadrangle:* Riverside East

*Level of Investigation:* Section 106 NHPA; CEQA Phase I and Phase II

*Key Words:* Riverside; NHPA Section 106; CEQA; 48.64 acres surveyed

## MANAGEMENT SUMMARY

The applicant, Darrell Butler, for KB Development, proposes to construct an industrial warehouse development and associated parking spaces and water-quality features on three undeveloped land parcels (Assessor Parcel Numbers 263-060-022, -024, and -026) for the proposed Sycamore Hills Distribution Center Project (Project). The Project is located immediately south of the Sycamore Canyon Wilderness Park in the City of Riverside (City), Riverside County, California. Maximum depth of disturbance proposed for the Project will be 16 feet below the ground surface. As subcontracted by Ruth Villalobos & Associates, Inc., Applied EarthWorks, Inc. (Æ) completed a Phase I and Phase II cultural resource investigation for the Project.

As a result of both federal and City permitting requirements, the Project must comply with Section 106 of the National Historic Preservation Act (NHPA) and the California Environmental Quality Act (CEQA). The U.S. Army Corps of Engineers (USACE) is the lead agency for Section 106 compliance and the City of Riverside is the Lead Agency for the purposes of CEQA.

To determine whether the proposed Project would affect historic properties or historical resources, Æ conducted a cultural resource assessment of the 48.64-acre Area of Potential Effects (APE). Æ's cultural resource assessment consisted of desktop and field investigations—Phase I was completed through records search and literature review, communications with Native American tribal representatives, and an intensive pedestrian reconnaissance surface survey on September 19, 2018, whereas Phase II consisted of additional desktop research and subsurface testing and evaluation of all archaeological sites in the APE. The Phase II fieldwork was completed on September 20, 21, 28, and October 1, 2018. This report summarizes all the Phase I and II methods and results.

The literature and records search at the Eastern Information Center (EIC) of the California Historical Resources Information System indicates 179 cultural resources previously documented within a 1-mile-wide radius of the APE (Study Area). Of the 179 cultural resources identified in the Study Area, 169 are prehistoric archaeological sites. Four of these resources, all prehistoric bedrock milling sites, are documented within the APE.

Æ requested a search of the Sacred Lands File (SLF) from the Native American Heritage Commission. Results of the SLF search confirmed there are known Native American cultural sites within the APE. Æ followed up with Native American individuals and organizations, as recommended by the NAHC, to elicit information on Native American resources in the area. Of the 12 groups and/or individuals contacted, responses have been received from the Cahuilla Band of Indians, the Morongo Band of Mission Indians, the Cabazon Band of Mission Indians, and the Santa Rosa Band of Cahuilla Indians. In addition to Æ's communication with local Native American tribes and individuals, the City initiated formal government-to-government Assembly Bill 52 (AB 52) consultation and the USACE initiated Section 106 consultation with various Native American tribes who have interests in the Project area. A summary of additional cultural

resource feedback resulting from the tribal consultation process is included in the Environmental Impact Report prepared for the Project.

Æ Archaeologists Evan Mills and Andrew Miller first performed the Phase I intensive pedestrian reconnaissance surface survey of the APE before formally testing and evaluating the archaeological resources identified within the APE. Locations of the four previously recorded archaeological sites within the Project area were revisited during the survey and Æ's archaeologists also identified three additional prehistoric bedrock milling sites. For the Phase II investigation, Mills and Miller excavated 28 Shovel Probes (SHPs), intuitively placed among the seven archaeological sites. All 28 SHPs were devoid of cultural material.

Based on the archaeological data only, significance evaluations indicate none of the archaeological sites are recommended as eligible for listing on the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), or as a City-Designated Cultural Resource. However, the findings of the current study indicate the sites may be considered contributing elements to a subsistence-based procurement and processing cultural landscape or historic district under the following:

- NRHP Criterion A and CRHR Criterion 1 - their historical associations with broad patterns of national, local, or regional history;
- NRHP Criterion B and CRHR Criterion 2 - possible associations with the lives of significant persons in the past who are important to local, California or national history; and
- NRHP Criterion D and CRHR Criterion 4 - has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

Æ is currently under contract to prepare a Tribal Cultural Landscape (TCL) study to explore these findings with the Soboba Band of Luiseño Indians for the Project. In addition, Æ is under contract to coordinate with the Pechanga Band of Luiseño Indians to prepare a Tribal Cultural Resource (TCR)/Traditional Cultural Property (TCP) study.

None of the four mapped soil series have buried A (Ab) horizons as recorded by the National Resource Conservation Service. In addition, the many bedrock outcrops throughout the western portion of the APE and Æ's 28 SHPs indicate a shallow depth to bedrock there, which drastically reduces the overall potential for intact and significant archaeological deposits. Finally, the eastern half of the APE is mapped as Cretaceous bedrock with only a thin layer of soil across the entire site. Based on this information, there is a low likelihood for buried archaeological resources within the APE and Æ does not recommend archaeological monitoring during construction. However, during AB 52 consultation with the City and Section 106 consultation with the USACE, various Native American tribes requested tribal monitoring during ground disturbing construction.

Field notes documenting the current investigation are on file at Æ's Hemet office. A copy of this report will also be placed on file at the EIC.

# CONTENTS

<b>1</b>	<b>INTRODUCTION.....</b>	<b>1</b>
1.1	PROJECT LOCATION AND DESCRIPTION.....	1
1.2	AREA OF POTENTIAL EFFECTS (APE).....	4
1.3	REPORT ORGANIZATION.....	4
<b>2</b>	<b>REGULATORY CONTEXT.....</b>	<b>7</b>
2.1	FEDERAL LAWS AND REGULATIONS.....	7
2.2	STATE LAWS AND REGULATIONS.....	8
2.3	LOCAL LAWS AND REGULATIONS.....	9
	2.3.1 City of Riverside General Plan (2025).....	9
	2.3.2 City of Riverside Municipal Code.....	9
2.4	CONTEXTS FOR EVALUATION.....	11
	2.4.1 Integrity.....	11
	2.4.2 Linkage.....	12
<b>3</b>	<b>SETTING.....</b>	<b>14</b>
3.1	ENVIRONMENTAL SETTING.....	14
	3.1.1 Existing Conditions and Potential for Buried Cultural Deposits.....	14
3.2	PREHISTORIC SETTING.....	15
	3.2.1 Middle Archaic Period (ca. 7000–4000 B.P.).....	15
	3.2.2 Late Archaic Period (ca. 4000–1500 B.P.).....	16
	3.2.3 Saratoga Springs Period (ca. 1500–750 B.P.).....	17
	3.2.4 Late Prehistoric Period (ca. 750–410 B.P.).....	18
	3.2.5 Protohistoric Period (ca. 410–180 B.P.).....	19
3.3	ENTHNOGRAPHIC SETTING.....	19
	3.3.1 Social Structure.....	20
	3.3.2 Subsistence and Domestic Resources.....	20
	3.3.3 Shelter and Community Structures.....	21
	3.3.4 Religion, World View, and the Sacred.....	22
3.4	HISTORICAL SETTING.....	22
	3.4.1 California History.....	22
	3.4.2 History of the City of Riverside.....	23
<b>4</b>	<b>CULTURAL RESOURCE LITERATURE AND RECORDS SEARCH.....</b>	<b>26</b>
4.1	CA-RIV-2486 (33-002486).....	33
4.2	CA-RIV-2487 (33-002487).....	33
4.3	CA-RIV-2488 (33-002488).....	33
4.4	CA-RIV-2489 (33-002489).....	33
4.5	HISTORICAL MAP REVIEW.....	33
<b>5</b>	<b>NATIVE AMERICAN COMMUNICATIONS.....</b>	<b>34</b>

<b>6</b>	<b>RESEARCH DESIGN .....</b>	<b>36</b>
6.1	PREHISTORIC RESEARCH THEMES .....	36
6.2	A CULTURAL LANDSCAPE-BASED APPROACH TO BEDROCK MILLING SITES .....	36
<b>7</b>	<b>FIELD METHODS.....</b>	<b>39</b>
7.1	SURVEY METHODS .....	39
7.2	TESTING METHODS.....	40
<b>8</b>	<b>FIELD RESULTS .....</b>	<b>41</b>
8.1	SURVEY RESULTS .....	41
8.1.1	CA-RIV-2486 (33-002486) .....	41
8.1.2	CA-RIV-2487 (33-002487) .....	41
8.1.3	CA-RIV-2488 (33-002488) .....	44
8.1.4	CA-RIV-2489 (33-002489) .....	44
8.1.5	CA-RIV-11772 (33-028956) .....	45
8.1.6	CA-RIV-11770 (33-028955) .....	46
8.1.7	CA-RIV-11769 (33-028954) .....	46
8.2	TESTING RESULTS.....	47
<b>9</b>	<b>SIGNIFICANCE EVALUATIONS.....</b>	<b>49</b>
9.1	CA-RIV-2486 (33-002486) .....	49
9.2	CA-RIV-2487 (33-002487) .....	50
9.3	CA-RIV-2488 (33-002488) .....	51
9.4	CA-RIV-2489 (33-002489) .....	51
9.5	CA-RIV-11772 (33-028956) .....	52
9.6	CA-RIV-11770 (33-028955) .....	53
9.7	CA-RIV-11769 (33-028954) .....	54
9.8	CULTURAL LANDSCAPES AND BEDROCK MILLING SITES .....	55
<b>10</b>	<b>MANAGEMENT RECOMMENDATIONS .....</b>	<b>57</b>
<b>11</b>	<b>REFERENCES.....</b>	<b>59</b>

## APPENDICES

<b>A</b>	<b>Confidential Records Search Results</b>
<b>B</b>	<b>Native American Communication</b>
<b>C</b>	<b>Confidential DPR 523 Recording Forms</b>

## FIGURES

Figure 1-1	Project vicinity map .....	2
Figure 1-2	Project location map .....	3
Figure 1-3	Project APE map.....	5
Figure 8-1	Cultural resources within the APE (Not Available for Public Review).....	42

Figure 8-2	CA-RIV-2486, Feature 1 overview (view to the southeast). ....	43
Figure 8-3	CA-RIV-2487, Feature 1 overview (view to the southeast). ....	43
Figure 8-4	CA-RIV-2488 site overview (view to the northwest). ....	44
Figure 8-5	CA-RIV-2489 site overview (view to the east). ....	45
Figure 8-6	CA-RIV-11772, Feature 2 overview (view to the northeast). ....	45
Figure 8-7	CA-RIV-11770, Feature 1 overview (view to the north). ....	46
Figure 8-8	CA-RIV-11769, site overview (view to the north). ....	47

## **TABLES**

Table 4-1 Previous Cultural Resource Studies in the Study Area .....	26
Table 4-2 Cultural Resources in the Study Area .....	28
Table 8-1 Results of Shovel Probes Excavated within the APE.....	47

# 1

## INTRODUCTION

Under contract to Ruth Villalobos & Associates, Inc. (RVA), Applied EarthWorks, Inc. (Æ) completed a cultural resource assessment for the Sycamore Hills Distribution Center Project (Project) in the City of Riverside (City), Riverside County, California. The applicant, Darrell Butler, for KB Development, proposes to construct an industrial warehouse development on 48.6 (gross) acres of land in the southwestern portion of the Sycamore Canyon Business Park. The Project is within a U.S. Army Corps of Engineers (USACE) jurisdictional wetland; therefore, a USACE permit is anticipated and compliance with the requirements of Section 106 of the National Historic Preservation Act (NHPA) will be needed. The USACE is the Lead Agency for the Section 106 compliance.

Because the Project also requires discretionary approval from the City, the requirements of the California Environmental Quality Act (CEQA) also pertain. The City is the Lead Agency for the purposes of CEQA. Æ conducted a cultural resource assessment of the Project's Area of Potential Effects (APE) to identify significant cultural resources, if any, that could be affected by the Project. Amy L. Ollendorf, Ph.D., M.S., R.P.A. (#12588) served as Æ's principal investigator and was responsible for overall quality control, including report review and editing. Joan George, B.S. served as Æ's project manager. Fieldwork was conducted by Æ archaeologists Evan Mills, M.A. and Andrew Miller, M.A. Kholood Abdo-Hintzman, M.A. co-authored this report.

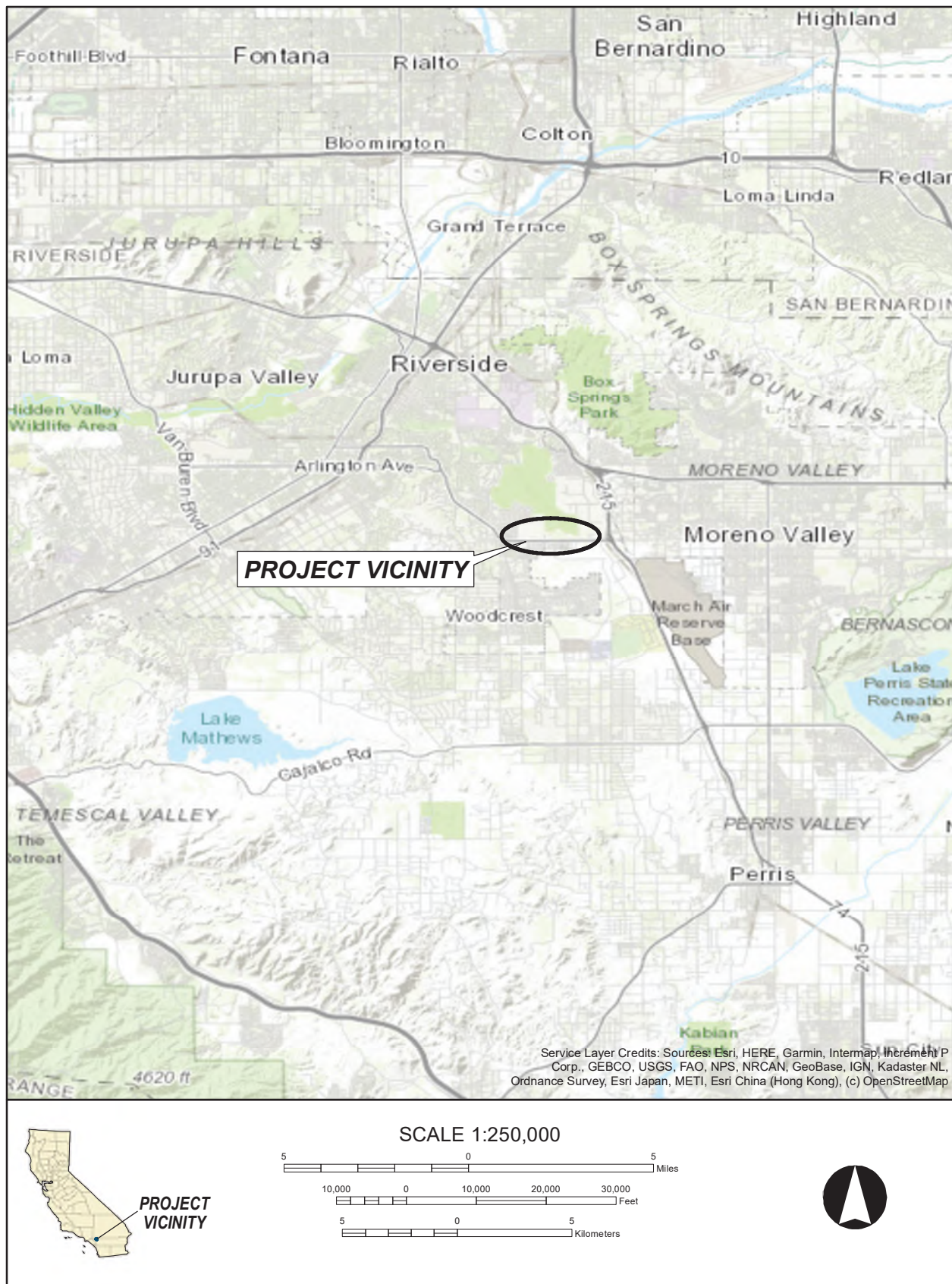
For the purposes of this study, the Project Area (CEQA terminology) is encompassed by the Area of Potential Effects (NHPA terminology). Since the APE includes the Project Area, "APE" is utilized throughout the remainder of this report.

### 1.1 PROJECT LOCATION AND DESCRIPTION

The Project is in the eastern portion of the City of Riverside, west of the Interstate 215 freeway and the City of Moreno Valley (Figure 1-1). The Project is situated north of East Alessandro Boulevard, east of Barton Street, and immediately south of the Sycamore Canyon Wilderness Park within Assessor Parcel Numbers (APN) 263-060-022, -024, and -026. Specifically, the Project is within the southwestern quarter of Section 9, Township 3 South, Range 4 West, San Bernardino Baseline and Meridian, as shown on the 1967 (photo-revised 1980) Riverside East, California 7.5-minute US Geological Survey (USGS) topographic quadrangle (Figure 1-2).

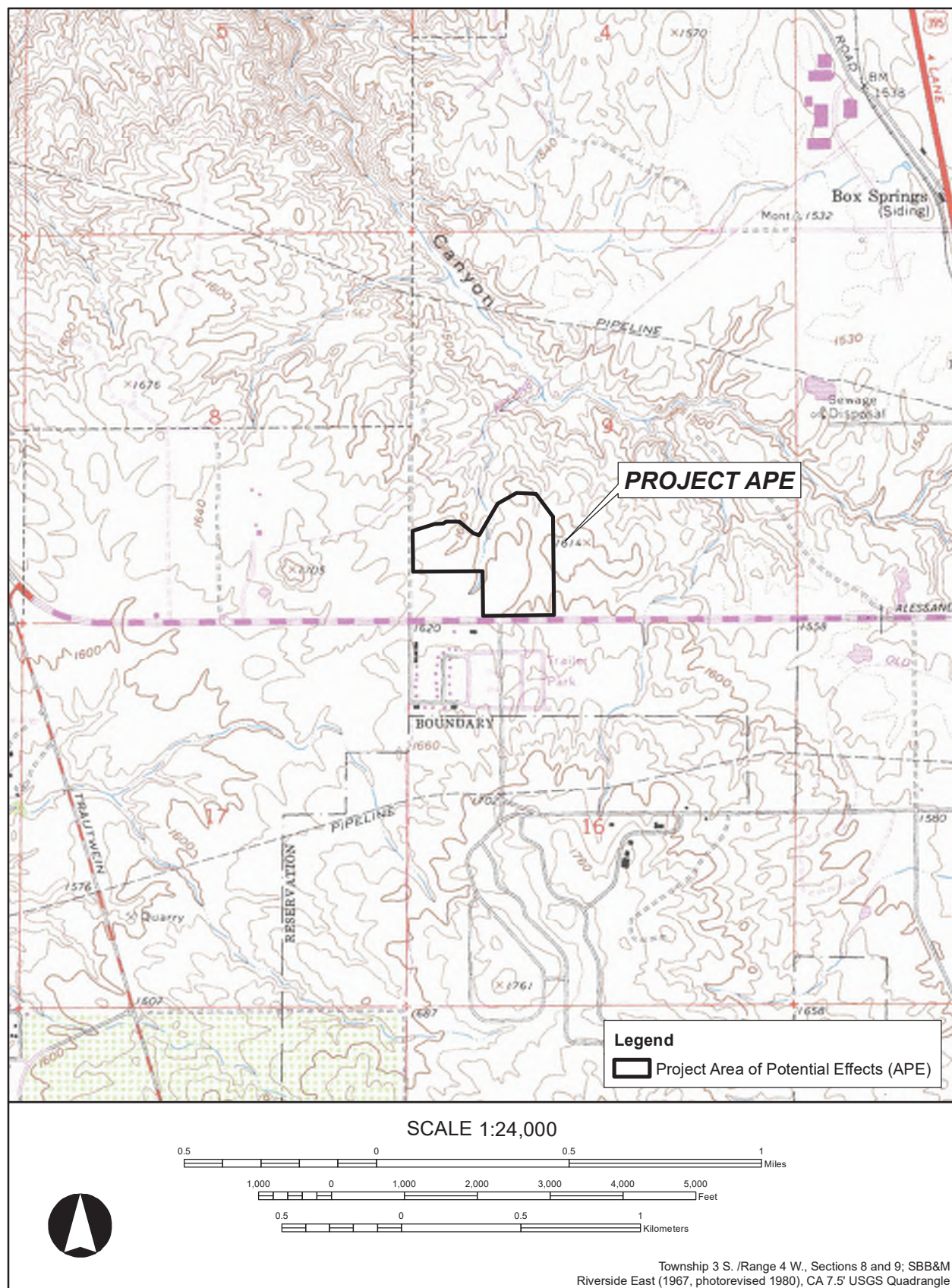
The property is spread in an east to west direction with natural rolling land descending gradually from a west to east direction. There are two jurisdictional drainages on the site. The undeveloped parcels are covered with a low to moderate growth of vegetation cover consisting of natural grasses and weeds with some granitic rock outcrops. Elevation across the APE ranges between approximately 1,570 feet and 1,616 feet above mean sea level (amsl).





**Figure 1-1** Project vicinity map.





**Figure 1-2 Project location map.**

The Project proposes subdividing the site into two numbered parcels (Parcels 1 and 2), and three lettered parcels (Parcels A, B, and C) (Figure 1-3). Parcels 1 and 2 are each proposed to be developed with a high cube transload short-term warehouse building (Buildings A and B). Building A, a 400,000 square foot warehouse, will be constructed on Parcel 1. Building B, a 203,100 square foot warehouse, will be constructed on Parcel 2. Associated improvements include parking, fire lanes, fencing and walls (including retaining walls), landscaping, and water quality treatment areas.

Parcels A and Parcel B consist of existing Restricted Property of natural land, with a supporting jurisdictional feature, totaling approximately 11.6 acres. A 0.67-acre driveway will be constructed through the Restricted Property to provide street access from Alessandro Boulevard to Parcel 1, which would reduce the Restricted Property to 10.93 acres. However, 1.44 acres will be added to Parcel A to mitigate this loss, resulting in a total of 12.37 acres of Restricted Property (net gain of 0.77 acres). A Conservation Easement is proposed to be placed over the amended 12.37 acres of Restricted Property. A trailhead parking lot is proposed on Parcel C, totaling 1.18 acres, for access to the Sycamore Canyon Wilderness Park. Improvements include a parking lot, sidewalk, shade structure, bike rack, drinking fountain, fencing, and a Fire Department and access gate. Parcel C will be dedicated to the City.

The design for Building A results in cut areas up to 15 feet in depth and fill areas as much as 12 feet thick; however, over-excavation is not expected to exceed 3 feet in depth. Excess excavated material will be utilized for the construction of Building B. The design for Building B results in cut areas up to 16 feet deep and fill areas as much as 8 feet thick; over-excavation also is not expected to exceed 3 feet in depth.

## **1.2 AREA OF POTENTIAL EFFECTS**

Although the Project area was investigated for CEQA purposes, an area encompassing the Project area known as the APE was defined for the Project by the USACE and investigated by Æ for compliance with Section 106 of the NHPA. According to 36 CFR § 800.16(d), the APE is the geographic area within which a federal undertaking may directly or indirectly cause alterations to the character or use of historic properties. The Project qualifies as a federal undertaking because it is under direct or indirect jurisdiction of a federal agency (36 CFR § 800.16[y]).

The APE for this Project is limited to all proposed features within the 48.64-acre vacant Project area investigated for CEQA purposes (see Figure 1-3). Ground disturbance may reach a maximum depth of 16 feet below the current grade within the APE.

## **1.3 REPORT ORGANIZATION**

This report documents the results of a cultural resource assessment of the proposed Project. Chapter 1 has described the Project and its location, defined the scope of cultural resource studies, and defined the APE. Chapter 2 states the regulatory context and the context for evaluation of sites. Chapter 3 summarizes the natural and cultural setting of the Project and surrounding region. Chapter 4 presents the results of the archaeological literature review and records search. Chapter 5 summarizes the Sacred Lands File (SLF) search with the Native American Heritage Commission (NAHC) and Native American communications. The research design is presented in Chapter 6.





Figure 1-3 Project Area of Potential Effects (APE).

Cultural resource field methods employed during this investigation are described in Chapter 7 and field results are presented in Chapter 8. Evaluations of resources located within the APE are provided in Chapter 9, while Chapter 10 provides management recommendations, followed by bibliographic references in Chapter 11. Results of the confidential literature and records search at the Eastern Information Center (EIC) of the California Historic Resource System (CHRIS) are included as Appendix A. Results of the SLF search and correspondence with Native American groups are included as Appendix B. The California Department of Parks and Recreation (DPR) 523 recording forms are included as Appendix C.

## 2 REGULATORY CONTEXT

Construction of the Project requires a permit under Section 404 of the Clean Water Act from the USACE. As a result of this permit requirement, the Project is a federal undertaking and is subject to the full authority of federal historic preservation laws and regulations, namely Section 106 of the NHPA and its implementing regulations (36 CFR Part 800).

Several state and local laws also guide actions that concern cultural resources. These include the CEQA (Public Resources Code 21000 et seq.), Public Health and Safety Code (HSC), Public Resources Code (PRC), the City of Riverside General Plan, and the City of Riverside Municipal Code.

### 2.1 FEDERAL LAWS AND REGULATIONS

Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties. A historic property as defined in 36 CFR 800.16(l)(1) means any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the NRHP. Undertakings include any federally funded, licensed, or permitted project (36 CFR 800.16[y]).

In the context of a federally permitted undertaking, such as this Project, a historic property must meet one or more of the four NRHP criteria of historical significance; possess integrity of location, design, setting, materials, workmanship, feeling, association (36 CFR 60.4); and, in general, it must be at least 50 years old:

- A. that are associated with events that have made a significant contribution to the broad patterns of our history;
- B. that are associated with the lives of persons significant in our past;
- C. that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. that have yielded, or may be likely to yield, information important to prehistory or history.

If a cultural resource is at least 50 years old, meets one or more of these specific criteria of historical significance, and is considered a good representative of a significant historical theme or pattern, the historic property is eligible for nomination to the NRHP. A consultant's role is to render a professional recommendation rather than an administrative determination of NRHP eligibility. In the case of this Project, the USACE in consultation with the SHPO and tribes will determine NRHP eligibility. If the SHPO, tribes, and USACE disagree about a resource's NRHP

eligibility, the Advisory Council on Historic Preservation (ACHP) or the Keeper of the NRHP may become involved in the eligibility determination process if requested.

Associative values are identified within the context of local, regional, and national history. Historical research is required to evaluate significant historical associations under Criteria A/1, B/2, and C/3. Criterion D/4, which is most often applied to archaeological sites, requires specification in terms of an archaeological context and research design. In addition to archaeological research potential, sites may possess public and ethnic values which should be considered when evaluating significance (Hardesty 1988:109). For example, persons or their descendants associated with a particular site may retain strong connections with that place through memories or folklore. The importance of this aspect of significance lies not only in the strength of these associations as they contribute to the broad patterns of history, but also in the valuable yet ephemeral source of information such memories represent.

Finally, archaeological sites may have broader public significance insofar as they can serve to educate the public about important aspects of national, state, and local history. This evaluation also considers the resource in terms of its potential for public interpretation and education. These criteria, by which the NRHP eligibility of a resource is judged, are essential because they “indicate what properties should be considered for protection from destruction or impairment” (36 CFR 60.2). Any action, as part of an undertaking, which could affect a significant cultural resource is subject to review and comment under Section 106 of the NHPA.

## **2.2 STATE LAWS AND REGULATIONS**

Since the Project also requires discretionary City approval, the CEQA also is applicable. The CEQA Statute and Guidelines direct lead agencies to determine whether a project will have a significant impact on historical resources. Historical resources in CEQA terminology are analogous to historic properties in NHPA terminology. That is, a cultural resource shall be considered “historically significant” if it meets the requirements for listing on the California Register of Historical Resources (CRHR) under any one of the following criteria (Title 14, California Code of Regulations [CCR], § 15064.5):

1. Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or,
4. Has yielded, or may be likely to yield, information important in prehistory or history.

The CEQA lead agency, in this case the City, makes determinations regarding significance and eligibility for listing in the CRHR. A project with an impact that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant impact on the environment (14 CCR § 15064.5[b]). Similarly, the CEQA lead agency will make a determination about a project’s effects.

## **2.3 LOCAL LAWS AND REGULATIONS**

### **2.3.1 City of Riverside General Plan (2025)**

The City of Riverside General Plan 2025 was adopted in 2007 and addresses the seven state-mandated elements of general plans (land use, housing, circulation, open space, conservation, noise, and safety) (City of Riverside 2007). The General Plan is intended to achieve the land use, circulation, and other goals of the City in order to reflect the community's current values for growth over the long term.

With regard to cultural resources, the Historic Preservation element of the City of Riverside General Plan contains seven objectives with associated policies to protect the City's historical and paleontological resources (City of Riverside 2007:HP-25 to HP-29 ). These include:

Objective HP-1: To use historic preservation principles as an equal component in the planning and development process.

Objective HP-2: To continue an active program to identify, interpret and designate the City's cultural resources.

Objective HP-3: To promote the City's cultural resources as a means to enhance the City's identity as an important center of Southern California history.

Objective HP-4: To fully integrate the consideration of cultural resources as a major aspect of the City's planning, permitting, and development activities.

Objective HP-5: To ensure compatibility between new development and existing cultural resources.

Objective HP-6: To actively pursue funding for a first-class historic preservation program, including money needed for educational materials, studies, surveys, staffing, and incentives for preservation by private property owners.

Objective HP-7: To encourage both public and private stewardship of the City's cultural resources.

### **2.3.2 City of Riverside Municipal Code**

The following are the criteria for these resources as defined in the Cultural Resources Ordinance of the City of Riverside Municipal Code (Title 20, Ordinance 7108, 2010) as amended:

**Landmark Criteria:** This designation refers to any Improvement or Natural Feature that is an exceptional example of a historical, archaeological, cultural, architectural, community, aesthetic, or artistic heritage of the City, retains a high degree of integrity, and meets one or more of the following criteria:

1. Exemplifies or reflects special elements of the City's cultural, social, economic, political, aesthetic, engineering, architectural, or natural history;



2. Is identified with persons or events significant in local, state or national history;
3. Embodies distinctive characteristics of a style, type, period or method of construction, or is a valuable example of the use of indigenous materials or craftsmanship;
4. Represents the work of a notable builder, designer, or architect, or important creative individual;
5. Embodies elements that possess high artistic values or represents a significant structural or architectural achievement or innovation;
6. Reflects significant geographical patterns, including those associated with different eras of settlement and growth, particular transportation modes, or distinctive examples of park or community planning, or cultural landscape;
7. Is one of the last remaining examples in the City, region, State, or nation possessing distinguishing characteristics of an architectural or historical type or specimen; or
8. Has yielded or may be likely to yield, information important in history or prehistory.

**Resource or Structure of Merit Criteria:** This designation refers to any Improvement or Natural Feature which contributes to the broader understanding of the historical, archaeological, cultural, architectural, community, aesthetic, or artistic heritage of the City, retains sufficient integrity, and:

1. Has a unique location or singular physical characteristics or is a view or vista representing an established and familiar visual feature of a neighborhood community or of the City;
2. Is an example of a type of building which was once common but is now rare in its neighborhood, community or area;
3. Is connected with a business or use which was once common but is now rare;
4. A Cultural Resource that could be eligible under Landmark Criteria no longer exhibiting a high level of integrity, however, retaining sufficient integrity to convey significance under one or more of the Landmark Criteria;
5. Has yielded or may be likely to yield, information important in history or prehistory; or
6. An improvement or resource that no longer exhibits the high degree of integrity sufficient for Landmark designation, yet still retains sufficient integrity under one or more of the Landmark criteria to convey cultural resource significance as a Structure or Resource of Merit. (Ord. 7108 §1, 2010).

**Historic District:** The City of Riverside defines a Historic District as:

1. A concentration, linkage, or continuity of cultural resources, where at least fifty percent of the structures or elements retain significant historic integrity (a “geographic Historic District”), or
2. A thematically-related grouping of cultural resources which contributes to each other and are unified aesthetically by plan or physical development, and which have been designated or determined eligible for designation as a historic district by the Historic Preservation Officer, Board, or City Council, or is listed in the National Register of Historic Places or

the California Register of Historical Resources, or is a California Historical Landmark or a California Point of Historical Interest (a “thematic Historic District”).

In addition to either 1 or 2 above, the area also:

3. Exemplifies or reflects special elements of the City’s cultural, social, economic, political, aesthetic, engineering, architectural, or natural history;
4. Is identified with persons or events significant in local, State, or national history;
5. Embodies distinctive characteristics of a style, type, period, or method of construction, or is a valuable example of the use of indigenous materials or craftsmanship;
6. Represents the work of notable builders, designers, or architects;
7. Embodies a collection of elements of architectural design, detail, materials or craftsmanship that represent a significant structural or architectural achievement or innovation;
8. Reflects significant geographical patterns, including those associated with different eras of settlement and growth, particular transportation modes, or distinctive examples of park or community planning;
9. Conveys a sense of historic and architectural cohesiveness through its design, setting, materials, workmanship or association; or
10. Has yielded or may be likely to yield, information important in history or prehistory.

## **2.4 CONTEXTS FOR EVALUATION**

The archaeological and historic contexts and research domains presented in Chapters 2 and 5, respectively, establish the framework within which decisions about significance are based (NPS 2002:9). The evaluation process essentially weighs the relative importance of events, people, and places against the larger backdrop of prehistory and history; the contexts provide the comparative standards and/or examples as well as the theme(s) necessary for this assessment. According to the NPS (2002:9), a theme is a pattern or trend that has influenced the history of an area for a certain period. A theme is typically couched in geographic (i.e., local, state, or national) and temporal terms to focus and facilitate the evaluation process.

Significance is based on how well the subject resource represents one or more of these themes, provides important scientific information about the theme, or helps to understand the important events or people associated with the resource and its inherent qualities. A resource must demonstrate more than just association with a theme; it must be a good representative of the theme, capable of illustrating or explaining the various thematic elements of a particular time and place in history.

### **2.4.1 Integrity**

All properties change over time. Therefore, it is not necessary for a property to retain all of its original historic physical features or characteristics in order to be eligible for listing in the NRHP or CRHR or as a City of Riverside Designated Cultural Resource. The property must, however,

retain enough integrity to enable it to convey its historic identity; in other words, to be recognizable to a historical contemporary. The NRHP recognizes seven aspects or qualities that, in various combinations, define integrity:

1. **Location**—the place where the historic property was constructed or the place where the historic event occurred.
2. **Design**—the combination of elements that create the form, plan, space, structure, and style of a property.
3. **Setting**—the physical environment of a historic property.
4. **Materials**—the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.
5. **Workmanship**—the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.
6. **Feeling**—a property's expression of the aesthetic or historic sense of a particular period of time.
7. **Association**—the direct link between an important historic event or person and a historic property [NPS 2002:44–45].

These elements of integrity are most appropriately applied to built-environment resources (i.e., standing buildings, structures, and objects). Although location (as described above) is relevant for all types of resources, the other aspects of integrity are not readily applicable to most archaeological sites. Instead, physical properties—like vertical and horizontal structure—provide a more relevant measure of integrity for archaeological sites. To illustrate, a site is conventionally considered to possess integrity if its original stratigraphy remains generally unaltered such that the chronology of activity can be determined, and if indications of disturbance do not obscure the full range of activity that occurred at the site, as expressed in its features and artifacts. If both conditions are generally met, the site will have likely retained its ability to yield scientifically important information. To retain historic integrity, a property will always possess several, and usually most, of these aspects. In order to properly assess integrity, however, significance (why, where, and when a property is important) must first be fully established. Only after significance is established can the issue of integrity be addressed. To be eligible for listing in the NRHP or CRHR or as a City of Riverside Designated Cultural Resource, a resource must possess both significance and sufficient integrity.

## 2.4.2 Linkage

Under NRHP significance Criterion D and CRHR Criterion 4, the data potential of a particular archaeological site is identified through the linkage of specific artifact classes present at the site with research themes such as those outlined in Chapter 5 above<sup>1</sup>. For example, charcoal or other

---

<sup>1</sup> Although this discussion focuses on data potential as it relates to NRHP Criterion D and CRHR Criterion 4, the ability of a resource to yield information important to history and prehistory is also relevant to the identification of Designated Cultural Resources as defined in the City of Riverside Municipal Code Title 20 (see above).

organic remains suitable for radiocarbon dating, source-identified obsidian, projectile points, or other stylistic artifacts would permit the study of cultural chronology. Flaked stone tools and debitage may provide information on lithic technology, while faunal and floral remains provide information on food procurement, diet, seasonality, and the biotic environment. The presence of these kinds of remains in an undisturbed context would indicate a significant cultural deposit. If such remains are lacking, or if their contextual integrity has been seriously impaired by post-depositional disturbances, then the site would not retain integrity and likely would not be considered eligible under Criterion D/4.

A key factor in assessing archaeological data potentials is the capacity for chronological control of the associated cultural assemblage. Temporally diagnostic artifact forms, historical documents, datable carbon, source-identified obsidian specimens, and intact stratified deposits are among the major sources of chronological data. Sufficient samples of obsidian debitage, even in the absence of diagnostic tool types, can also yield chronologically controlled data on raw material procurement, lithic reduction sequences, and tool manufacturing techniques through obsidian sourcing and hydration studies.

If site chronology and function can be defined, a site can usually provide data on land use and settlement patterns. These data are usually embodied in the locational, functional, and contextual information about the site. Similarly, almost all prehistoric sites have some potential to provide data on lithic technology, given chronological control of a sufficient sample of tools and/or debitage. However, if this information cannot be placed in a larger cultural context, the data is not considered of great importance; thus, sites having only limited settlement or technological data are not generally deemed significant or important under Criterion D/4. Likewise, sparse scatters of flaked or ground stone without temporal diagnostics have limited data potential due to the low density and low variability of the cultural assemblage and the lack of datable material.

Archaeological sites in the APE generally were judged to meet the NRHP/CRHR requirements under Criterion D/4 if they exhibited one or more of the following characteristics:

- Temporally discrete features, strata, or components;
- Variability in flaked and ground stone assemblages and faunal remains;
- Sufficient quantities of artifacts and debris to provide statistically valid samples;
- Internal spatial variability that might reflect functional differentiation in site use;
- Vertical or horizontal structure that might reflect discrete single component occupations or readily separable multicomponent occupations; and/or
- Documentation of important historical associations.

Sites with these characteristics were judged to contain the kinds of data useful for understanding the local chronological sequence, defining discrete cultural components, and learning how these relate to more well-known cultural sequences. At the next hierarchical level, such sites can provide information on dimensions of flaked and ground stone technology, prehistoric diet and subsistence, trade and exchange, and other regionally important research questions.

## **3 SETTING**

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

### **3.1 ENVIRONMENTAL SETTING**

The Project is within the northeastern part of the geologically complex Peninsular Ranges geomorphic province. The Peninsular Ranges are a northwest-southeast oriented complex of blocks that extend 125 miles from the Transverse Ranges and Los Angeles Basin to the tip of Baja California. The Peninsular Ranges are bounded to the east by the Colorado Desert and range in width from 30 to 100 miles (Norris and Webb 1976). The Project is approximately 3.5 miles northeast of Lake Mathews and 1.5 miles southwest of Box Springs Mountain, within the central part of the Perris Block, a relatively stable rectangular structural unit positioned between the Elsinore and San Jacinto fault zones (Morton et al. 2001).

The geology in the vicinity of the Project consists largely of Cretaceous plutonic rocks that are part of the composite Peninsular Ranges batholith (Morton et al. 2001). East of the Project, very old alluvial fan deposits flank the west side of the San Jacinto Valley and form a low relief and nearly level plain, which are likely derived from the Val Verde Pluton and the Box Spring Mountains. Similarly, to the west is a very old alluvial fan forming the eastern side of the Santa Ana Valley that is likely also derived from the Val Verde Pluton and the western slopes of the Box Spring Mountains.

Much of the APE consists of biotite-hornblende tonalite, the principal plutonic rock type of the Val Verde Pluton. The tonalite is a relatively weathered, homogeneous, gray granitic rock that is mostly massive and occasionally foliated. Soils within the APE are discussed in the following section as the context for possible buried archaeological resources.

As the climate of the region is largely determined by topographic features, climate, in turn, largely dictates the character of the biotic environment exploited by native populations. The climate of the Project is characterized as Mediterranean, with hot, dry summers and cool, moist winters. It has a semi-arid precipitation regime; significant changes in temperature and moisture occur based on elevation and exposure, particularly in the nearby mountains. The average annual rainfall ranges from 9 to 16 inches and the mean annual temperature varies from 59 to 65 degrees Fahrenheit (USDA 1971).

#### **3.1.1 Existing Conditions and Potential for Buried Cultural Deposits**

Four soil series are mapped by the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) within the APE (Soil Survey Staff 2020a). Three of the soil series

are derived from alluvium from granitic bedrock and are generally on steep slopes, sometimes at elevations as high as 4,000 feet amsl – Cienba gravelly loams, Fallbrook sandy loams, and Vista coarse sandy loams (Soil Survey Staff 2020b, 2020c, 2020d). The fourth soil series mapped within the APE – Arlington very fine sandy loams -- is formed on nearly level to strongly sloping surfaces on alluvial fans and terraces at elevations 400 to 2,000 feet amsl (Soil Survey Staff 2020e). Almost half the APE is mapped as Fallbrook soils (49 percent), followed in extent by Arlington (approximately 27 percent) and Vista (approximately 21 percent) soils with less than 2 percent of the APE in Cieneba soils (Soil Survey Staff 2020a).

Those mapped soil series in the Alfisols order -- Arlington and Fallbrook – as well as the one in the Inceptisols order – Vista – all possess well developed A and B horizons over C horizons. The Cieneba soils are Entisols with poorly developed, thin A horizons over barely decomposing rocky C horizons. None of the four mapped soil series have buried A (Ab) horizons. As such, the potential for intact buried archaeological deposits is highest in Arlington and Fallbrook soils followed by Vista soils. *Æ* suggests Cieneba soils likely have no potential for buried archaeological resources within the APE.

### **3.2 PREHISTORIC SETTING**

The prehistoric cultural setting of the Project provides a context for understanding the types, nature, and significance of the prehistoric cultural resources identified within the general Project. Native American occupation of the inland valleys of southern California can be divided into seven cultural periods: Paleoindian (ca. 12,000–9500 years before present [B.P.]); Early Archaic (ca. 9500–7000 B.P.); Middle Archaic (ca. 7000–4000 B.P.); Late Archaic (ca. 4000–1500 B.P.); Saratoga Springs (ca. 1500–750 B.P.); Late Prehistoric (ca. 750–410 B.P.); and Protohistoric (ca. 410–180 B.P.), which ended in the ethnographic period. Due to the nature of the prehistoric archaeological sites identified within a 1-mile-wide radius of the Project (see Chapter 4), the prehistoric cultural setting discussed below begins at the Middle Archaic period.

The data presented herein regarding the sequence of prehistoric use, adaptation, and occupation of the interior valleys and mountain localities of southern California are summarized from a synthesis of more than 10 years of archaeological research conducted at Diamond Valley Lake as part of the Eastside Reservoir Project (ESRP), located approximately 22 miles south-southeast of the Project (Goldberg et al. 2001; McDougall et al. 2003). For the most part, the prehistory of the inland valleys of southern California that characterizes the Project has been less thoroughly understood than that of the nearby desert and coastal regions. Prior to the ESRP cultural resources studies, no comprehensive synthesis had been developed specifically for the interior valley and mountain localities of cismontane southern California that characterizes the region. The following has been adapted from Horne and McDougall (2003).

#### **3.2.1 Middle Archaic Period (ca. 7000–4000 B.P.)**

The Middle Archaic saw a reversal of the weather patterns, which had prevailed throughout much of cismontane southern California for several millennia. By about 6000 B.P., local environmental conditions ameliorated while conditions in the deserts deteriorated, reaching maximum aridity of the postglacial period (Antevs 1952; Hall 1985; Haynes 1967; Mehringer and Warren 1976; Spaulding 1991, 1995). Spaulding (2001) proposes that a westerly air flow pattern returned to

southern California, while the monsoonal weather patterns in the deserts retreated. As a result, the inland areas may have seen increased effective moisture, while the interior deserts, no longer receiving moist monsoonal flow and now in the rainshadow of the Transverse and Peninsular Ranges, became quite arid. This suggests that cismontane southern California, including the inland valleys of San Bernardino and western Riverside counties, may have been a relatively more hospitable environment than the interior deserts during the middle Holocene.

The ESRP study indicated an increase in prehistoric use and occupation after about 6000 B.P., in comparison to the earlier periods, in the inland areas of cismontane southern California (Goldberg et al. 2001). The more intensively used residential locations occur along alluvial fan margins, while less intensively used areas tend to be situated on arroyo bottoms or upland benches (Goldberg et al. 2001).

This interval has been described frequently as the “Milling Stone Horizon” because of the preponderance of milling tools, such as manos and milling stones, in the archaeological assemblages of sites dated to this era (Basgall and True 1985; Kowta 1969; Wallace 1955). In the coastal and inland regions of southern California, this period of cultural development is marked by the technological advancements of seed grinding for flour and possibly the first use of marine resources, such as shellfish and marine mammals. The artifact inventory of this period also includes other ground stone artifacts, such as crude hammerstones, as well as flaked stone artifacts, such as scraper planes, choppers, large drills, crescents, and large leaf-shaped projectile points and knives. The artifact assemblage also includes likely nonutilitarian artifacts, such as beads, pendants, charmstones, discoidals, spherical stones, and cogged stones (Kowta 1969; True 1958; Warren et al. 1961).

### **3.2.2 Late Archaic Period (ca. 4000–1500 B.P.)**

The Late Archaic period was a time of cultural intensification in southern California. The beginning of the Late Archaic coincides with the Little Pluvial, a period of increased moisture in the region. Effective moisture continued to increase in the desert interior by approximately 3600 B.P. and lasted throughout most of the Late Archaic. This ameliorated climate allowed for more extensive occupation of the region. By approximately 2100 B.P., however, drying and warming increased, perhaps providing motivation for resource intensification. Archaeological site types that typify this time period include residential bases with large, diverse artifact assemblages, abundant faunal remains, and cultural features, as well as temporary bases, temporary camps, and task-specific activity areas. In general, sites showing evidence of the most intensive use tend to be on range-front benches adjacent to permanent water sources, such as perennial springs or larger streams, while less intensively used locales occur either on upland benches or on the margins of active alluvial fans (Goldberg 2001).

Data from Late Archaic component archaeological sites also suggest increased sedentism during this period, with a change to a semi-sedentary land-use and collection strategy. The profusion of features, and especially refuse deposits in Late Archaic components, suggests that seasonal encampments saw longer use and more frequent reuse than during the latter part of the preceding Middle Archaic period, with increasing moisture improving the conditions of southern California after ca. 3100 B.P. (Horne 2001; Spaulding 2001). Drying and warming after ca. 2100 B.P. likely exacted a toll on expanding populations, influencing changes in resource procurement strategies,

promoting economic diversification and resource intensification, and perhaps resulting in a permanent shift towards greater sedentism (Goldberg 2001).

The subsistence base broadened during the Late Archaic period. The technological advancement of the mortar and pestle may indicate the use of acorns, an important storable subsistence resource. Hunted resources also presumably gained importance in the diet with an abundance of broad, leaf-shaped blades and heavy, often stemmed or notched projectile points found in association with large numbers of terrestrial and aquatic mammal bones. Other characteristic features of this period include the appearance of bone and antler implements and the occasional use of asphaltum and steatite. Most chronological sequences for southern California recognize the introduction of the bow and arrow by 1500 B.P., marked by the appearance of small arrow points and arrow shaft straighteners.

Technologically, the artifact assemblage of this period was similar to that of the preceding Middle Archaic; new tools were added either as innovations or as “borrowed” cultural items. Diagnostic projectile points of this period are still fairly large (dart point size), but also include more refined notched (Elko), concave base (Humboldt), and small stemmed (Gypsum) forms (Warren 1984). Late in the period, Rose Spring arrow points appeared in the archaeological record in the deserts, reflecting the spread of the bow and arrow technology from the Great Basin and the Colorado River region. This projectile point type was not found at the ESRP study area, and there is no evidence suggesting that the bow and arrow had come into use at this time in the inland regions of southern California.

### **3.2.3 Saratoga Springs Period (ca. 1500–750 B.P.)**

Because paleoenvironmental conditions were little changed from the preceding period, cultural trends in the early portion of the Saratoga Springs period were, in large part, a continuation of the developments begun during the end of the Late Archaic period. However, the Medieval Warm Period (MWP), also known as the Medieval Climate Optimum, or Medieval Climatic Anomaly, was a time of even more persistent drought, began by 1060 B.P. Significantly warmer and drier conditions ensued. These climatic changes were experienced throughout the western United States (Jones et al. 1999; Kennett and Kennett 2000), although the inland areas of cismontane southern California may have been less affected than the desert interior. The MWP continued through the first 200 years of the Late Prehistoric period until approximately 550 B.P. (Spaulding 2001).

Although it has been anticipated that intensive use of the inland areas of cismontane southern California during the MWP may have been curtailed altogether, owing to inhospitable climate and concomitant decline in water and food sources, this does not appear to be the case. While land-use and procurement strategies experienced profound changes during this time, the response to deteriorating conditions was not abandonment of the inland areas, but rather intensification. Climatic conditions of warming and drying that began ca. 2100 B.P., toward the end of the Late Archaic period, had already triggered an intensification process that established productive strategies for dealing with resource stress. With the onset of the MWP, those strategies were further refined and intensified (Goldberg 2001). The focal shift of prehistoric activity from alluvial fan margins to mountain-front benches adjacent to permanent water sources, which was initiated during the Late Archaic period, continues to be seen in the Saratoga Springs component archaeological sites (Goldberg 2001).



The frequency of refuse deposits and artifact and toolstone caches during the MWP is slightly higher than during the preceding Late Archaic period and much higher than during the latter portion of the subsequent Late Prehistoric period. The frequency of artifact and toolstone caches more than doubled during the Saratoga Springs period from the preceding period, while the frequency of human remains reached the highest point of any time in the archaeological record. The intentional caching of toolstone and ground stone tools suggests that people anticipated returning to the same locations. The midden-altered sediments, which appear for the first time during the Saratoga Springs period, support the continued re-use of desired locations (Horne 2001).

Archaeological assemblages demonstrate the comparative importance of plant foods as a primary food source during the MWP than in any other prehistoric period; plant processing intensified and acorns apparently became an important staple (Klink 2001a). Faunal assemblages also show that resource stress was accommodated with similar strategies by intensifying the use of lagomorphs and by further expanding diet breadth, adding animals (i.e., medium-sized carnivores) that were rarely consumed during other periods of prehistory (McKim 2001). The most abundant evidence of trade also occurs during the MWP, suggesting that exchange was another mechanism for dealing with resource stress (Goldberg 2001).

### **3.2.4 Late Prehistoric Period (ca. 750–410 B.P.)**

The MWP extended into the Late Prehistoric period, ending about 550 B.P. The cultural trends and patterns of land use that characterized the MWP, including the portion that extends into the earlier part of the Late Prehistoric period, were discussed above. At the end of the MWP, however, and lasting throughout the ensuing Protohistoric period, a period of cooler temperatures and greater precipitation ushered in the Little Ice Age, during which time ecosystem productivity greatly increased along with the availability and predictability of water resources (Spaulding 2001).

During this time, Lake Cahuilla in the Coachella Valley began to recede (Waters 1983). As a result, the large Patayan populations occupying its shores began moving eastward to the Colorado River basin or westward into areas such as Anza Borrego, Coyote Canyon, the Upper Coachella Valley, the Little San Bernardino Mountains, and the San Jacinto Plain (Wilke 1976:172–183). The final desiccation of Lake Cahuilla, which had occurred by approximately 370 B.P. (A.D. 1580), resulted in a population shift away from the lakebed into the Peninsular Ranges and inland valleys to the west, such as the Project area, as well as to the Colorado River regions to the east.

With the return of more mesic conditions post-550 B.P., which resulted in less resource stress, studies at five residential sites comprising 16 separate components at ESRP indicate that that people returned to a less intensive, semisedentary land-use strategy similar to that identified during the Late Archaic period (Goldberg 2001). The number and frequency of artifact and toolstone caches were reduced; hearth features become slightly more common. Rock art also first appeared in association with Late Prehistoric components that post-date the MWP. The decrease in the number of artifact and toolstone caches and the first appearance of rock art during this time suggest that residential sites are now occupied on a year-round basis (Horne 2001).

A reduction in emphasis on plant foods—especially acorns, which require intensive preparation—is also visible in the archaeological record, and likely accounts for the reduction in refuse deposits, fire-altered rock weights, and midden development visible toward the end of the Late Prehistoric

period. The reduction in mortars, pestles, and other grinding tools after the MWP suggests that the intensive procurement and processing of acorns and other plant foods was no longer as critical as previously; this pattern is further supported by a decline in the effort expended in shaping grinding tools (Klink 2001a). It is possible that the portable milling toolkit was supplemented substantially by bedrock milling features; however, bedrock features cannot be dated, and, therefore, cannot be assigned to any particular time period(s).

Percentages of projectile points also increased somewhat after the MWP. Cottonwood Triangular points began to appear in inland assemblages at this time, and Obsidian Butte obsidian (located in the southeastern Salton Sea Basin and exposed by the desiccation of Lake Cahuilla) becomes much more common, suggesting an increased focus on large mammals. However, the lower ratio of late-stage bifaces indicates that hunting methods returned to random-encounter strategies, rather than the logistical forays of the preceding period (Klink 2001b). Of particular note, faunal assemblages produced an anomalously high lagomorph index after the MWP, suggesting a very wet climatic regime with dense undergrowth well suited to cottontails (McKim 2001). Finally, the percentage of nonutilitarian artifacts declined considerably, suggesting that trade was no longer critical for assuring food supplies (Klink 2001c).

### **3.2.5 Protohistoric Period (ca. 410–180 B.P.)**

The productive conditions of the Little Ice Age continued throughout the Protohistoric period. Generally speaking, sedentism intensified during the Protohistoric period, with small, but apparently fully sedentary villages forming. Increased hunting efficiency (through use of the bow and arrow) and widespread exploitation of acorns and other hard nuts and berries (indicated by the renewed abundance of mortars and pestles) provided reliable and storable food resources. This, in turn, promoted greater sedentism. Related to this increase in resource utilization and sedentism are sites with deeper middens, suggesting central-based wandering or permanent habitation. These would have been the villages, or rancherias, noted by the early nonnative explorers (True 1966, 1970).

The most striking change in material culture during this time is the local manufacture of ceramic vessels and ceramic smoking pipes. Although pottery was known in the Colorado Desert as long ago as 800 B.P., ceramic technology in the Project region appears to date to approximately 350 B.P. Additionally, abundant amounts of lithic raw material from Obsidian Butte were imported into the region. Cottonwood Triangular points were supplemented by Desert Side-Notched points. Late in this period, some European trade goods (i.e., glass trade beads) were added to the previous cultural assemblages (Meighan 1954).

## **3.3 ETHNOGRAPHIC SETTING**

Archival and published reports suggest the Project area is situated where the traditional use territories of the Serrano, Cahuilla, Luiseño, and Gabrielino overlap, just south of the present City of San Bernardino. All of these cultural groups spoke languages belonging to the Takic branch of the Shoshonean family, a part of the larger Uto-Aztecan language stock (Bean 1978:576; Geiger and Meighan 1976:19). In the following sections, specific aspects of Serrano, Cahuilla, Luiseño, and Gabrielino ethnography and ethnohistory are explored. This information has been summarized

from Bean and Vane (2001) and McCawley (1996); portions have been adapted from Horne and McDougall (2003).

### **3.3.1 Social Structure**

Prior to the Mission period (i.e., prior to 1769), the Serrano, Cahuilla, and Luiseño, had nonpolitical, nonterritorial patrimoieties that governed marriage patterns as well as patrilineal clans and lineages. The words for these moieties mean “Coyote” and “Wildcat.” These cultural groups had political-ritual-corporate units (clans) composed of three to 10 lineages, distinctly different, named, claiming a common genitor, with one lineage recognized as the founding lineage (Bean 1978:580; Bean and Vane 2004:13). Clans owned a large territory in which each lineage owned a village site and specific resource areas. Clan lineages cooperated in large communal subsistence activities (e.g., animal drives and hunts, controlled burning) and in performing rituals. Founding lineages often owned the office of ceremonial leader, the ceremonial house, and a ceremonial bundle (Bean and Vane 2001:V.A-2-5).

The Gabrielino had a more sophisticated political social structure. They, too, had a system of patrilineal lineages. Each lineage belonged to one of two “Coyote” or “Wildcat” moieties (Harrington 1942:32). Gabrielino lineages were capable of being split and reorganized into segmentary lineages, which served as mechanism for territorial expansion. Hunting and gathering territories were owned by the lineage; lineage membership gave individual families use rights. Unlike their Serrano, Cahuilla, and Luiseño neighbors, the Gabrielino had a hierarchically ordered social class of elite, middle class, and commoners. Class membership played a major role in determining individual lifestyles, as it depended upon both ancestry and wealth (Bean and Smith 1978:543).

### **3.3.2 Subsistence and Domestic Resources**

The Serrano, Cahuilla, Luiseño, and Gabrielino were, for the most part, hunting, collecting, and harvesting peoples. The Serrano, Cahuilla, and Luiseño clans were apt to traditionally use areas in the valleys, foothills, and mountains, providing them with the resources of many different ecological niches. Individual lineages or families traditionally utilized specific resource areas within the clan territory.

Fish, birds, insects, and large and small mammals were available in Sycamore Canyon. Mountain sheep (*Ovis canadensis*), deer, and antelope were some of the large mammals hunted. Now extinct in this part of California, antelope were once numerous in the area (Harrington n.d.). As well, mountain lion, black bear, grizzly bear, deer, and wild boar were hunted. Similarly, the Gabrielino lineage traditional use of land in valley, foothill, mountain, coastal, and estuary areas also offered a diverse array of food and other natural resources.

To gather food resources and to prepare them for eating, the Serrano, Cahuilla, Luiseño, and Gabrielino had an extensive inventory of equipment. The throwing stick and bow and arrow were the most important hunting tools for killing game, but snares, traps, slings, decoys, disguises, and hunting blinds were also part of the hunting technology. For fishing, nets, traps, spears, hooks and lines, and fish poisons were used. Many inland villages had access to creeks and rivers and to

ancient Lake Cahuilla until its last desiccation about 400 to 450 years ago, and during subsequent brief stands during the mid-1800s.

As in most of California, acorns were a major staple, but the roots, leaves, seeds, and fruit of many other plants were also used. Gathering required few tools: poles for shaking down pine nuts and acorns, cactus pickers, chia hooks, seed beaters, digging sticks and weights for digging sticks, and pry bars. Material culture items associated with transportation were mainly used to move food and included burden baskets, carrying nets, game bags, and saddle pads.

Food was usually stored in large storage baskets. Pottery ollas and baskets treated with asphaltum were also used to store and carry water and seeds. Wood, clay, and steatite were used to make jars, bowls, and trays. Skin and woven grass were used to make bags. Food processing required hammers and anvils for cracking nuts; mortars and pestles for grinding acorns and other hard nuts and berries; manos, metates, and bedrock milling slicks for grinding grass grains, seeds, and berries; winnowing shells and baskets; strainers; leaching baskets and bowls; knives made of stone, bone, wood, and carrizo cane; bone saws; and drying racks made of wooden poles to dry fish.

Leaves and some greens were pulverized in bedrock mortars and sometimes added to acorn mush (Anderson 2005). Prolific bedrock milling slicks are known for this part of Riverside County and archaeological evidence indicates Sycamore Canyon was used extensively through time for food processing, if not also for other traditional purposes.

“Grinding slicks, which are smooth, shiny surfaces on flat, stationary boulders... Rock outcrops on ranchlands in Riverside County and many other areas throughout California are riddled with these polished, shiny surfaces. Archaeologists tell us that they are ancient kitchen counters and that the constant rubbing back and forth of a grindstone across plant foods to break the chaff smoothed these rock surfaces over time” (Anderson 2005:260).

After grinding or pounding, the resulting flour was often sifted in a basket. Basket mortars, with asphaltum used to attach an open-bottomed basket to a mortar, were also important for food processing. Food was served in wooden and gourd dishes and cups and in basket bowls that were sometimes tarred. Wood, shell, and horn were used for spoons.

In addition to gathering and hunting, the mainland Gabrielino were involved in an extensive trade network that extended as far east as the Colorado River and as far west as San Nicolas Island (Davis 1961). With the Serrano, the Gabrielino traded shell beads, fish, sea otter skins, and soapstone vessels for deerskin and seeds (Heizer 1968; Strong 1929:95–96); the Cahuilla received beads, soapstone, and asphaltum from the Gabrielino in exchange for food, furs, hides, obsidian, and salt (Bean and Saubel 1972:133). In addition to forging alliances with neighboring groups, trade and exchange was also a means of offsetting food shortages during winter months and in times of resource stress (e.g., drought).

### **3.3.3 Shelter and Community Structures**

In prehistoric times, Serrano, Cahuilla, Luiseño, and Gabrielino shelters are believed to have been dome shaped; during post-contact times they tended to be rectangular (Harrington 1942:10). The entryway into the shelter was usually covered with hides or woven mats, and a smoke hole with a

removable cover was present at the apex of the dome for smoke to escape. Serrano, Cahuilla, and Luiseño shelters were made of brush, although some were wattled and plastered with adobe mud; Gabrielino shelters were made of reed. Most of the Serrano, Cahuilla, and Luiseño domestic activities were performed outside the shelters within the shade of large, expansive ramadas; windbreaks, made of vertical poles covered with rush mats, provided open-air food preparation and cooking areas at Gabrielino settlements.

Within Serrano, Cahuilla, and Luiseño villages, the chief's house was the largest and was usually next to the ceremonial house. Each village also had a men's sweat house and several granaries (Bean 1978:578; Bean and Vane 2001, 2004:7–13). At a typical Gabrielino settlement, a yovaar, an unroofed religious structure, was built in the center and surrounded first by the houses of the chief and elite members of society and then by the smaller houses of other community members; poor members occupied simple lean-to style structures along the outskirts of the settlement (Boscana 1933). Sweathuts and granaries were also present in Gabrielino settlements.

### **3.3.4 Religion, World View, and the Sacred**

The Serrano, Cahuilla, Luiseño, and Gabrielino, like other California Indians, understand the universe in terms of power, and power, believed to be sentient and to have will, was assumed to be the principal causative agent for all phenomena. Unusual natural phenomena are viewed as especially sacred, being the repositories of concentrations of power. Mountain tops, and especially particular mountain tops, are held sacred, as are unusual rock formations, springs, and streams. Rock art sites are sacred, having been the sites of ceremonies. Burial and cremation sites are also sacred, as are many other places of residual power. In addition, various birds, but especially eagles, condors, hawks, and other birds of prey and their symbolic representations, are revered as sacred beings of great power and were sometimes ritually killed and mourned in mortuary ceremonies similar to those for human elites. For this reason, bird cremation sites are sacred.

Because of these strong beliefs, rituals were a constant factor in the life of every Native American individual. Some rituals were scheduled and routine (e.g., birth, puberty, death, mourning, and the eagle ritual and first fruits rites), whereas others were sporadic and situationally performed (e.g., deer ceremony, bird dance, enemy songs, and the rain ritual) (Bean and Vane 2001:VII.A-3-10).

## **3.4 HISTORICAL SETTING**

The history of the Project area provides a context for understanding local settlement from mission lands to the development of the modern urban landscape. It is the basis for the identification of the historic property types constructed during this settlement, and the evaluation of their significance as historical resources.

### **3.4.1 California History**

Exploration of the California coast in the sixteenth and seventeenth centuries was the basis for the Spanish claim to the region. In the eighteenth century, Spain recognized that to strengthen its claim, it would have to settle Alta California to preclude encroachment by the Russians and British. Therefore, in the latter half of the eighteenth century Spain and the Franciscan Order of the Catholic Church founded a series of presidios, or military camps, and missions along the California coast, beginning at San Diego in 1769. These developments were the beginning of the era of Native

American subjugation, displacement, acculturation, and annihilation throughout the West. For instance, the Spanish actively displaced the Serranos, Cahuillas, Luiseños, and Gabrielinos from their traditional use areas.

In 1821, Mexico opened the ports of San Diego and Monterey to foreign trade (Crouch et al. 1982:200). American ships docked at California ports to purchase tallow and hides, which were known as California banknotes. Americans also settled in California, some of them becoming citizens and owners of large ranchos.

Conflicts between the Californios and the central government in Mexico City led to a series of uprisings culminating in the Bear Flag Revolt of June 1846. However, Mexican control of California had effectively ended the year before when the Californios expelled Manuel Micheltorena, the last Mexican governor.

With the signing of the Treaty of Guadalupe-Hidalgo on February 2, 1848, California formally became an American territory, and two years later, on 9 September 1850, California became the thirty-first state in the Union. Between those two years came a large influx of Americans seeking their fortunes; the catalyst for this influx was James Marshall's 1848 discovery of gold at Sutter's Mill. The population and wealth in the early statehood years were concentrated in the northern part of the state. Ranching was the main occupation in the southern counties; the flood and drought of the 1860s brought that era to a close, and the completion of the transcontinental railroad in 1869 opened California to agricultural settlement.

Southern California was promoted as an ideal agricultural area, with fertile soil and a mild climate. Books on California painted beautiful pictures that appealed to both Americans and Europeans. There were three land booms tied to railroad construction: (1) after the transcontinental railroad was completed, enabling easy travel to California; (2) late 1870s after the Southern Pacific was completed; and, (3) 1886–1888, when the Santa Fe transcontinental line was completed. Competition between the lines incited a rate war, and both tourists and potential settlers took advantage of the low fares to come to California (Lech 2004:222).

### **3.4.2 History of the City of Riverside**

The Project area lies within the eastern limits of the City of Riverside. The development of Riverside, California and the growth of the citrus industry go hand in hand. Riverside was founded as a town in San Bernardino County in the 1870s and incorporated in 1883. It was located on the south bank of the Santa Ana River, its source of water. Advertised as a "Colony for California" the area was settled as an agricultural area by immigrants coming to the state to partake of the wonders listed in promotional literature. Riverside became a center of the citrus industry, and famous for its Washington navel orange. Competition with the neighboring city of San Bernardino resulted in the formation of the County of Riverside in 1893, with Riverside the seat of the newly established county.

A historical background for the history of the citrus industry in the City of Riverside is taken from Brown and Boyd (1922). Orange trees were first planted in Riverside in 1871, but the citrus industry for which Riverside is famous began three years later. In 1874, Eliza Tibbets received three Brazilian navel orange trees from a personal friend, William Saunders, who was a

horticulturist at the USDA. The trees came from Bahia, Brazil. The Bahia Orange did not do well in Florida, but its success in southern California was phenomenal.

Tibbets planted the trees and one of them died after it was trampled by a cow during the first year. After that unfortunate incident, the other two trees were transplanted to land owned by Sam McCoy. The trees were later transplanted again; one at the Mission Inn property in 1903 by President Theodore Roosevelt, (this tree died in 1922); the other was placed at the intersection of Magnolia and Arlington avenues. Eliza Tibbets was honored with a stone marker placed with the tree. That tree is reported to still stand to this day inside a protective fence.

The trees thrived in the southern California climate and the navel orange industry grew rapidly. Citrus became the primary agricultural product of the Riverside colony. Many growers purchased bud wood and then grafted the cuttings to root stock. Within a few years, the successful cultivation of many thousands of the newly discovered Brazilian navel orange led to a California Gold Rush of a different kind: the establishment of the citrus industry, which is commemorated in the landscapes and exhibits of the California Citrus State Historic Park in Riverside and the restored packing houses in Downtown Riverside's Marketplace district.

To cultivate large orchards, growers required the construction of major water conveyance systems. Beginning in the 1870s with the construction of the Southern California Colony Association's "Upper Canal" (established 1870) and the "Lower Canal" (established circa 1874), water arrived into the Riverside area from the Santa Ana River (HAER 1991:2-6). By 1882, there were more than half a million citrus trees in California, almost half of which were in Riverside.

As orchards began to dominate Riverside area agriculture, the need for larger water transport systems grew proportionately. To help meet the demand, the Gage Canal was built, tapping the waters of the Santa Ana River and bringing much needed irrigation into the region. Chinese laborers, credited with building the railroad grade for the California Southern Railway at Box Springs Canyon (approximately 2.5 miles north of the Project) and Temecula Canyon, hand dug the canal, along with an expansive network of irrigation ditches, helping Riverside become famous for its citrus industry. Many towns had Chinese neighborhoods or "Chinatowns" and Riverside was no exception (Dillon 1995:41).

By 1886, water flowed from the head gates at Tequesquite Arroyo through the upper, 12-mile-long portion of the canal. By 1889, water flowed through the entire 20.13-mile-long canal. Lands could now be irrigated with ease from the Santa Ana River 20 miles away to the district of Arlington Heights in the City of Riverside. By the turn of the twentieth century, a significant cultural landscape evolved that consisted of more than 12,000 acres of orange groves (the largest situated in Arlington Heights [approximately 6 miles west of the Project] and the district of Highgrove [approximately 7 miles north of the Project]).

To facilitate the transportation of citrus crops from the grower to the consumer, the railroad industry routed several main and branch lines straight into the heart of the region. The Atchison Topeka & Santa Fe, the Union Pacific, and the Southern Pacific railroads laid track in and around Riverside and built or leased large networks of packing houses, icing plants, and storage. The development of refrigerated railroad cars and innovative irrigation systems established Riverside as the state's wealthiest city per capita by 1895.

By 1940, the Riverside citrus industry had evolved into a major economic force. The 1943 U.S. Army map reveals that the Riverside/Arlington area was still a major citrus producer in the 1940s, with thousands of acres of citrus trees planted in the valley filling large tracts of land along Victoria Avenue, Dufferin Avenue, and Indiana Avenue. The post-World War II era ushered in a boom in commercial, industrial, and residential development in and near the region's urban centers, followed by the construction of several freeways linking urban areas to one another. U.S. Highway 395, which was once a two-lane road through Riverside, was expanded during the 1960s and became Interstate 15E by 1972. Now signed as Interstate 215 through the Perris Valley, this route has expanded to a four-lane divided highway. The late 1990s and early 2000s marked another boom period in the growth of the region, in which more residential and commercial development rapidly consumed agricultural lands.



## 4

### CULTURAL RESOURCE LITERATURE AND RECORDS SEARCH

On September 11, 2018, prior to the field survey of the APE, AEC engaged the EIC, housed at the University of California, Riverside, to complete an archaeological literature and records search for an area encompassing a 1-mile-wide radius of the APE (Study Area). The two-fold objective of this records search was to determine (1) whether any previous cultural resource investigations have been completed and (2) whether any prehistoric or historical cultural resources are previously recorded within the Study Area.

The records search indicated that no fewer than 21 cultural resource studies have been conducted previously within the Study Area. Five of these (RI-1537, RI-1648, RI-1721, RI-2497, and RI-3693) involved portions of the APE (Table 4-1). One hundred percent of the APE has been surveyed previously as a result of these studies. A copy of the EIC records search results is provided in Appendix A.

**Table 4-1**  
**Previous Cultural Resource Studies in the Study Area**

Author(s)	Date	EIC		Title
		Reference #		
Drover, Christopher	1985	RI-00016		Environmental Impact Report: An Archaeological Assessment of the Canyon Springs, Trunk Sewer, Edgemont to East Riverside, Riverside County, California.
Lerch, Michael K.	1982	RI-01525		Cultural Resources Assessment of the Kaplan Pit, Upper Sycamore Canyon Area, City of Riverside, California
Swenson, James D.	1982	RI-01537*		An Archaeological Assessment of the Box Springs Industrial Park Specific Plan Study Area, Riverside County, California
Swenson, James D.	1982	RI-01538		An Archaeological Assessment of Sycamore Canyon Specific Plan Study Area, Riverside County, California
Archaeological Research, Inc.	1974	RI-01648*		Archaeological Report – Project W.O. 5-3764, Box Springs Feeder
Bouscaren, Stephen	1983	RI-01717		An Archaeological Assessment of 637 acres of Land West of Edgemont in Western Riverside County, California
Lerch, Michael K.	1983	RI-01721*		Cultural Resources Assessment of the Northern, Western, and Southern Extensions of the Sycamore Canyon Specific Plan, City of Riverside, California
Arkush, Brook S.	1989	RI-02497*		Cultural Resources Assessment of 160 acres of Land Surrounding the Henry J. Mills Filtration Plant Located in the City of Riverside, Riverside County, California
Padon, Beth, and Scott Crownover	1990	RI-02753		Cultural Resources Assessment, Southern California Gas Company Proposed Line 5000 – Sycamore Canyon Segment, Riverside County, California
Tetra Tech, Inc.	1990	RI-03243		Cultural Resources Investigations for a Proposed Realignment of Facilities from Los Angeles Air Force Base to March Air Force Base, Riverside County, California.

**Table 4-1 (continued)**  
**Previous Cultural Resource Studies in the Study Area**

Author(s)	EIC		Title
	Date	Reference #	
McDonald, Meg and Barb Giacomini	1996	RI-03510	An Intensive Survey of Approximately 2,500 acres of March Air Force Base, Riverside County, California
Foster, John M., J. Schmidt, C. Weber, G. Romani, and R. Greenwood	1991	RI-03693*	Cultural Resources Investigation: Inland Feeder Project, Metropolitan Water District of Southern California.
Dahdul, Mariam, Daniel Ballester, Bai Tang, and Michael Hogan	2003	RI-5746	Historical/Archaeological Resources Survey Report: Redesigned Water Quality Basin Site Street Improvements Project, Cottonwood Avenue, and Sycamore Canyon Boulevard, City of Riverside, Riverside County, California
Love, Bruce, Bai Tang, and Mariam Dahdul	2002	RI-05895	Historical/Archaeological Resources Survey Report, Cottonwood Avenue and Sycamore Canyon Boulevard Street Improvement Project and water Quality Basin Project Site, City of Riverside, Riverside County, California
Hogan, Michael, Bai Tang, Josh Smallwood, and Daniel Ballester	2003	RI-05995	Historical/Archaeological Resources Survey Report, Water Quality Basin “B” Project, in the City of Riverside
Brandman, Michael	2006	RI-07241	Phase I Archaeological Assessment, Phase II Archaeological Assessment (Testing), and Paleontological Records Review Kaliber 52 Project, Riverside County, California
Dice, Michael	2006	RI-07398	Phase I Cultural Resources Assessment and Paleontological Records Review APN 263-240-039 Riverside, Riverside County, California
Tang, Bai “Tom”; Michael Hogan	2007	RI-07552	Historical/Archaeological Resources Survey Report, Sycamore V and Sycamore 6 & 7 Projects, City of Riverside, Riverside County, California
Vanessa Mirro, Dennis McDougall, Mike Mirro, and Joan George	2009	RI-08399	Cultural Resources Report for the Box Springs Feeder Repair Project, Riverside County, California.
Clark, Tiffany	2016	RI-10017	Cultural Resources Assessment of the Sycamore Canyon Business Park Buildings 1&2, Riverside County, California
Tetra Tech, Inc.	1990	RI-10142	Draft Report Cultural Resources Investigations for A Proposed Realignment of Facilities from Los Angeles Air Force Base to March Air Force Base, Riverside County, California

\*Included portions of the APE

These previous studies resulted in the identification and documentation of a total of 179 cultural resources in the Study Area—169 prehistoric archaeological sites, 4 historical archaeological sites, 4 isolated prehistoric artifacts, 1 site with both prehistoric and historic artifacts, and 1 built-environment resource (railroad grade) (Table 4-2). All of the prehistoric archaeological resources documented in the Study Area are bedrock milling sites (some with ground stone, such as manos, and other lithics), including four within the APE.

**Table 4-2**  
**Cultural Resources in the Study Area**

<b>Primary</b>	<b>Trinomial</b>	<b>Description</b>	<b>Within APE</b>	<b>Adjacent to APE</b>	<b>Outside of APE</b>
Prehistoric Archaeological Sites					
33-000998	CA-RIV-998	Bedrock milling site			X
33-001016	CA-RIV-1016	Bedrock milling site			X
33-001017	CA-RIV-1017	Bedrock milling site			X
33-002426	CA-RIV-2426	Bedrock milling site			X
33-002427	CA-RIV-2427	Bedrock milling site			X
33-002428	CA-RIV-2428	Bedrock milling site and one mano fragment			X
33-002429	CA-RIV-2429	Bedrock milling site			X
33-002431	CA-RIV-2431	Bedrock milling site			X
33-002432	CA-RIV-2432	Bedrock milling site			X
33-002433	CA-RIV-2433	Bedrock milling site			X
33-002434	CA-RIV-2434	Bedrock milling site			X
33-002435	CA-RIV-2435	Bedrock milling site			X
33-002436	CA-RIV-2436	Bedrock milling site			X
33-002437	CA-RIV-2437	Bedrock milling site			X
33-002438	CA-RIV-2438	Bedrock milling site			X
33-002439	CA-RIV-2439	Bedrock milling site			X
33-002440	CA-RIV-2440	Bedrock milling site			X
33-002441	CA-RIV-2441	Bedrock milling site			X
33-002442	CA-RIV-2442	Bedrock milling site			X
33-002443	CA-RIV-2443	Bedrock milling site			X
33-002444	CA-RIV-2444	Bedrock milling site			X
33-002451	CA-RIV-2451	Bedrock milling site			X
33-002452	CA-RIV-2452	Bedrock milling site			X
33-002453	CA-RIV-2453	Bedrock milling site			X
33-002454	CA-RIV-2454	Bedrock milling site			X
33-002459	CA-RIV-2459	Bedrock milling site and one mano			X
33-002460	CA-RIV-2460	Bedrock milling site			X
33-002461	CA-RIV-2461	Bedrock milling site			X
33-002462	CA-RIV-2462	Bedrock milling site			X
33-002463	CA-RIV-2463	Bedrock milling site			X
33-002464	CA-RIV-2464	Bedrock milling site			X
33-002465	CA-RIV-2465	Bedrock milling site			X
33-002466	CA-RIV-2466	Bedrock milling site			X
33-002467	CA-RIV-2467	Bedrock milling site			X
33-002468	CA-RIV-2468	Bedrock milling site			X
33-002469	CA-RIV-2469	Bedrock milling site			X
33-002470	CA-RIV-2470	Bedrock milling site			X

**Table 4-2**  
**Cultural Resources in the Study Area**

<b>Primary</b>	<b>Trinomial</b>	<b>Description</b>	<b>Within APE</b>	<b>Adjacent to APE</b>	<b>Outside of APE</b>
33-002471	CA-RIV-2471	Bedrock milling site			X
33-002472	CA-RIV-2472	Bedrock milling site			X
33-002473	CA-RIV-2473	Bedrock milling site			X
33-002474	CA-RIV-2474	Bedrock milling site			X
33-002475	CA-RIV-2475	Bedrock milling site			X
33-002476	CA-RIV-2476	Bedrock milling site			X
33-002477	CA-RIV-2477	Bedrock milling site			X
33-002478	CA-RIV-2478	Bedrock milling site			X
33-002479	CA-RIV-2479	Bedrock milling site			X
33-002480	CA-RIV-2480	Bedrock milling site			X
33-002481	CA-RIV-2481	Bedrock milling site			X
33-002482	CA-RIV-2482	Bedrock milling site			X
33-002483	CA-RIV-2483	Bedrock milling site			X
33-002484	CA-RIV-2484	Bedrock milling site			X
33-002485	CA-RIV-2485	Bedrock milling site		X	
33-002486	CA-RIV-2486	Bedrock milling site	X		
33-002487	CA-RIV-2487	Bedrock milling site	X		
33-002488	CA-RIV-2488	Bedrock milling site	X		
33-002489	CA-RIV-2489	Bedrock milling site	X		
33-002490	CA-RIV-2490	Bedrock milling site		X	
33-002491	CA-RIV-2491	Bedrock milling site			X
33-002492	CA-RIV-2492	Bedrock milling site			X
33-002493	CA-RIV-2493	Bedrock milling site			X
33-002494	CA-RIV-2494	Bedrock milling site			X
33-002495	CA-RIV-2495	Bedrock milling site			X
33-002496	CA-RIV-2496	Bedrock milling site			X
33-002497	CA-RIV-2497	Bedrock milling site			X
33-002498	CA-RIV-2498	Bedrock milling site		X	
33-002499	CA-RIV-2499	Bedrock milling site			X
33-002500	CA-RIV-2500	Bedrock milling site			X
33-002501	CA-RIV-2501	Bedrock milling site			X
33-002502	CA-RIV-2502	Bedrock milling site			X
33-002503	CA-RIV-2503	Bedrock milling site			X
33-002504	CA-RIV-2504	Bedrock milling site			X
33-002505	CA-RIV-2505	Bedrock milling site			X
33-002506	CA-RIV-2506	Bedrock milling site			X
33-002507	CA-RIV-2507	Bedrock milling site			X
33-002508	CA-RIV-2508	Bedrock milling site			X
33-002509	CA-RIV-2509	Bedrock milling site			X
33-002510	CA-RIV-2510	Bedrock milling site			X
33-002511	CA-RIV-2511	Bedrock milling site			X

**Table 4-2**  
**Cultural Resources in the Study Area**

<b>Primary</b>	<b>Trinomial</b>	<b>Description</b>	<b>Within APE</b>	<b>Adjacent to APE</b>	<b>Outside of APE</b>
33-002512	CA-RIV-2512	Bedrock milling site			X
33-002513	CA-RIV-2513	Bedrock milling site			X
33-002514	CA-RIV-2514	Bedrock milling site			X
33-002515	CA-RIV-2515	Bedrock milling site			X
33-002516	CA-RIV-2516	Bedrock milling site			X
33-002517	CA-RIV-2517	Bedrock milling site			X
33-002518	CA-RIV-2518	Bedrock milling site			X
33-002519	CA-RIV-2519	Bedrock milling site			X
33-002520	CA-RIV-2520	Bedrock milling site			X
33-002521	CA-RIV-2521	Bedrock milling site			X
33-002522	CA-RIV-2522	Bedrock milling site			X
33-002523	CA-RIV-2523	Bedrock milling site			X
33-002524	CA-RIV-2524	Bedrock milling site			X
33-002525	CA-RIV-2525	Bedrock milling site			X
33-002526	CA-RIV-2526	Bedrock milling site			X
33-002527	CA-RIV-2527	Bedrock milling site			X
33-002528	CA-RIV-2528	Bedrock milling site			X
33-002547	CA-RIV-2547	Bedrock milling site			X
33-002548	CA-RIV-2548	Bedrock milling site			X
33-002549	CA-RIV-2549	Bedrock milling site			X
33-002550	CA-RIV-2550	Bedrock milling site			X
33-002666	CA-RIV-2666	Bedrock milling site			X
33-002667	CA-RIV-2667	Bedrock milling site			X
33-002685	CA-RIV-2685	Bedrock milling site			X
33-002686	CA-RIV-2686	Bedrock milling site			X
33-002687	CA-RIV-2687	Bedrock milling site			X
33-002688	CA-RIV-2688	Bedrock milling site			X
33-002689	CA-RIV-2689	Bedrock milling site			X
33-002690	CA-RIV-2690	Bedrock milling site			X
33-002691	CA-RIV-2691	Bedrock milling site			X
33-002692	CA-RIV-2692	Bedrock milling site			X
33-002701	CA-RIV-2701	Bedrock milling site			X
33-002702	CA-RIV-2702	Bedrock milling site			X
33-002703	CA-RIV-2703	Bedrock milling site			X
33-002704	CA-RIV-2704	Bedrock milling site			X
33-002705	CA-RIV-2705	Bedrock milling site			X
33-002706	CA-RIV-2706	Bedrock milling site			X
33-002707	CA-RIV-2707	Bedrock milling site			X
33-002708	CA-RIV-2708	Bedrock milling site			X
33-002709	CA-RIV-2709	Bedrock milling site			X
33-002710	CA-RIV-2710	Bedrock milling site			X

**Table 4-2**  
**Cultural Resources in the Study Area**

<b>Primary</b>	<b>Trinomial</b>	<b>Description</b>	<b>Within APE</b>	<b>Adjacent to APE</b>	<b>Outside of APE</b>
33-002712	CA-RIV-2712	Bedrock milling site			X
33-002714	CA-RIV-2714	Bedrock milling site			X
33-002715	CA-RIV-2715	Bedrock milling site			X
33-002716	CA-RIV-2716	Bedrock milling site with associated ground stone and other lithics			X
33-002717	CA-RIV-2717	Bedrock milling site			X
33-002718	CA-RIV-2718	Bedrock milling site			X
33-002719	CA-RIV-2719	Bedrock milling site			X
33-002720	CA-RIV-2720	Bedrock milling site			X
33-002747	CA-RIV-2747	Bedrock milling site with associated ground stone and other lithics			X
33-003695	CA-RIV-3695	Bedrock milling site			X
33-003696	CA-RIV-3696	Bedrock milling site			X
33-003697	CA-RIV-3697	Bedrock milling site			X
33-003698	CA-RIV-3698	Bedrock milling site			X
33-003699	CA-RIV-3699	Bedrock milling site			X
33-003700	CA-RIV-3700	Bedrock milling site			X
33-003780	CA-RIV-3780	Bedrock milling site			X
33-003781	CA-RIV-3781	Bedrock milling site			X
33-003782	CA-RIV-3782	Bedrock milling site			X
33-003783	CA-RIV-3783	Bedrock milling site			X
33-003784	CA-RIV-3784	Bedrock milling site			X
33-004067	CA-RIV-4067	Bedrock milling site			X
33-004068	CA-RIV-4068	Bedrock milling site			X
33-004069	CA-RIV-4069	Bedrock milling site			X
33-004868	CA-RIV-4868	Bedrock milling site			X
33-005420	CA-RIV-5420	Bedrock milling site			X
33-005421	CA-RIV-5421	Bedrock milling site			X
33-005422	CA-RIV-5422	Bedrock milling site			X
33-005423	CA-RIV-5423	Bedrock milling site			X
33-005424	CA-RIV-5424	Bedrock milling site			X
33-005425	CA-RIV-5425	Bedrock milling site			X
33-005426	CA-RIV-5426	Bedrock milling site			X
33-005427	CA-RIV-5427	Bedrock milling site			X
33-005429	CA-RIV-5429	Bedrock milling site			X
33-005433	CA-RIV-5433	Bedrock milling site			X
33-005450	CA-RIV-5450	Bedrock milling site			X
33-005451	CA-RIV-5451	Bedrock milling site			X
33-005452	CA-RIV-5452	Bedrock milling site			X
33-005457	CA-RIV-5457	Bedrock milling site			X
33-007722	CA-RIV-5811	Bedrock milling site			X

**Table 4-2  
Cultural Resources in the Study Area**

<b>Primary</b>	<b>Trinomial</b>	<b>Description</b>	<b>Within APE</b>	<b>Adjacent to APE</b>	<b>Outside of APE</b>
33-007745	CA-RIV-5815	Bedrock milling site			X
33-007746	CA-RIV-5816	Bedrock milling site			X
33-007747	CA-RIV-5817	Bedrock milling site			X
33-007748	CA-RIV-5818	Bedrock milling site			X
33-007749	CA-RIV-5819	Bedrock milling site			X
33-011502	CA-RIV-6856	Bedrock milling site			X
33-015323	CA-RIV-8091	Bedrock milling site			X
33-015324	CA-RIV-8092	Bedrock milling site			X
33-015325	CA-RIV-8093	Bedrock milling site			X
33-017887	CA-RIV-9435	Bedrock milling site			X
33-024837	CA-RIV-12312	Bedrock milling site			X
<b>Isolated Prehistoric Artifacts</b>					
33-015656		Quartzite flake			X
33-015657		Granitic bifacial mano			X
33-012662		Calcedony flaked tool			X
33-018671		Milling feature (isolated slick)			X
<b>Historic Archaeological Sites</b>					
33-015326		Domestic refuse			X
33-018667		1950s–1960s Refuse scatter			X
33-018668		1930s–1940s Refuse scatter			X
33-018669		Refuse scatter			X
<b>Prehistoric and Historic Archaeological Sites</b>					
33-002425	CA-RIV-2425	Bedrock milling site with associated lithic scatter; possible historical adobe structural remnants with refuse scatter			X
<b>Built Environment</b>					
33-024842	CA-RIV-12314	Railroad grade			X

Additional sources consulted by Æ during the archaeological literature and records search include the NRHP, the Office of Historic Preservation (OHP) Archaeological Determinations of Eligibility File, the OHP Directory of Properties in the Historic Property Data File, and the City’s Historic Landmark List. No historic properties or landmarks are recorded or listed within, or immediately adjacent to, the APE. The four archaeological sites were all originally recorded by Daniel McCarthy of the Archaeological Research Unit, University of California, Riverside. All four sites are located in the western extension of the APE. To date, subsurface investigations have not been conducted at any of the sites, and no CRHR or NRHP recommendations have been made. Descriptive details are presented below.

#### **4.1 CA-RIV-2486 (33-002486)**

At the time of the original recordation, CA-RIV-2486 included two granitic boulders with seven grinding slicks (McCarthy 1982a). More than two and a half decades later, Beth Padon and Douglas McIntosh of Discovery Works, Inc. revisited the site during the archaeological site relocation survey for the City's Burn Training Project and recorded a total of eight slicks on three granitic boulders (Padon and McIntosh 2008). The site on top of a low ridge and soils consist of decomposing granite and fine-to-coarse-grained silty sand. Vegetation observed included non-native grasses, buckwheat, and white sage (Padon and McIntosh 2008).

#### **4.2 CA-RIV-2487 (33-002487)**

Located 24 meters southwest of CA-RIV-2486, a single granitic boulder with five grinding slicks comprised CA-RIV-2487 at the time of recordation (McCarthy 1982b). The site is on a bench above an intermittent stream and soils consists of bedrock granite. Vegetation observed included buckwheat and black sage (McCarthy 1982b). This site had not been revisited by professional archaeologists prior to Æ's present investigation.

#### **4.3 CA-RIV-2488 (33-002488)**

CA-RIV-2488 was recorded approximately 48 meters northeast of CA-RIV-2487 as four granitic boulders with 17 grinding slicks (McCarthy 1982c). The site is on both sides of an intermittent drainage and soils consists of bedrock granite. Vegetation observed included white sage, cholla, buckwheat and willow (McCarthy 1982b). This site had not been revisited by professional archaeologists prior to Æ's present investigation.

#### **4.4 CA-RIV-2489 (33-002489)**

Another bedrock milling feature, CA-RIV-2489 was recorded approximately 59 meters east of CA-RIV-2488 as a single granitic boulder with three grinding slicks at the time of recordation (McCarthy 1982d). The site is next to an intermittent wash and soils consists of bedrock granite. Vegetation observed included willow and buckwheat (McCarthy 1982b). This site had not been revisited by professional archaeologists prior to Æ's present investigation.

#### **4.5 HISTORICAL MAP REVIEW**

Æ consulted the 1901 Elsinore 30-minute USGS topographic quadrangle map, the 1901, 1942 and 1953 Riverside 15-minute USGS topographic quadrangle maps, and the 1953 Riverside East 7.5-minute USGS topographic quadrangle map to assess historical land-use in the Study Area. Several roads were present in the Project vicinity in the early 1900s. Although the 1942 USGS 15-minute topographic quadrangle map indicates some of these roads continued to be in use into the 1940s, none of these roads are within the APE. No other structures, roads, or other features of interest are shown within, or in the vicinity of, the APE on any of the other historical maps.



## 5 NATIVE AMERICAN COMMUNICATIONS

Æ contacted the NAHC on September 4, 2018, for a review of the SLF, to determine if any known Native American cultural properties (e.g., traditional use or gathering areas, places of religious or sacred activity) are present within or adjacent to the APE. The NAHC responded on September 11, stating that the SLF search indicates Native American cultural sites are present within the APE.

Upon review of the Native American contact list and by removing redundancies, Æ narrowed the list to 12 individuals and/or organizations who are traditionally and culturally affiliated to the geographic area where the Project is located. Æ sent a letter describing the Project and asking these individuals and organizations for their input; hard copies were sent via U.S. Mail and electronic copies were sent via email, all on October 2, 2018. A copy of the letter, the list of contacts, and received responses are included in Appendix B. Æ sent a second round of correspondence on October 16, 2018.

Individuals/organizations contacted include:

- Patricia Garcia-Plotkin, Director/Tribal Historic Preservation Officer for the Agua Caliente Band of Cahuilla Indians (ACBCI)
- Amanda Vance, Chairperson of the Augustine Band of Cahuilla Mission Indians
- Doug Welmas, Chairperson of the Cabazon Band of Mission Indians
- Daniel Salgado, Chairperson of the Cahuilla Band of Indians
- Shane Chapparosa, Chairman of the Los Coyotes Band of Cahuilla and Cupeño Indians
- Alicia Benally, Cultural Resource Specialist for the Morongo Band of Mission Indians
- Joseph Hamilton, Chairman of the Ramona Band of Cahuilla
- Steven Estrada, Chairman of the Santa Rosa Band of Cahuilla Indians
- Joseph Ontiveros, Cultural Resource Department for the Soboba Band of Luiseño Indians (Soboba)
- Michael Mirelez, Cultural Resource Coordinator for the Torres-Martinez Desert Cahuilla Indians
- Katherine Saubel Foundation

As of October 16, 2018, four responses had been received:

- BobbyRay Esparza, Cultural Coordinator for the Cahuilla Band of Indians noted the Tribe has concerns with unearthing cultural resources during construction and therefore requests the presence of cultural monitors during all ground-disturbing activities. The Tribe also requests to be notified of all updates and/or changes with the Project moving forward.
- Travis Armstrong, Tribal Historic Preservation Officer for the Morongo Band of Mission Indians (MBMI) noted the Project is within a sensitive area for tribal cultural resources associated with the people of the MBMI. Therefore, the Tribe requests a thorough records search, participation in the pedestrian survey or a copy of the Phase I study as soon as it can be made available, and the presence of a MBMI Tribal Cultural Resource Monitor during all required ground-disturbing activities pertaining to the Project.

- Judy Stapp, Director of Cultural Affairs for the Cabazon Band of Mission Indians noted the Project is located outside of the Tribe's current reservation boundaries. The Tribe has no specific archival information on the site indicating that it may be a sacred/religious site or other site of Native American traditional cultural value within the Project area.
- Steven Estrada, Chairman of the Santa Rosa Band of Cahuilla Indians stated the Tribe will defer further consultation and monitoring for the Project to Soboba.

In addition to Æ's communication with local Native American tribes and individuals, the City initiated formal government-to-government Assembly Bill 52 (AB 52) consultation and the USACE initiated Section 106 consultation with various Native American tribes who have interests in the Project area. Consultation efforts, including tribal feedback, are addressed in the Environmental Impact Report (EIR) prepared for the Project.

## 6 RESEARCH DESIGN

A research design is presented in this chapter to serve as a basis for the evaluation of cultural resources identified within the APE. The research design is intentionally broad in scope and considers an array of research topics germane to the prehistory of interior southern California in general and western Riverside County in particular.

### 6.1 PREHISTORIC RESEARCH THEMES

Research in the region has elucidated the timing, ways, and reasons that past human populations in the area adapted to their ever-changing environment. Among the many interrelated elements of human adaptation are chronology, technology, subsistence, land use, and settlement strategies. These aspects of adaptation can be studied archaeologically and, thus, have been the focus of regional studies (Goldberg et al. 2001). Existing research designs were used to establish the context within which site significance was evaluated and potential Project effects or impacts were assessed. Major prehistoric themes particularly relevant to the cultural resources within the APE include:

- **Chronology** – Does the site contain temporally significant artifacts (e.g., projectile points, ceramics, and beads) or artifacts with chronometric potential (organic material suitable for radiocarbon analysis or obsidian that can provide hydration readings)? When was the site occupied? How do artifacts conform to patterns observed for the temporal components defined in the region?
- **Technology of Tool Manufacture and Use** – Is there evidence to suggest tools were manufactured on site? Do lithic artifacts and technologies reflect expedient manufacture and use or a more curated pattern of technology? What does this tell us about land use and mobility?
- **Settlement Organization and Land Use** – What does the artifact assemblage suggest about the range of activities conducted at the site? Are there artifact types with morphological and stylistic attributes that have specific regional or geographic affinities? Does the assemblage allow for investigations into trade and exchange?
- **Subsistence Behavior** – Are plant or animal remains available at the site to inform on subsistence behavior? Are there indications that certain resource types were preferentially exploited? What does this tell us about the seasonality of site use?

### 6.2 A CULTURAL LANDSCAPE-BASED APPROACH TO BEDROCK MILLING SITES

Recent developments in landscape theory provide a means for archaeologists working in western Riverside County to define, discuss, and interpret cultural landscapes. Landscape refers broadly to

culturally constructed space and the creation of meaningful places. Landscape includes natural-resource distributions and the relationship of human groups to those resources, but it also comprises how natural resources and landmarks are incorporated into the cultural landscape as meaningful places to the people who lived there. For hunter-gatherer groups, this may include burial grounds, rock art sites, a built or modified environment that extends beyond a habitation site, rivers, mountains, or resource-collection areas that are culturally significant, or even habitation or activity sites that bear important cultural meaning.

Cultural landscape approaches have been useful for understanding cultural resources within the context of broader surroundings (Bender 1993; Cosgrove 1984; Fowles 2010; Gamble and Wilken-Robertson 2008; Hirsch and O'Hanlon 1995; Potter 2004; Rossignol and Wandsnider 1992; Tilley 1994; Ucko and Layton 1999). These approaches explicitly acknowledge the importance of both the natural environment—its features and its resources—and constructed places of meaning (the built environment). Within this theoretical construct, places are perceived, experienced, contextualized, and given meaning by people and their actions and these actions are both constrained and enabled by the natural and cultural resources composing the landscape. The cultural landscape is therefore created by human activity and structured by the distribution of resources on the land and the cultural perceptions of human relationships to those resources (Anschuetz et al. 2001; Potter 2004).

While sacred places, revered landforms, and residential sites are the most visible components of cultural landscapes, an equally important element is the activity area or “taskscape,” which comprises places created and modified through repetitious activities that occur on the landscape (Ingold 1993; Perry and Delaney-Rivera 2011:106) and connected physically to other places through a patchwork of trails and relationally by the social and economic meanings associated with the specific task. Each task derives its meaning from its position within an ensemble of tasks, generally by groups working together (Ingold 1993; Robinson 2010). As such, individual tasks or activities represented at or near sites cannot be considered in isolation from the ensemble, an idea that resonates with local Native American views of the landscape (Applied EarthWorks, Inc. 2013).

The taskscape, then, is a socially constructed space of human activity, understood as having spatial boundaries and delimitations for the purposes of analysis. One of the most prominent ensembles of tasks that have been documented in western Riverside County relates to subsistence-based procurement and processing activities. Subsistence-based procurement and processing tasks carried out by prehistoric inhabitants over several millennia left an indelible mark on cultural and modern landscapes and remains an important unit of analysis for archaeological research. Site and non-site locations communicate direct and indirect evidence relating to subsistence-based tasks, which can be extracted from natural resource patches where wild foods were collected, hunting blinds and butchering locations, temporary camps, work camps, or seasonal camps like those associated with the acorn harvest. In areas like western Riverside County where bedrock outcrops are situated near valuable resource patches and permanent water sources, evidence of routine socioeconomic tasks related to subsistence are no more apparent than at bedrock milling sites ranging from isolated bedrock milling features exhibiting a single slick to dense clusters of milling features representing processing stations containing a variety of slicks, basin metates, and sometimes mortars.

In the past, these bedrock milling sites were evaluated in isolation from one another, labeled ubiquitous, redundant, and were well-documented in the archaeological literature. Many sites were thus determined not historically significant for the NRHP or the CRHR and were destroyed during project construction without further consideration. The problem is not specific to bedrock milling sites and was addressed in the *National Register Bulletin: Guidelines for Evaluating and Registering Archaeological Properties*.

Overlooking the significance of small sites may skew our understanding of past lifeways as these sites not only receive less research attention, but are also destroyed without being recorded thoroughly because they are ‘written off’ as ineligible for listing in the National Register. Such losses point up the need to continuously reexamine historic contexts and allow new discoveries to challenge our ideas about the past [Little et al. 2000:21].

In the Sycamore Canyon area, the prevalence of bedrock milling sites suggests these sites may constitute part of a meaningful taskscape within the larger cultural landscape. Delineation of a cultural landscape is beyond the scope of the current study and would require a cooperative effort between the Native Americans and cultural resource managers to determine the level of research needed to properly identify, record, and evaluate such a landscape for the CRHR, NRHP, or local designation. As such, the present study acknowledges the existence and significance of the concept of cultural landscapes and associated taskscapes based on scientific, academic, and tribal knowledge and Native American concerns and recommends that the cultural landscape concept be taken into account in current and future Project planning and decision-making processes.

## FIELD METHODS

### 7.1 SURVEY METHODS

On September 19, 2018, Æ Archaeologists Evan Mills and Andrew Miller completed an intensive pedestrian surface survey for cultural resources in the 48.64-acre APE. The two-fold purpose of the survey was (1) to identify any new cultural resources within the APE and (2) to examine the conditions of previously recorded resources. As noted in Chapter 4, the APE has been previously surveyed for cultural resources multiple times, although none of the previous professional efforts included subsurface archaeological investigations. In addition, all previously recorded prehistoric archaeological resources within the Study Area are bedrock milling sites.

Æ's survey was conducted by the two-person crew walking parallel transects spaced at 20-meter (66-foot) intervals, as the property has been previously surveyed multiple times. All archaeological sites observed during the survey were recorded with a hand-held Trimble GeoX7 Global Positioning System (GPS) unit with sub-meter accuracy. Æ documented all of the sites on DPR 523 recording forms. In addition, all features were photographed, measured, and documented in detail on a Milling Station Record.

All areas likely to possess archaeologically or historically sensitive cultural resources were inspected carefully. Additionally, surveyors investigated any extant topographical features (e.g., bedrock exposures), unusual landforms, contours, soil changes, features (e.g., road cuts, drainages), and other potential cultural site markers within the APE. The Daily Work Record completed each day by Evan Mills documented survey personnel, hours worked, weather, ground surface visibility, vegetation, soils, exposure/slope, topography, natural depositional environments, and cultural resources encountered within the APE.

Æ Archaeologists Evan Mills and Andrew Miller returned to the area on September 20 and 21, 2018, to refine the site documentation in preparation for site testing and evaluation. Portions of the APE in which resources were initially identified were resurveyed at 5-meter transect intervals to delineate site boundaries; those boundaries were followed to the edge of the APE but not beyond. If found, cultural material was mapped with a GPS unit, photographed, measured, and documented on DPR 523 recording forms. During the field inventory, systematic efforts were made to characterize and define the areal extent of each cultural resource. For the purposes of the Project, three or fewer artifacts within 30 meters of each other were recorded as isolated finds. Cultural materials exceeding three artifacts within 30 meters of each other were documented as an archaeological site.

Æ personnel attempted to re-identify the four archaeological sites (CA-RIV-2486, -2487, -2488, and -2489) recorded previously within the APE. During the revisit, the surface manifestations and conditions were assessed for each site. Digital overview photographs were also taken of each site; in addition, digital overview photographs were taken of each activity locus, cultural feature, and temporally or functionally diagnostic artifacts (if found). An updated site record was completed if

the current site record was deemed inadequate or incorrect. No artifacts were collected during survey.

## **7.2 TESTING METHODS**

Shovel probes (SHPs) are employed for subsurface testing to define horizontal and vertical site boundaries and document intrasite variability. Subsurface testing is also necessary to determine the thickness and nature of cultural deposits, if any. By definition, subsurface testing is exploratory.

A total of 28 SHPs, intuitively placed within the sites, was excavated within the APE by Mills and Miller on September 20, 21, 28, and October 1, 2018 (see site sketch maps in Appendix C). SHPs were circular and measured 30 centimeters in diameter. They were manually excavated in arbitrary 20-centimeter levels to depths up to 100 centimeters below the ground surface (bgs) and were terminated at bedrock. Mills and Miller screened all excavated sediments through 1/8-inch hardware mesh. In addition, the team backfilled all SHPs to restore the ground surface to its previous appearance. Mills and Miller examined all rocks observed within the SHPs for any signs of cultural modification (i.e., grinding wear, heat alteration). This was a non-collection study. If artifacts were encountered during the testing investigations, they would be photographed, drawn, described, and reburied in the SHP in which they were found.

## 8 FIELD RESULTS

### 8.1 SURVEY RESULTS

The vegetation in the area consists of black sage, willow, sycamore, buckwheat, and seasonal grasses. Riparian scrub obscured visibility in the drainage areas within the central and southern portion of the APE.

Ground-surface visibility throughout the APE was moderate (approximately 30–60 percent), with the majority of the APE covered in dry bunch grass. Surface sediments were observed to be dark yellowish-brown silt consistent with small- to medium-sized angular to subangular gravels of granite. Bedrock is found at very shallow depths with a number of outcrops noted in the west-central portion of the APE. With the exception of sedimentary materials found within the drainage wash, most of the APE is characterized by poor soil development.

The western portion of the APE is moderately disturbed by recreational trails and vegetation removal activities. In addition, modern refuse, a modern memorial/shrine, and a modern crucifix were observed within the western portion of the APE. The eastern portion of the APE appeared intact with little to no disturbance noted. No artifacts on the ground surface that may be associated with the milling features were encountered by the archaeologists.

Æ's survey of the APE resulted in the identification of three additional bedrock milling sites (CA-RIV-11772, CA-RIV-11770, and CA-RIV-11769). The four previously recorded (CA-RIV-2486, -2487, -2488, and -2489) and three newly identified resources are all distributed across the western extension of the APE. These seven archaeological sites are depicted on Figure 8-1(not available for public review), summarized below, and discussed in detail in the site records included in Appendix C.

#### 8.1.1 CA-RIV-2486 (33-002486)

Æ found CA-RIV-2486 to be a 58 by 35-meter bedrock milling site consisting of two granitic boulder outcrops (Æ Features 1 and 2) with a total of 10 milling slicks (Figure 8-2). The two outcrops are located approximately 30 meters north-south from each other. This current update identified a total of eight milling slicks on Feature 1 (the 6 original slicks and 2 new slicks) and two on Feature 2. The west side of the site is situated flush with the ground surface and the location of milling slicks 6 and 7 appear to have been exposed by rain. The northern boundary of this site may extend outside the northern limit of the APE.

#### 8.1.2 CA-RIV-2487 (33-002487)

Æ documented another three milling slicks, for a total of eight milling slicks, across three granitic boulder outcrops (Æ Features 1–3) approximately 24 meters southwest of the presumed southern boundary of CA-RIV-2486. The three rock outcrops are approximately 19 and 22 meters apart from north to south. Five milling slicks on Feature 1, two of the milling slicks are on Feature 2, and one of the milling slicks is on Feature 3 at this 75 by 31-meter bedrock milling site (Figure 8-3).





**Figure 8-2** CA-RIV-2486, Feature 1 overview (view to the southeast).



**Figure 8-3** CA-RIV-2487, Feature 1 overview (view to the southeast).

### 8.1.3 CA-RIV-2488 (33-002488)

CA-RIV-2488 is a 73 by 63-meter bedrock milling site consisting of four granitic boulder outcrops (Æ Features 1-4) with a total of 17 milling slicks (Figure 8-4). This site is approximately 33 meters southeast of the presumed south boundary of CA-RIV-2486 and approximately 48 meters east-northeast of the presumed east boundary of CA-RIV-2487. As originally recorded (McCarthy 1982c), the milling slicks are distributed in clusters across at CA-RIV-2488:

- 11 milling slicks in the southwestern portion of the site (Æ Feature 1);
- three milling slicks in the western portion of the site (Æ Feature 2);
- one milling slick in the northern portion of the site (Æ Feature 3); and
- two milling slicks in the southeastern portion of the site (Æ Feature 4).

Feature 2 is 11 meters north of Feature 1, Feature 3 is 21 meters northeast of Feature 2, Feature 4 is 30 meters southeast of Feature 3, and Feature 1 is 43 meters west of Feature 4. The original 1982 site documentation (McCarthy 1982c) is accurate in terms of site description; however, the location was incorrectly mapped. Æ's DPR update notes the correct location as a result of the current field effort.



**Figure 8-4** CA-RIV-2488 site overview (view to the northwest).

### 8.1.4 CA-RIV-2489 (33-002489)

CA-RIV-2489 is a 21 by 17-meter bedrock milling site approximately 59 meters east-southeast of the presumed east boundary of CA-RIV-2488 (Figure 8-5). As originally recorded (McCarthy 1982d), this site consists of one granitic boulder outcrop (Æ Feature 1) with a total of three milling slicks. Æ verified the accuracy of the site description and location. The current DPR update only adds GPS mapping of the features and the site boundary.



### **8.1.5 CA-RIV-11772 (33-028956)**

CA-RIV-11772 is an 18 by 25-meter bedrock milling site approximately 80 meters southeast of the south tip of CA-RIV-2487. This site consists of two granitic boulder outcrops six meters apart (Æ Features 1 and 2) with a total of four milling slicks (3 on Æ Feature 1 and 1 on Æ Feature 2) (Figure 8-6). The two rock outcrops are aligned east-west from each other.



**Figure 8-5 CA-RIV-2489 site overview (view to the east).**



**Figure 8-6 CA-RIV-11772, Feature 2 overview (view to the northeast).**

### **8.1.6 CA-RIV-11770 (33-028955)**

CA-RIV-11770 is a 19 by 16.5-meter bedrock milling site consisting of one granitic boulder outcrop (Æ Feature 1) with a total of two milling slicks (Figure 8-7). This site is located along the west boundary of the APE, adjacent to a dirt road and a drainage. The western site boundary may extend farther westward outside of the APE. CA-RIV-11770 is approximately 28 meters southwest of the presumed west boundary of CA-RIV-11769 and approximately 99 meters west of the presumed west boundary of CA-RIV-2487. Some previous disturbance is evident and modern refuse is present in the area. In addition, soils around the boulder appeared somewhat loose and the boulder may not be in its original location.



**Figure 8-7 CA-RIV-11770, Feature 1 overview (view to the north).**

### **8.1.7 CA-RIV-11769 (33-028954)**

CA-RIV-11769 is another bedrock milling site approximately 28 meters northeast of the presumed south boundary of CA-RIV-11770, approximately 75 meters northwest of the presumed north boundary of CA-RIV-2487, and approximately 79 meters southwest of the presumed west boundary of CA-RIV-2486. This site is 21 by 21 meters in size and consists of one granitic boulder outcrop (Æ Feature 1) with one milling slick (Figure 8-8).





**Figure 8-8 CA-RIV-11769, site overview (view to the north).**

## 8.2 TESTING RESULTS

Excavated sediments were moderately compact silt with 25 percent small granitic gravels. All SHPs were devoid of archaeological materials and a shallow depth to bedrock was recorded in all of the SHPs (i.e., as shallow as only 12 centimeters [less than 5 inches] and as deep as only 47 centimeters [ca. 19 inches] below ground surface). Table 8-1 summarizes the findings of the SHP excavations.

Table 8-1 Results of Shovel Probes Excavated within the APE						
SHP #	SHP Status for Cultural Remains	Excavation Level <sup>1</sup>			Comments	
		0–20 cm	20–40 cm	40–60 cm		
CA-RIV-2486						
1	Negative	0	/	-	Terminated at 34 cm due to bedrock	
2	Negative	0	/	-	Modern refuse noted in 0-20 cm level; Terminated at 30 cm due to bedrock	
3	Negative	0	0	-	None	
4	Negative	0	0	/	Terminated at 30 cm due to bedrock	
CA-RIV-2487						
1	Negative	0	0	-	None	
2	Negative	0	0	-	None	
3	Negative	0	0	-	None	
4	Negative	0	0	/	Terminated at 45 cm due to bedrock	
CA-RIV-2488						
1	Negative	0	0	/	Terminated at 47 cm due to bedrock	

Table 8-1 (continued)

SHP #	SHP Status for Cultural Remains	Excavation Level <sup>1</sup>			
		0–20 cm	20–40 cm	40–60 cm	
2	Negative	0	/	-	Terminated at 37 cm due to bedrock
3	Negative	0	0	/	Terminated at 47 cm due to bedrock
4	Negative	0	0	-	None
5	Negative	0	/	-	Terminated at 30 cm due to bedrock
1	Negative	0	0	-	Modern ceramic sherds noted in 0-20 cm level
2	Negative	0	0	-	None
3	Negative	0	/	-	Terminated at 30 cm due to bedrock
1	Negative	/	-	-	Terminated at 23 cm due to bedrock
2	Negative	0	/	-	Terminated at 30 cm due to bedrock
3	Negative	0	0	/	Terminated at 42 cm due to bedrock
4	Negative	0	0	/	Terminated at 44 cm due to bedrock
1	Negative	0	0	-	None
2	Negative	0	0	-	None
3	Negative	0	0	-	None
4	Negative	0	0	-	None
1	Negative	0	0	-	None
2	Negative	/	-	-	Terminated at 12 cm due to bedrock
3	Negative	0	/	-	Terminated at 30 cm due to bedrock
4	Negative	/	-	-	Terminated at 12 cm due to bedrock

Note: <sup>1</sup> 0 = no artifacts present; - = level not excavated; / = level partially excavated.

## SIGNIFICANCE & INTEGRITY EVALUATIONS

This chapter provides an assessment of the significance of CA-RIV-2486, -2487, -2488, -2489, -11769, -11770, and -11772 in order to evaluate the eligibility of these resources for listing in the NRHP/CRHR. All of the recorded sites appear to retain integrity in terms of intact milling slicks.

### 9.1 CA-RIV-2486 (33-002486)

CA-RIV-2486 represents a special-use area related to subsistence-based processing activities, most likely the processing of locally collected native seeds, plant fibers, and small mammals. The flat surfaces of the grinding slicks would have been most conducive to seed grinding rather than acorn processing, for which mortar cups were often utilized (Basgall and True 1985). While the milling slicks are shallow, eight of the 10 slicks exhibit a high degree of polish suggesting relatively intensive use of this site. No artifacts were found in association with the milling features during the site revisit, which is consistent with the earlier findings by Padon and McIntosh (2008). Furthermore, the negative findings of the four shovel probes excavated at CA-RIV-2486 indicate that the site lacks substantial subsurface cultural deposits.

Archaeological data from the earlier work at CA-RIV-2486, along with archaeological information obtained during the recent cultural resource survey and testing, indicate that the site does not individually meet any of the criteria for listing on the NRHP or CRHR. While Native American groups were contacted for this Project, none provided any information in regard to local named places or direct site usage. Therefore, it is assumed CA-RIV-2486 is not associated with events that have made a significant contribution to the broad patterns of history and therefore is not recommended as eligible for listing under Criterion A/1. The site does not appear to be associated with the lives of persons significant in the past and therefore is not recommended as eligible for listing under Criterion B/2. The site also does not appear to embody the distinctive characteristics of a type, period, or method of construction, and thus is not recommended eligible under Criterion C/3. The absence of surface artifacts and subsurface cultural deposits suggests that the site has not yielded or is not likely to yield any additional information that can address research issues related to chronology, technology, settlement organization and land use, and subsistence behavior. Finally, protein residue analysis conducted on bedrock milling sites approximately 1.4 miles to the northeast yielded inconclusive results regarding chronology (Cummings 2018). Because additional research potential appears to be limited or absent, CA-RIV-2486 is not considered eligible for listing under Criterion D/4.

CA-RIV-2486 also does not appear to meet the criteria as a City of Riverside Designated Cultural Resource. It is not considered a Cultural Heritage Landmark as it is not an “exceptional example” of an archaeological resource. Furthermore, the site appears to also lack the data potential to individually contribute important information to the “broader understanding” of the archaeological heritage of the City of Riverside.

The site features appear to retain integrity and the overall site appears to retain integrity of location. However, the integrity of setting, feeling, and association has been impaired by industrial development to the west and south. To the east and north the terrain is relatively unaltered.

Moreover, weed abatement activities in the area surrounding the bedrock milling outcrops have removed the native plant communities that would have been found prehistorically. Finally, the site's integrity has been further impaired by recreational hiking/biking trail use which has disturbed the native sediments in the immediate area south of the bedrock milling features.

## **9.2 CA-RIV-2487 (33-002487)**

CA-RIV-2487 is a special-use area related to subsistence-based processing activities, most likely the processing of locally collected native seeds, plant fibers, and small mammals. The shallowness of the eight identified grinding slicks suggests that the site is associated with seed processing. All but one of the eight milling surfaces exhibit a moderate-to-heavily polished surface, suggesting relatively intensive use of this site. No artifacts were found in association with the milling features during the site revisit, which is consistent with the earlier findings by McCarthy (1982b). Furthermore, the negative findings of the four shovel probes excavated at CA-RIV-2487 indicate that the site lacks substantial subsurface cultural deposits.

Archaeological data from the earlier work at CA-RIV-2487, along with archaeological information obtained during the recent cultural resource survey and testing, indicate that the site does not individually meet any of the four criteria for listing on the NRHP or the CRHR. While Native American groups were contacted for this Project, none provided any information in regard to local named places or direct site usage. Therefore, it is assumed CA-RIV-2487 is not associated with events that have made a significant contribution to the broad patterns of history and therefore is not recommended as eligible for listing under Criterion A/1. The site does not appear to be associated with the lives of persons significant in the past and therefore is not recommended as eligible for listing under Criterion B/2. The site also does not appear to embody the distinctive characteristics of a type, period, or method of construction, and thus is not recommended eligible under Criterion C/3. The absence of surface artifacts and subsurface cultural deposits suggests that the site has not yielded or is not likely to yield any additional information that can address research issues related to chronology, technology, settlement organization and land use, and subsistence behavior. Finally, protein residue analysis conducted on bedrock milling sites approximately 1.4 miles to the northeast yielded inconclusive results regarding chronology (Cummings 2018). Because additional research potential appears to be limited or absent, CA-RIV-2487 is not recommended as eligible for listing under Criterion D/4.

CA-RIV-2487 also does not appear to meet the criteria as a City of Riverside Designated Cultural Resource. It is not considered a Cultural Heritage Landmark as it is not an "exceptional example" of an archaeological resource. Furthermore, the site appears to also lack the data potential to individually contribute important information to the "broader understanding" of the archaeological heritage of the City of Riverside.

The site features appear to retain integrity and the overall site appears to retain integrity of location. However, the integrity of setting, feeling, and association has been impaired by industrial development to the west and south. To the east and north the terrain is relatively unaltered. Moreover, weed abatement activities in the area surrounding the bedrock milling outcrops have removed the native plant communities that would have been found prehistorically.



### **9.3 CA-RIV-2488 (33-002488)**

CA-RIV-2488 is a special-use area related to subsistence-based processing activities, most likely the processing of locally collected native seeds, plant fibers, and small mammals. The shallowness of the 17 identified grinding slicks suggests that the site is associated with seed processing. The highly polished surface of 15 of the slicks suggests intensive use of this site. No artifacts were found in association with the milling features during the site revisit, which is consistent with the earlier findings by McCarthy (1982c). Furthermore, the negative findings of the five shovel probes excavated at CA-RIV-2488 indicate that the site lacks substantial subsurface cultural deposits.

Archaeological data from the earlier work at CA-RIV-2488, along with archaeological information obtained during the recent cultural resource survey and testing, indicate that the site does not individually meet any of the four criteria for listing on the NRHP or the CRHR. While Native American groups were contacted for this Project, none provided any information in regard to local named places or direct site usage. Therefore, it is assumed CA-RIV-2488 is not associated with events that have made a significant contribution to the broad patterns of history and therefore is not recommended as eligible for listing under Criterion A/1. The site does not appear to be associated with the lives of persons significant in the past and therefore is not recommended as eligible for listing under Criterion B/2. The site also does not appear to embody the distinctive characteristics of a type, period, or method of construction, and thus is not recommended eligible under Criterion C/3. The absence of surface artifacts and subsurface cultural deposits suggests that the site has not yielded or is not likely to yield any additional information that can address research issues related to chronology, technology, settlement organization and land use, and subsistence behavior. Finally, protein residue analysis conducted on bedrock milling sites approximately 1.4 miles to the northeast yielded inconclusive results regarding chronology (Cummings 2018). Because additional research potential appears to be limited or absent, CA-RIV-2488 is not recommended as eligible for listing under Criterion D/4.

CA-RIV-2488 also does not appear to meet the criteria as a City of Riverside Designated Cultural Resource. It is not considered a Cultural Heritage Landmark as it is not an “exceptional example” of an archaeological resource. Furthermore, the site appears to also lack the data potential to individually contribute important information to the “broader understanding” of the archaeological heritage of the City of Riverside.

The site features appear to retain integrity and the overall site appears to retain integrity of location. However, the integrity of setting, feeling, and association has been impaired by industrial development to the west and south. To the east and north the terrain is relatively unaltered. Furthermore, weed abatement activities have removed the native plant communities and disturbed the ground surface of the area surrounding the bedrock milling feature.

### **9.4 CA-RIV-2489 (33-002489)**

CA-RIV-2489 is a special-use area related to subsistence-based processing activities, most likely the processing of locally collected native seeds, plant fibers, and small mammals. The shallowness of the three identified grinding slicks suggests that the site is associated with seed processing. The moderate-to-highly polished surface of the slicks suggests relatively intensive use of this site. No artifacts were found in association with the milling features during the site revisit, which is

consistent with the earlier findings by McCarthy (1982d). Furthermore, the negative findings of the three shovel probes excavated at CA-RIV-2489 indicate that the site lacks substantial subsurface cultural deposits.

Archaeological data from the earlier work at CA-RIV-2489, along with archaeological information obtained during the recent cultural resource survey and testing, indicate that the site does not individually meet any of the four criteria for listing on the NRHP or the CRHR. While Native American groups were contacted for this Project, none provided any information in regard to local named places or direct site usage. Therefore, it is assumed CA-RIV-2489 is not associated with events that have made a significant contribution to the broad patterns of history and therefore is not recommended as eligible for listing under Criterion A/1. The site does not appear to be associated with the lives of persons significant in the past and therefore is not recommended as eligible for listing under Criterion B/2. The site also does not appear to embody the distinctive characteristics of a type, period, or method of construction, and thus is not recommended eligible under Criterion C/3. The absence of surface artifacts and subsurface cultural deposits suggests that the site has not yielded or is not likely to yield any additional information that can address research issues related to chronology, technology, settlement organization and land use, and subsistence behavior. Finally, protein residue analysis conducted on bedrock milling sites approximately 1.4 miles to the northeast yielded inconclusive results regarding chronology (Cummings 2018). Because additional research potential appears to be limited or absent, CA-RIV-2489 is not recommended as eligible for listing under Criterion D/4.

CA-RIV-2489 also does not appear to meet the criteria as a City of Riverside Designated Cultural Resource. It is not considered a Cultural Heritage Landmark as it is not an “exceptional example” of an archaeological resource. Furthermore, the site appears to also lack the data potential to individually contribute important information to the “broader understanding” of the archaeological heritage of the City of Riverside.

The site features appear to retain integrity and the overall site appears to retain integrity of location. However, the integrity of setting, feeling, and association has been impaired by industrial development to the west and south. To the east and north the terrain is relatively unaltered. Furthermore, weed abatement activities have removed the native plant communities and disturbed the ground surface of the area surrounding the bedrock milling feature.

## **9.5 CA-RIV-11772 (33-028956)**

CA-RIV-11772 is a special-use area related to subsistence-based processing activities, most likely the processing of locally collected native seeds, plant fibers, and small mammals. The shallowness of the four identified grinding slicks suggests that the site is associated with seed processing. The moderately polished surface of three of the slicks suggests relatively intensive use of this site. No surface artifacts were identified at the site during the current effort. Furthermore, the negative findings of the four shovel probes excavated at CA-RIV-11772 indicate that the site lacks substantial subsurface cultural deposits.

Archaeological information obtained during the current cultural resource survey and testing indicate that CA-RIV-11772 does not individually meet any of the four criteria for listing on the NRHP or the CRHR. While Native American groups were contacted for this Project, none

provided any information in regard to local named places or direct site usage. Therefore, it is assumed CA-RIV-11772 is not associated with events that have made a significant contribution to the broad patterns of history and therefore is not recommended as eligible for listing under Criterion A/1. The site does not appear to be associated with the lives of persons significant in the past and therefore is not recommended as eligible for listing under Criterion B/2. The site also does not appear to embody the distinctive characteristics of a type, period, or method of construction, and thus is not recommended eligible under Criterion C/3. The absence of surface artifacts and subsurface cultural deposits suggests that the site has not yielded or is not likely to yield any additional information that can address research issues related to chronology, technology, settlement organization and land use, and subsistence behavior. Finally, protein residue analysis conducted on bedrock milling sites approximately 1.4 miles to the northeast yielded inconclusive results regarding chronology (Cummings 2018). Because additional research potential appears to be limited or absent, CA-RIV-11772 is not recommended as eligible for listing under Criterion D/4.

CA-RIV-11772 also does not appear to meet the criteria as a City of Riverside Designated Cultural Resource. It is not considered a Cultural Heritage Landmark as it is not an “exceptional example” of an archaeological resource. Furthermore, the site appears to also lack the data potential to individually contribute important information to the “broader understanding” of the archaeological heritage of the City of Riverside.

The site features appear to retain integrity and the overall site appears to retain integrity of location. However, the integrity of setting, feeling, and association has been impaired by industrial development to the west and south. To the east and north the terrain is relatively unaltered. Furthermore, weed abatement activities have removed the native plant communities and disturbed the ground surface of the area surrounding the bedrock milling feature.

## **9.6 CA-RIV-11770 (33-028955)**

CA-RIV-11770 is a special-use area related to subsistence-based processing activities, most likely the processing of locally collected native seeds, plant fibers, and small mammals. The shallowness of the two identified grinding slicks suggests that the site is associated with seed processing. The moderately polished surface of two of the slicks suggests relatively intensive use of this site. No surface artifacts were identified at the site during the current effort. Furthermore, the negative findings of the four shovel probes excavated at CA-RIV-11770 indicate that the site lacks substantial subsurface cultural deposits.

Archaeological information obtained during the current cultural resource survey and testing indicate that CA-RIV-11770 does not individually meet any of the four criteria for listing on the NRHP or the CRHR. While Native American groups were contacted for this Project, none provided any information in regard to local named places or direct site usage. Therefore, it is assumed CA-RIV-11770 is not associated with events that have made a significant contribution to the broad patterns of history and therefore is not recommended as eligible for listing under Criterion A/1. The site does not appear to be associated with the lives of persons significant in the past and therefore is not recommended as eligible for listing under Criterion B/2. The site also does not appear to embody the distinctive characteristics of a type, period, or method of construction, and thus is not recommended eligible under Criterion C/3. The absence of surface

artifacts and subsurface cultural deposits suggests that the site has not yielded or is not likely to yield any additional information that can address research issues related to chronology, technology, settlement organization and land use, and subsistence behavior. Finally, protein residue analysis conducted on bedrock milling sites approximately 1.4 miles to the northeast yielded inconclusive results regarding chronology (Cummings 2018). Because additional research potential appears to be limited or absent, CA-RIV-11770 is not recommended as eligible for listing under Criterion D/4.

CA-RIV-11770 also does not appear to meet the criteria as a City of Riverside Designated Cultural Resource. It is not considered a Cultural Heritage Landmark as it is not an “exceptional example” of an archaeological resource. Furthermore, the site appears to also lack the data potential to individually contribute important information to the “broader understanding” of the archaeological heritage of the City of Riverside.

It is unclear if the site retains integrity of location, as the large bedrock boulder cropping out at the ground surface may have been moved (see Section 7.1.6 above). However, the overall integrity of the site’s setting, feeling, and association has been impaired by industrial development to the west and south. To the east and north the terrain is relatively unaltered. In addition, weed abatement activities have removed the native plant communities and disturbed the ground surface of the area surrounding the bedrock milling feature. Finally, the site’s integrity has been further impaired by use of the recreational hiking/biking trail to the south and a dirt road to the west, which has disturbed the native sediments in the immediate area of the site.

## **9.7 CA-RIV-11769 (33-028954)**

CA-RIV-11769 is a special-use area related to subsistence-based processing activities, most likely the processing of locally collected native seeds, plant fibers, and small mammals. The shallowness of the one identified grinding slick suggests that the site is associated with seed processing. The slick is moderately polished, which suggests relatively intensive use of this site. No surface artifacts were identified at the site during the current effort. Furthermore, the negative findings of the four shovel probes excavated at CA-RIV-11769 indicate that the site lacks substantial subsurface cultural deposits.

Archaeological information obtained during the current cultural resource survey and testing indicate that CA-RIV-11769 does not individually meet any of the four criteria for listing on the NRHP or the CRHR. While Native American groups were contacted for this Project, none provided any information in regard to local named places or direct site usage. Therefore, it is assumed CA-RIV-11769 is not associated with events that have made a significant contribution to the broad patterns of history and therefore is not recommended as eligible for listing under Criterion A/1. The site does not appear to be associated with the lives of persons significant in the past and therefore is not recommended as eligible for listing under Criterion B/2. The site also does not appear to embody the distinctive characteristics of a type, period, or method of construction, and thus is not recommended eligible under Criterion C/3. The absence of surface artifacts and subsurface cultural deposits suggests that the site has not yielded or is not likely to yield any additional information that can address research issues related to chronology, technology, settlement organization and land use, and subsistence behavior. Finally, protein residue analysis conducted on bedrock milling sites approximately 1.4 miles to the northeast

yielded inconclusive results regarding chronology (Cummings 2018). Because additional research potential appears to be limited or absent, CA-RIV-11769 is not recommended as eligible for listing under Criterion D/4.

CA-RIV-11769 also does not appear to meet the criteria as a City of Riverside Designated Cultural Resource. It is not considered a Cultural Heritage Landmark as it is not an “exceptional example” of an archaeological resource. Furthermore, the site appears to also lack the data potential to individually contribute important information to the “broader understanding” of the archaeological heritage of the City of Riverside.

The site features appear to retain integrity and the overall site appears to retain integrity of location. However, the integrity of setting, feeling, and association has been impaired by industrial development to the west and south. To the east and north the terrain is relatively unaltered. In addition, weed abatement activities have removed the native plant communities and disturbed the ground surface of the area surrounding the bedrock milling feature.

## **9.8 CULTURAL LANDSCAPES AND BEDROCK MILLING SITES**

As previously discussed in Section 6.2, delineating the boundary of the cultural landscape that encompasses Sycamore Canyon and the surrounding area would require a cooperative effort between Native American groups and cultural resource managers to determine the level of research needed to properly identify, record, and evaluate such a landscape for the NRHP, CRHR, or as a City of Riverside Designated Cultural Resource. Although this work is beyond the scope of the current Project, AECOM is now under contract to complete a Tribal Cultural Landscape (TCL) Study with Soboba and findings are forthcoming. One outcome of the TCL Study is expected to provide sufficient information to the City and USACE to determine whether the TCL qualifies for nomination to the CRHR as a Tribal Cultural Resource (TCR) and/or the NRHP as a Traditional Cultural Property (TCP). In addition, AECOM is under contract to coordinate with the Pechanga Band of Luiseño Indians (Pechanga) to prepare a TCR/TCP study. In the meantime, a previous focused landscape study for the Sycamore Canyon Business Park provides some preliminary observations regarding the role the seven bedrock milling sites (CA-RIV-2486, -2487, -2488, -2489, -11769, -11770, and -11772) may have played in the larger indigenous cultural landscape (Clark 2017).

It should be noted that bedrock milling features likely represent one of an unknown number of site types that made up the subsistence-based procurement and processing ensemble. Additional bedrock milling sites were used in the collection and processing of local resources and related tasks may have included the gathering of small seeds, grasses, and possibly small game for processing on the bedrock features and ground stone metates using hand grinding or pounding stones. Lithic-reduction activities to produce tools used in food gathering and processing and the packaging of processed and unprocessed materials for transport back to the residential site may also have been tasks integrated into the subsistence regime at bedrock milling sites.

Site distribution data suggest subsistence-based procurement and processing tasks involving bedrock milling features may have been centered on the area immediately surrounding Sycamore Canyon. Specifically, the examination of known bedrock milling sites within the 2-mile-wide Study Area indicates that the highest densities of outcrop features are found within a half-mile of Sycamore Canyon Creek with the highest concentrations located on the terraces that border the

creek. While the current Project is located along a secondary drainage, it is still within a half-mile of Sycamore Canyon Creek. The majority of the grinding slicks at the seven sites within the APE exhibit moderate-to-heavy polish, which implies long-term and/or repeated use of the bedrock milling features at CA-RIV-2486, -2487, -2488, -2489, -11769, -11770, and -11772, unlike other bedrock milling sites elsewhere which exhibit signs of minimal use.

If the TCL focused on prehistoric subsistence-based procurement and processing tasks in Sycamore Canyon is recommended as a TCR and/or TCP, then the extant data at CA-RIV-2486, -2487, -2488, -2489, -11769, -11770, and -11772 are likely to be considered contributing elements. The locations of the seven sites within a half-mile of Sycamore Canyon Creek suggest the processing activities that occurred at these loci were an integral part of a larger subsistence regime centered on the canyon. Additionally, the TCL may have also served residential, economic, and ceremonial functions as well. As such, the seven sites may be key contributors to the significance of the cultural landscape. While industrial development to the west and south of the sites has somewhat impacted the integrity of setting, feeling, and association of the seven resources, the area to the north and east is open vacant land. Æ suggests the resources retain a sufficient degree of integrity to convey significance as a group related to subsistence-based procurement and processing activities within a cultural landscape.

## 10

### MANAGEMENT RECOMMENDATIONS

This investigation identified seven bedrock milling sites in close proximity to each other in the western portion of the APE. The four previously recorded sites were re-identified and their site records updated for the Project. In addition, three newly identified bedrock milling sites also were documented.

All seven of the archaeological sites (CA-RIV-2486, -2487, -2488, -2489, -11769, -11770, and -11772) were evaluated for eligibility for listing on the NRHP and CRHR and as a City of Riverside Designated Cultural Resource. Based on the archaeological data only, Æ recommends that all seven sites individually are ineligible for listing on the NRHP and CRHR or as a City of Riverside Designated Cultural Resource. However, the findings of the current study indicate that the sites may be considered contributing elements to a subsistence-based procurement and processing cultural landscape or historic district for their historical associations with broad patterns of national, local, or regional history (Criterion A/1), for possible associations with the lives of significant persons in the past who are important to local, California or national history (Criterion B/2), and for the potential to yield, information important to the prehistory or history of the local area, California, or the nation (Criterion D/4). Through AB 52 and Section 106 consultation between the City, USACE, and interested Tribes, Soboba requested a TCL study be prepared for the Project and Pechanga requested a TCR/TCP study be prepared for the Project. Æ is currently under contract to prepare a TCL study to explore these findings with Soboba and to coordinate with Pechanga to prepare a TCR/TCP study for the Project.

Of the 179 cultural resources identified in the Study Area, 169 are prehistoric archaeological sites, four are historical archaeological sites, four are isolated prehistoric artifacts, one is a site with both prehistoric and historic artifacts, and one is a built-environment resource. All of the prehistoric archaeological resources documented in the Study Area are bedrock milling sites recorded on the ground surface. In addition, none of the four mapped soil series have Ab horizons and Æ encountered very shallow depth to bedrock during shovel probing within the western portion of the APE, which drastically reduces the overall potential for intact and significant archaeological deposits. Finally, the eastern half of the APE is mapped as Cretaceous bedrock with only a thin layer of soil across the entire site. Based on this information, there is a low likelihood for buried archaeological resources within the APE and Æ does not recommend archaeological monitoring during construction. However, during AB 52 consultation with the City and Section 106 consultation with the USACE, various Native American tribes requested tribal monitoring during ground disturbing construction. When construction begins and in the event that potentially significant archaeological materials are encountered, all work must be halted in the vicinity of the discovery until a qualified archaeologist can visit the site of discovery and assess the significance of the find. If significant archaeological remains are encountered, any discoveries, and subsequent evaluation and treatment, should be documented in a cultural resource report, which should be submitted to the EIC.

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

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



## 11 REFERENCES

Anderson, M. Kat

- 2005 *Tending the Wild: Native American Knowledge and the Management of California's Natural Resources*. University of California Press, Berkeley.

Anschuetz, Kurt F., Richard H. Wilshusen, and Cherie L. Scheick

- 2001 An Archaeology of Landscapes: Perspectives and Directions. *Journal of Archaeological Research*, 9(2):157–211.

Antevs, E.

- 1952 Climatic History and the Antiquity of Man in California. *University of California Archaeological Survey Reports* 16:23–31. Berkeley, CA.

Applied EarthWorks, Inc.

- 2013 Phase II Testing and Evaluation of Five Sites for the Winchester Crossroads Project (Specific Plan 288, Amendment 2), Near the Community of Winchester, Riverside County, California. Report prepared for the County of Riverside Planning Department, Riverside, CA.

Basgall, M. E., and D. L. True

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

Bean, Lowell J.

- 1978 Cahuilla. In *Handbook of North American Indians, Vol. 8 (California)*. William C. Sturtevant, general editor, Robert F. Heizer, volume editor. Smithsonian Institution, Washington, D.C.

Bean, Lowell J., and Katherine S. Saubel

- 1972 TEMALPAKH, Cahuilla Indian Knowledge and Usage of Plants. Malki Museum Press, Banning, California.

Bean, Lowell J., and Charles R. Smith

- 1978 Gabrielino. In *Handbook of North American Indians, Vol. 8 (California)*. William C. Sturtevant, general editor, Robert F. Heizer, volume editor. Smithsonian Institution, Washington, D.C.

Bean, Lowell J., and Sylvia B. Vane

- 2001 *Eastside Reservoir Project Phase III: Ethnography and Ethnohistory*. Report prepared by Cultural Systems Research, Inc., Menlo Park, California. Report submitted to the Metropolitan Water District of Southern California, Los Angeles, California.

- 2004 *Ethnographic Overview, Inland Feeder Pipeline Project*. Cultural Systems Research, Inc., Menlo Park. Submitted to the Metropolitan Water District of Southern California, Los Angeles, California.

Bender, Barbara (editor)

- 1993 *Landscape: Politics and Perspectives*. Berg, Providence.

Boscana, Father Geronimo

- 1933 *Chinigchinich: A Revised and Annotated Version of Alfred Robinson's Translation of Father Geronimo Boscana's Historical Account of the Belief, Usages, Customs and Extravagancies of the Indians of this Mission of San Juan Capistrano Called the Acagchemem Tribe*. Fine Arts Press, Santa Ana, California. (Reprinted, Malki Museum Press, Banning, California, 1972.)

Brown, John Jr., and James Boyd

- 1922 *History of San Bernardino and Riverside Counties; With Selected Biography of Actors and Witnesses of the Period of Growth and Achievement*, 3 volumes, The Western Historical Association, The Lewis Publishing Company, Chicago, Illinois.

City of Riverside

- 2007 *City of Riverside General Plan 2025*. Electronic document: <http://www.riversideca.gov/planning/gp2025program/general-plan.asp>, on June 4, 2015

Clark, Tiffany

- 2017 Memorandum: Focused Landscape Study for the Sycamore Canyon Business Park Buildings 1 & 2 Project, Riverside County, California. Report prepared by Applied EarthWorks, Inc., Pasadena, California (Confidential). Report submitted to the US Army Corps of Engineers, Orange and Riverside Counties, California.

Cosgrove, Denis

- 1984 *Symbolic Formation and Symbolic Landscapes*. University of Wisconsin Press, Madison.

Crouch, D. P., D. J. Garr, and A. I. Mundigo

- 1982 *Spanish City Planning in North America*. MIT Press, Cambridge, Massachusetts.

Cummings, Linda Scott

- 2018 Protein Residue Analysis (CIEP) of Bedrock Milling Washes from Sites CA-RIV-8750, CA-RIV-8751, CA-RIV-8752, Riverside County, California. Report prepared by PaleoResearch Institute, Inc., Golden, Colorado. Report prepared for Applied EarthWorks, Inc., Hemet, California.

Davis, James T.

- 1961 Trade Routes and Economic Exchange among the Indians of California. *University of California Archaeological Survey Report* 54:1–71. Berkeley.

Dillon, Brian D.

- 1995 *Archaeological Assessment of The Riverside Cogeneration Project on the Santa Ana River, Riverside County, California*. Brian D. Dillon, North Hills, California. Report submitted to Montgomery Watson Engineers, Riverside, California.

Fowles, Severin

- 2010 The Southwest School of Landscape Archaeology. *Annual Review of Anthropology* 39:453-468.

Gamble, Lynn H., and Michael Wilken-Robertson

- 2008 Kumeyaay Cultural Landscape of Baja California's Tijuana River Watershed. In *Journal of California and Great Basin Archaeology* 28(2):127–151.

Geiger, Maynard, O.F.M., and Clement W. Meighan

- 1976 *As the Padres Saw Them: California Indian Life and customs as Reported by the Franciscan Missionaries, 1913-1815*. Santa Barbara Mission Archive Library, Santa Barbara, California.

Goldberg, Susan K.

- 2001 Land Use, Mobility, and Intensification Evaluation and Refinement of the Model. In *Metropolitan Water District of Southern California Eastside Reservoir Project Archaeological Investigations*, Vol. IV: Chapter 14. Susan K. Goldberg, general editor. Report prepared by Applied EarthWorks, Inc., Hemet, California. Report submitted to the Metropolitan Water District of Southern California, Los Angeles, California.

Goldberg, S. K., C. J. Klink, J. A. Onken, W. G. Spaulding, M. C. Robinson, M. C. Horne, and R. L. McKim

- 2001 *Metropolitan Water District of Southern California Eastside Reservoir Project Final Report of Archaeological Investigations, Vol. IV: Synthesis of Findings*. Report prepared by Applied EarthWorks, Inc., Hemet, California. Report submitted to the Metropolitan Water District of Southern California, Los Angeles, California.

HAER (Historic American Engineering Record)

- 1991 *California Citrus Heritage Recording Project, Riverside, Riverside County, California: HAER*. National Park Service, US Department of the Interior, Washington, DC.

Hall, S. A.

- 1985 Quaternary Pollen Analysis and Vegetational History of the Southwest. In *Pollen Records of Late Quaternary North American Sediments*, edited by V. Bryant, Jr. and R. Holloway, pp. 95–124. American Association of Stratigraphic Palynologists Foundation, Dallas, TX.

Hardesty, Donald

- 1988 *The Archaeology of Mines and Mining: The View from the Silver State*. Special Publication Series, Number 6. Society for Historical Archaeology, Pleasant Hill, CA.

Harrington, John P.

- n.d. Ethnographic Field Notes. Copies on file at Cultural Systems Research, Inc., Menlo Park, California.

Harrington, John P. (continued)

- 1942 Culture Element Distributions: XIX Central California Coast. *University of California Anthropological Records* 7(1):1–46.

Haynes, C. V., Jr

- 1967 Quaternary Geology of the Tule Springs Area, Clark County, Nevada. In *Pleistocene Studies in Southern Nevada*, edited by H. M. Wormington and D. Ellis, pp. 15–104. Nevada State Museum Anthropological Papers, Reno, NV.

Heizer, Robert F.(ed)

- 1968 *The Indians of Los Angeles County: Hugo Reid's Letters of 1852*. Southwest Museum, Los Angeles.

Hirsch, Eric, and Michael O'Hanlon (editors)

- 1995 *The Anthropology of Landscape: Perspectives on Place and Space*. Clarendon Press, Oxford.

Horne, Melinda C.

- 2001 Site Structure and Features. In *Metropolitan Water District of Southern California Eastside Reservoir Project Archaeological Investigations*, Vol. IV: Chapter 8. Susan K. Goldberg, general editor. Report prepared by Applied EarthWorks, Inc., Hemet, California. Report submitted to the Metropolitan Water District of Southern California, Los Angeles, California.

Horne, Melinda C., and Dennis P. McDougall

- 2003 *Cultural Resources Element of the City of Riverside General Plan Update*. Applied EarthWorks, Inc., Hemet, California. Submitted to Cotton Bridges and Associates, Pasadena, California.

Ingold, Tim

- 1993 The Temporality of Landscape. *World Archaeology* 25:152–174.

Jones, T. L., G. M. Brown, L. M. Raab, J. L. McVickar, W. G. Spaulding, D. J. Kennett, A. York, and P. L. Walker

- 1999 Environmental Imperatives Reconsidered: Demographic Crises in Western North America during the Medieval Climatic Anomaly. *Current Anthropology*, 40(2):137–170.

Kennett, Douglas J., and James P. Kennett

- 2000 Competitive and Cooperation Responses to Climatic Instability in Coastal Southern California. *American Antiquity* 65:379–395.

Klink, C. J.

- 2001a Ground Stone Tool Production and Technological Strategies. In *Metropolitan Water District of Southern California Eastside Reservoir Project Archaeological Investigations, Vol. IV: Chapter 10*. Susan K. Goldberg, general editor. Report prepared by Applied EarthWorks, Inc., Hemet, California. Report submitted to the Metropolitan Water District of Southern California, Los Angeles, California. Klink, C. J.
- 2001b Flaked Stone Tool Production and Technological Strategies. In *Metropolitan Water District of Southern California Eastside Reservoir Project Archaeological Investigations, Vol. IV: Chapter 9*. Susan K. Goldberg, general editor. Report prepared by Applied EarthWorks, Inc., Hemet, California. Report submitted to the Metropolitan Water District of Southern California, Los Angeles, California.
- 2001c Artifact Assemblage Structure and Content. In *Metropolitan Water District of Southern California Eastside Reservoir Project Archaeological Investigations, Vol. IV: Chapter 13*. Susan K. Goldberg, general editor. Report prepared by Applied EarthWorks, Inc., Hemet, California. Report submitted to the Metropolitan Water District of Southern California, Los Angeles, California.

Kowta, M.

- 1969 *The Sayles Complex: A Late Milling Stone Assemblage from the Cajon Pass and the Ecological Implications of Its Scraper Planes*. University of California Publications in Anthropology 6. Berkeley and Los Angeles, CA.

Lech, Steve

- 2004 *Along the Old Roads: A History of the Portion of Southern California That Became Riverside County, 1772-1893*. Steve Lech, Riverside, California.

Little, Barbara, Erika M. Seibert, Jan Townsend, John H. Sprinkle, Jr., and John Knoerl

- 2000 National Register Bulletin: Guidelines for Evaluating and Registering Archaeological Properties. U.S. Department of the Interior, National Park Service.

McCarthy, Daniel

- 1982a Department of Parks and Recreation Series 523 forms for CA-RIV-002486. On file at the Riverside Information Center, at University of California, Riverside.
- 1982b Department of Parks and Recreation Series 523 forms for CA-RIV-002487. On file at the Riverside Information Center, at University of California, Riverside.
- 1982c Department of Parks and Recreation Series 523 forms for CA-RIV-002488. On file at the Riverside Information Center, at University of California, Riverside.
- 1982d Department of Parks and Recreation Series 523 forms for CA-RIV-002489. On file at the Riverside Information Center, at University of California, Riverside.

McCawley, William

- 1996 *The First Angelinos: The Gabrielino Indians of Los Angeles*. 2<sup>nd</sup> printing. Malki Museum Press/Ballena Press Cooperative Publication, Banning or Novato, California.

McDougall, D. P., M. C. Horne, and J. Sander

- 2003 *Cultural Resources Survey of a Portion of the Lake Mathews Inundation Zone*. Report prepared by Applied EarthWorks, Inc., Hemet, California. Report submitted to the Metropolitan Water District of Southern California, Los Angeles, California.

McKim, R. L.

- 2001 Faunal Assemblages: Vertebrate Faunal Remains. In *Metropolitan Water District of Southern California Eastside Reservoir Project Archaeological Investigations, Vol. IV: Chapter 12*. Susan K. Goldberg, general editor. Report prepared by Applied EarthWorks, Inc., Hemet, California. Report submitted to the Metropolitan Water District of Southern California, Los Angeles, California.

Mehringer, P. J., Jr., and C N. Warren

- 1976 Marsh, Dune, and Archaeological Chronology, Ash Meadows, Amargosa Desert, Nevada. In *Holocene Environmental Change in the Great Basin*, edited by R. Elston, pp. 120–150. Nevada Archaeological Survey Research Papers.

Meighan, Clement W.

- 1954 A Late Complex in Southern California Prehistory. *Southwestern Journal of Anthropology* 10(2):215–227.

Morton, D. M., B. Cox, M. Dawson, and T. O'Brien

- 2001 Geologic map of the Riverside East 7.5' quadrangle, Riverside County, California, U.S. 1:24,000. U. S. Geological Survey, Open-File Report OF 01-452.

National Park Service

- 2002 How to Apply the National Register Criteria for Evaluation. National Register Bulletin No. 15. U. S. Department of the Interior, National Park Service, Washington, D.C.

Norris, R. M., and R. W. Webb

- 1976 *Geology of California*. John Wiley & Sons, New York, New York, 378 pp.

Padon, Beth, and Douglas McIntosh

- 2008 Archaeological Assessment Report ARU #703, on file at the Eastern Information Center (1982); Archaeological letter report for the Burn Area Project June 2008. Discovery Works, Inc. Bloomfield, Los Alamitos, CA.

Perry, Jennifer, and Colleen Delaney-Rivera

- 2011 Interactions and Interiors of the Coastal Chumash: Perspectives from Santa Cruz Island and the Oxnard Plain. *California Archaeology* 3(1):103–1264.

Potter, James M.

- 2004 The Creation of Person, the Creation of Place: Hunting Landscapes in the American Southwest. *American Antiquity* 69(2):322–338.

Robinson, David W.

- 2010 Land Use, Land Ideology: An Integrated Geographic Information Systems Analysis of the Emigdiano Chumash Rock Art, South-Central California. *American Antiquity* 74:292–818.

Rossignol, Jacqueline, and LuAnn Wandsnider (editors)

- 1992 *Space, Time, and Archaeological Landscapes*. Plenum, New York.

Spaulding, W. Geoffrey

- 1991 A Middle Holocene Vegetation Record From The Mojave Desert And Its Paleoclimatic Significance. *Quaternary Research* 35:427–437.
- 1995 Environmental Change, Ecosystem Responses, and the Late Quaternary Development of the Mojave Desert. In *Late Quaternary Environments and Deep History: A Tribute to Paul S. Martin*, edited by D. Steadman and J. Mead. The Mammoth Site of Hot Springs, South Dakota, Inc. Scientific Papers, Volume 3. Hot Springs, SD.
- 2001 Paleoenvironmental Context of the Study Area. In *Metropolitan Water District of Southern California Eastside Reservoir Project Archaeological Investigations, Vol. IV: Chapter 5*, Susan K. Goldberg, general editor. Report prepared by Applied EarthWorks, Inc., Hemet, California. Report submitted to the Metropolitan Water District of Southern California, Los Angeles, California.

Soil Survey Staff

- 2020a Web Soil Survey. Natural Resources Conservation Service, US Department of Agriculture. Electronic document <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>. Accessed October 9, 2018.
- 2020b Official Soil Series Description: CIENEBA SERIES. Natural Resources Conservation Service, US Department of Agriculture. Electronic document [https://soilseries.sc.egov.usda.gov/OSD\\_Docs/C/CIENEBA.html](https://soilseries.sc.egov.usda.gov/OSD_Docs/C/CIENEBA.html). Accessed July 1, 2020.
- 2020c Official Soil Series Description: FALLBROOK SERIES. Natural Resources Conservation Service, US Department of Agriculture. Electronic document. Accessed October 9, 2019.
- 2020d Official Soil Series Description: VISTA SERIES. Natural Resources Conservation Service, US Department of Agriculture. Electronic document [https://soilseries.sc.egov.usda.gov/OSD\\_Docs/V/VISTA.html](https://soilseries.sc.egov.usda.gov/OSD_Docs/V/VISTA.html). Accessed July 1, 2020.
- 2020e Official Soil Series Description: ARLINGTON SERIES. Natural Resources Conservation Service, US Department of Agriculture. Electronic document [https://soilseries.sc.egov.usda.gov/OSD\\_Docs/A/ARLINGTON.html](https://soilseries.sc.egov.usda.gov/OSD_Docs/A/ARLINGTON.html). Accessed October 9, 2018.

Strong, William Duncan

- 1929 Aboriginal Society in Southern California. *University of California Publications in American Archaeology and Ethnology* 26(1):1–358. Berkeley. (Reprinted, Malki Museum Press, Banning, California, 1972.)

Tilley, Christopher

- 1994 *A Phenomenology of Landscape: Places, Paths, and Monuments*. Berg, Oxford.

True, D. L.

- 1958 An Early Gathering Complex in San Diego County, California. *American Antiquity* 23:255–263.

True, D. L. (continued)

- 1966 *Archaeological Differentiation of Shoshonean and Yuman Speaking Groups in Southern California*. Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Los Angeles, CA.
- 1970 *Investigations of a Late Prehistoric Complex in Cuyamaca State Park, San Diego County, California*. Archaeological Survey Monographs No. 1, University of California, Los Angeles, CA.

Ucko, Peter J., and Robert Layton (editors)

- 1999 *The Archaeology and Anthropology of Landscape: Shaping Your Landscape*. Routledge, New York.

USDA

- 1971 Soil Survey: Western Riverside Area, California. United States Department of Agriculture, Soil Conservation Service.

U.S. Geological Survey (USGS)

- 1901 *Elsinore, California*. 30-Minute (1:125,000 scale) Series. U.S. Geological Survey, Washington, D.C.
- 1901 *Riverside, California*. 15-Minute (1:62,500 scale) Series. U.S. Geological Survey, Washington, D.C.
- 1942 *Riverside, California*. 15-Minute (1:62,500 scale) Series. U.S. Geological Survey, Washington, D.C.
- 1953 *Riverside, California*. 15-Minute (1:62,500 scale) Series. U.S. Geological Survey, Washington, D.C.
- 1953 *Riverside East, California*. 7.5-Minute (1:24,000 scale) Series. U.S. Geological Survey, Washington, D.C.

Wallace, W. J.

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



Warren, Claude N.

- 1984 The Desert Region. In *California Archaeology*, by Michael J. Moratto, pp. 339–430. Academic Press, New York.

Warren, C. N., D. L. True, and A. A. Eudey

- 1961 Early Gathering Complexes of Western San Diego County: Results of Interpretation of an Archaeological Survey. *Archaeological Survey Annual Report 1960–1961*, pp. 1–106. Institute of Archaeology, University of California, Los Angeles, CA.

Waters, M. R.

- 1983 Late Holocene Lacustrine Chronology and Archaeology of Ancient Lake Cahuilla, California. *Quaternary Research* 19:373–387.

Wilke, Phillip J.

- 1976 *Late Prehistoric Human Ecology at Lake Cahuilla, Coachella Valley, California*. Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Riverside.

## **APPENDIX A**

### **Confidential Records Search Results (Not Available for Public Review)**

## **APPENDIX B**

### **Native American Communication**

## LIST OF NATIVE AMERICAN CONTACTS AND RECORD OF RESPONSES

Name	Date	Responses
Katherine Saubel Foundation	October 2, 2018  October 16, 2018	Scoping letter sent via USPS.  No email or phone number available to conduct follow-up. No response received.
Patricia Garcia-Plotkin Director Tribal Historic Preservation Office Agua Caliente Band of Cahuilla Indians	October 2, 2018  October 16, 2018	Scoping letter sent via email.  E-mailed follow-up effort for correspondence. No response received.
Amanda Vance Chairperson Augustine Band of Cahuilla Indians	October 2, 2018  October 16, 2018	Scoping letter sent via email.  E-mailed follow-up effort for correspondence. No response received.
Doug Welmas Chairperson Cabazon Band of Mission Indians	October 2, 2018  Letter dated October 2, 2018	Scoping letter sent via email.  Received letter response from Judy Stapp, Director of Cultural Affairs for the Tribe. Ms. Stapp notes the Project is located outside of the Tribe's current reservation boundaries. The Tribe has no specific archival information on the site indicating that it may be a sacred/religious site or other site of Native American traditional cultural value within the Project area.
Daniel Salgado Chairperson Cahuilla Band of Indians	October 2, 2018  October 3, 2018	Scoping letter sent via email.  Received email response from BobbyRay Esparza, Cultural Coordinator for the Tribe. Mr. Esparza notes that the Cahuilla Band has concerns with unearthing cultural resources during construction. Therefore, they request cultural monitors be present during all ground-disturbing activities. The Tribe also requests to be notified of all updates and/or changes with the Project moving forward.

Name	Date	Responses
Shane Chapparosa Chairman Los Coyotes Band of Cahuilla and Cupeno Indians	October 2, 2018  October 16, 2018	Scoping letter sent via email.  E-mailed follow-up effort for correspondence. No response received.
Robert Martin Chairperson Morongo Band of Mission Indians	October 2, 2018  October 3, 2018	Scoping letter sent via email.  Received email response from Travis Armstrong, Tribal Historic Preservation Officer for the Tribe. Mr. Armstrong notes the Project is within a sensitive area for tribal cultural resources associated with the people of the Morongo Band of Mission Indians (MBMI). Therefore, the Tribe requests a thorough records search be conducted, participation in the pedestrian survey or a copy of the Phase I study as soon as it can be made available, and a MBMI Tribal Cultural Resource Monitor be present during all required ground disturbing activities pertaining to the Project.
Joseph Hamilton Chairman Ramona Band of Cahuilla	October 2, 2018  October 16, 2018	Scoping letter sent via email.  E-mailed follow-up effort for correspondence. No response received.
Steven Estrada Chairman Santa Rosa Band of Cahuilla Indians	October 2, 2018  October 16, 2018	Scoping letter sent via email.  E-mailed follow-up effort for correspondence.  Received email response later in the day from Mr. Estrada who noted the Santa Rosa Band of Cahuilla Indians will defer further consultation and monitoring for the Project to the Soboba Band of Luiseño Indians.
Joseph Ontiveros Cultural Resource Department Soboba Band of Luiseño Indians	October 2, 2018  October 16, 2018	Scoping letter sent via email.  E-mailed follow-up effort for correspondence. No response received.

Name	Date	Responses
Michael Mirelez Cultural Resource Coordinator Torres-Martinez Desert Cahuilla Indians	October 2, 2018  October 16, 2018	Scoping letter sent via email.  E-mailed follow-up effort for correspondence. No response received.

# **Sacred Lands File & Native American Contacts List Request**

## **Native American Heritage Commission**

1550 Harbor Boulevard, Suite 100

West Sacramento, CA 95691

916-373-3710

916-657-5390 – Fax

[nahc@nahc.ca.gov](mailto:nahc@nahc.ca.gov)

*Information Below is Required for a Sacred Lands File Search*

**Date:** 9/4/2018

**Project:** Sycamore Hills Distribution Center (AE#3931)

**County:** Riverside

**USGS Quadrangle Name:** Riverside East

**Township:** 3S                      **Range:** 4W                      **Section(s):** 8 & 9

**Company/Firm/Agency:** Applied EarthWorks, Inc.

**Contact Person:** Kholood Abdo Hintzman

**Street Address:** 3550 East Florida Avenue, Suite H

**City:** Hemet                      **Zip:** 92544

**Phone:** (951) 766-2000

**Fax:** (951) 766-0020

**Email:** kahintzman@appliedearthworks.com

### **Project Description:**

Cultural Resources Assessment of approximately 37 acres of land north of East Alessandro Boulevard, east of Barton Street, and south of the Sycamore Canyon Regional Park for the proposed Sycamore Hills Distribution Center in the City of Riverside, Riverside County. California Environmental Quality Act compliance.

**NATIVE AMERICAN HERITAGE COMMISSION**

Environmental and Cultural Department  
1550 Harbor Blvd., ROOM 100  
West SACRAMENTO, CA 95691  
(916) 373-3710  
Fax (916) 373-5471



September 11, 2018

Kholood Abdo Hintzman  
Applied EarthWorks, Inc.

Sent by Email: kahintzman@appliedearthworks.com

Re : Sycamore Hills Distribution Center AE3931, Riverside County

Dear Kholood,

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results indicate Native American cultural sites are present. Please contact the Katherine Saubel, Box 373, Banning, CA 92220. Other sources for cultural resources should also be contacted for information regarding known and/or recorded sites.

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

If you receive notification of change of addresses and phone numbers from any of these tribes, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at frank.lienert@nahc.ca.gov.

Sincerely,



Frank Lienert  
Associate Governmental Program Analyst



**Native American Heritage Commission  
Native American Contacts  
September 11, 2018**

Cabazon Band of Mission Indians  
Doug Welmas. Chairperson  
84-245 Indio Springs Parkway Cahuilla  
Indio , CA 92203  
(760) 342-2593

(760) 347-7880 Fax

Los Covotes Band of Cahuilla and Cupeno Indians  
Shane Chapparosa. Chairman  
P.O. Box 189 Cahuilla  
Warner Springs , CA 92086-01  
Chapparosa@msn.com  
(760) 782-0711

(760) 782-0712 Fax

Ramona Band of Cahuilla  
Joseph Hamilton. Chairman  
P.O. Box 391670 Cahuilla  
Anza , CA 92539  
admin@ramonatribe.com  
(951) 763-4105

(951) 763-4325 Fax

Santa Rosa Band of Cahuilla Indians  
Steven Estrada. Chairman  
P.O. Box 391820 Cahuilla  
Anza , CA 92539  
(951) 659-2700

(951) 659-2228 Fax

Augustine Band of Cahuilla Indians  
Amanda Vance. Chairperson  
P.O. Box 846 Cahuilla  
Coachella , CA 92236  
(760) 398-4722  
(760) 369-7161 Fax

Aqua Caliente Band of Cahuilla Indians  
Jeff Grubbe. Chairperson  
5401 Dinah Shore Drive Cahuilla  
Palm Springs , CA 92264  
(760) 699-6800

(760) 699-6919 Fax

Morongo Band of Mission Indians  
Robert Martin. Chairperson  
12700 Pumarra Road Cahuilla  
Banning , CA 92220 Serrano  
(951) 849-8807  
(951) 755-5200  
(951) 922-8146 Fax

Aqua Caliente Band of Cahuilla Indians  
Patricia Garcia-Plotkin. Director. THPO  
5401 Dinah Shore Drive Cahuilla  
Palm Springs , CA 92264  
ACBCI-THPO@aguacaliente.net  
(760) 699-6907  
(760) 567-3761 Cell  
(760) 699-6924 Fax

Cahuilla Band of Indians  
Daniel Salgado. Chairperson  
52701 U. S. Highway 371 Cahuilla  
Anza , CA 92539  
Chairman@cahuilla.net  
(951) 763-5549  
(951) 763-2808

Soboba Band of Luiseno Indians  
Joseph Ontiveros. Cultural Resource Department  
P.O. BOX 487 Luiseno  
San Jacinto , CA 92581 Cahuilla  
iontiveros@soboba-nsn.gov  
(951) 663-5279  
(951) 654-5544 ext 4127  
(951) 654-4198 Fax

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced.

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

This list is only applicable for contacting local Native American Tribes with regard to cultural resources assessments for the proposed  
**Sycamore Hills Distribution Center AE3931, Riverside County**

**Native American Heritage Commission  
Native American Contacts  
September 11, 2018**

Torres-Martinez Desert Cahuilla Indians  
Michael Mirelez, Cultural Resource Coordinator  
P.O. Box 1160 Cahuilla  
Thermal, CA 92274  
mmirelez@tmdci.org  
(760) 399-0022, Ext. 1213

(760) 397-8146 Fax

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced.

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

This list is only applicable for contacting local Native American Tribes with regard to cultural resources assessments for the proposed  
**Sycamore Hills Distribution Center AE3931, Riverside County**



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

October 2, 2018

Alicia Benally  
Cultural Resource Specialist  
Morongo Band of Mission Indians  
12700 Pumarra Road  
Banning, CA, 92220

Re: Cultural Resource Assessment for the Sycamore Hills Distribution Center Project, City of Riverside, Riverside County, California.

Dear Ms. Benally:

On behalf of Ruth Villalobos & Associates, Inc., Applied EarthWorks, Inc. (Æ) is conducting a cultural resource study for the Sycamore Hills Distribution Center Project (Project). The Project involves the construction of two warehouse buildings on approximately 37 acres of land north of East Alessandro Boulevard, east of Barton Street, and south of the Sycamore Canyon Regional Park, in the City of Riverside. The Project will require a permit from the US Army Corp. of Engineers (USACE) and is also subject to the California Environmental Quality Act (CEQA). The City of Riverside is the lead CEQA agency. As indicated on the attached map, the Project is located on the Riverside East, CA 7.5' USGS quadrangle map within Township 3S / Range 4W, Sections 8 & 9, San Bernardino Baseline and Meridian (S.B.B.M.).

The archaeological literature and records search conducted at the Eastern Information Center housed at the University of California, Riverside, indicates that 21 cultural resources studies have been conducted within a one-mile radius of the Project area. Four of these studies covered the entire Project area. One hundred eighty-one cultural resource sites have been recorded within a one-mile radius of the Project area. Four of these resources (all prehistoric bedrock milling sites) are documented within the Project area. Æ was contracted to perform an archaeological survey of the Project area. The survey was completed on October 1, 2018 and transects spacing ranged from 10 to 15 meters. The four sites were re-identified during the field effort and three prehistoric bedrock milling sites were newly documented during the survey.

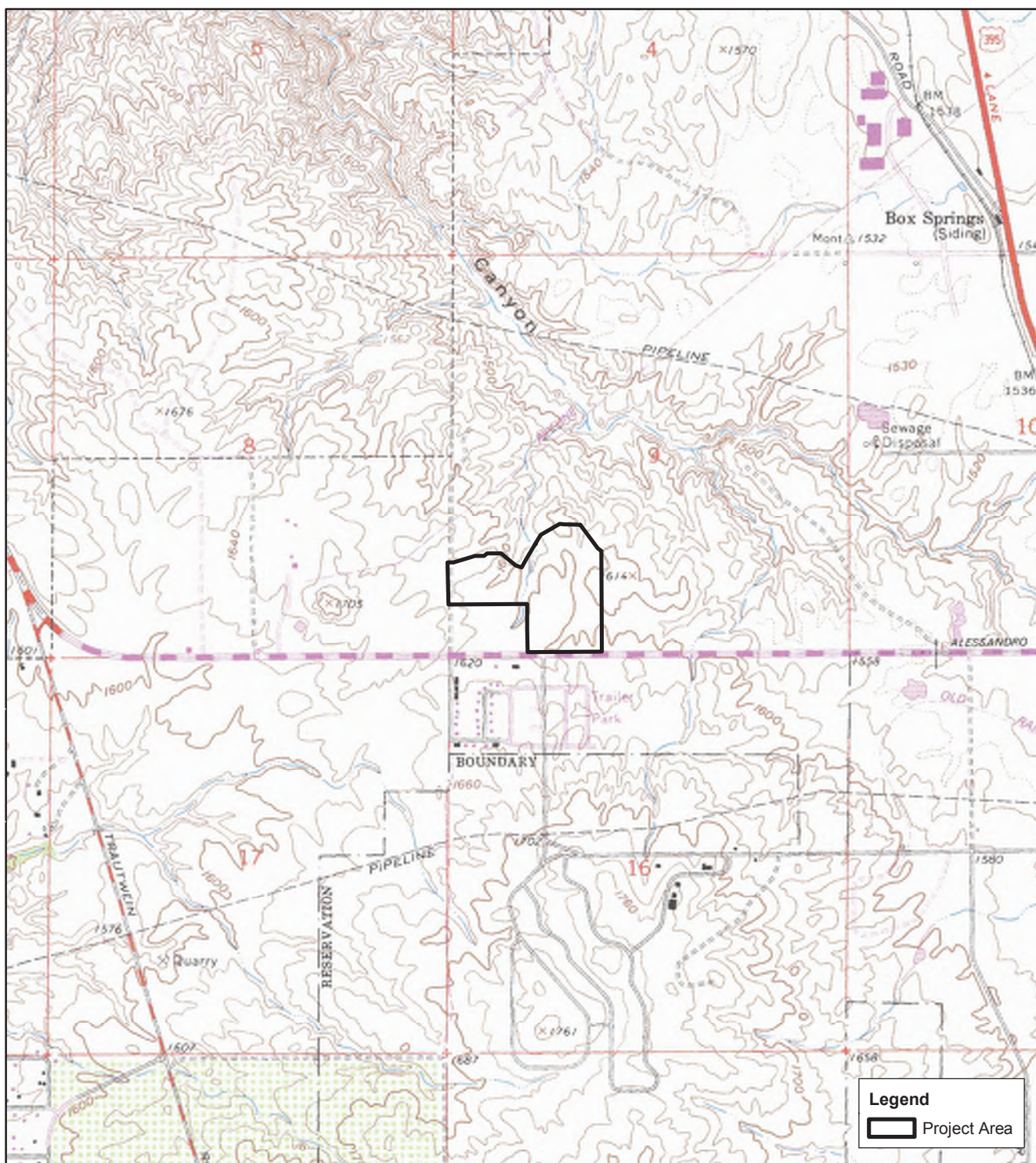
As part of the cultural resource assessment of the Project area, Æ requested a search of the *Sacred Lands File* by the Native American Heritage Commission (NAHC) on September 4, 2018. The NAHC responded on September 11, 2018 noting that Native American cultural sites are present within the Project area. Should your records show that cultural properties exist within or near the Project area shown on the enclosed map, or if you have any concerns regarding Native American issues related to the overall Project, please contact me at (951) 766-2000 or via letter expressing your concerns. You may also e-mail me at [jgeorge@appliedearthworks.com](mailto:jgeorge@appliedearthworks.com). If I do not hear from you within the next two weeks, I will contact you with a follow-up phone call or email.

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

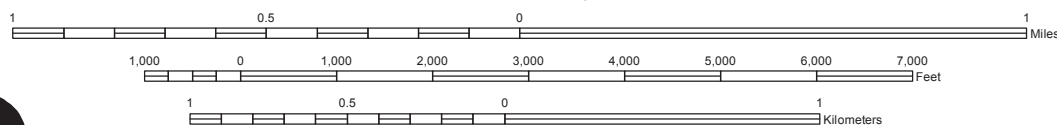
Respectfully yours,

A handwritten signature in black ink that reads "Joan George". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Joan George  
Associate Archaeologist  
Applied EarthWorks, Inc.



SCALE 1:24,000



Township 3 S. /Range 4 W., Sections 8 and 9; SBB&M  
Riverside East (1967, photorevised 1980), CA 7.5' USGS Quadrangle

Location map for the *Sycamore Hills Project - AE #3931*.





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

October 2, 2018

Shane Chapparosa  
Chairperson  
Los Coyotes Band of Cahuilla and Cupeño Indians  
P.O. Box 189  
Warner Springs, CA 92086

Re: Cultural Resource Assessment for the Sycamore Hills Distribution Center Project, City of Riverside, Riverside County, California.

Dear Mr. Chapparosa:

On behalf of Ruth Villalobos & Associates, Inc., Applied EarthWorks, Inc. (Æ) is conducting a cultural resource study for the Sycamore Hills Distribution Center Project (Project). The Project involves the construction of two warehouse buildings on approximately 37 acres of land north of East Alessandro Boulevard, east of Barton Street, and south of the Sycamore Canyon Regional Park, in the City of Riverside. The Project will require a permit from the US Army Corp. of Engineers (USACE) and is also subject to the California Environmental Quality Act (CEQA). The City of Riverside is the lead CEQA agency. As indicated on the attached map, the Project is located on the Riverside East, CA 7.5' USGS quadrangle map within Township 3S / Range 4W, Sections 8 & 9, San Bernardino Baseline and Meridian (S.B.B.M.).

The archaeological literature and records search conducted at the Eastern Information Center housed at the University of California, Riverside, indicates that 21 cultural resources studies have been conducted within a one-mile radius of the Project area. Four of these studies covered the entire Project area. One hundred eighty-one cultural resource sites have been recorded within a one-mile radius of the Project area. Four of these resources (all prehistoric bedrock milling sites) are documented within the Project area. Æ was contracted to perform an archaeological survey of the Project area. The survey was completed on October 1, 2018 and transects spacing ranged from 10 to 15 meters. The four sites were re-identified during the field effort and three prehistoric bedrock milling sites were newly documented during the survey.

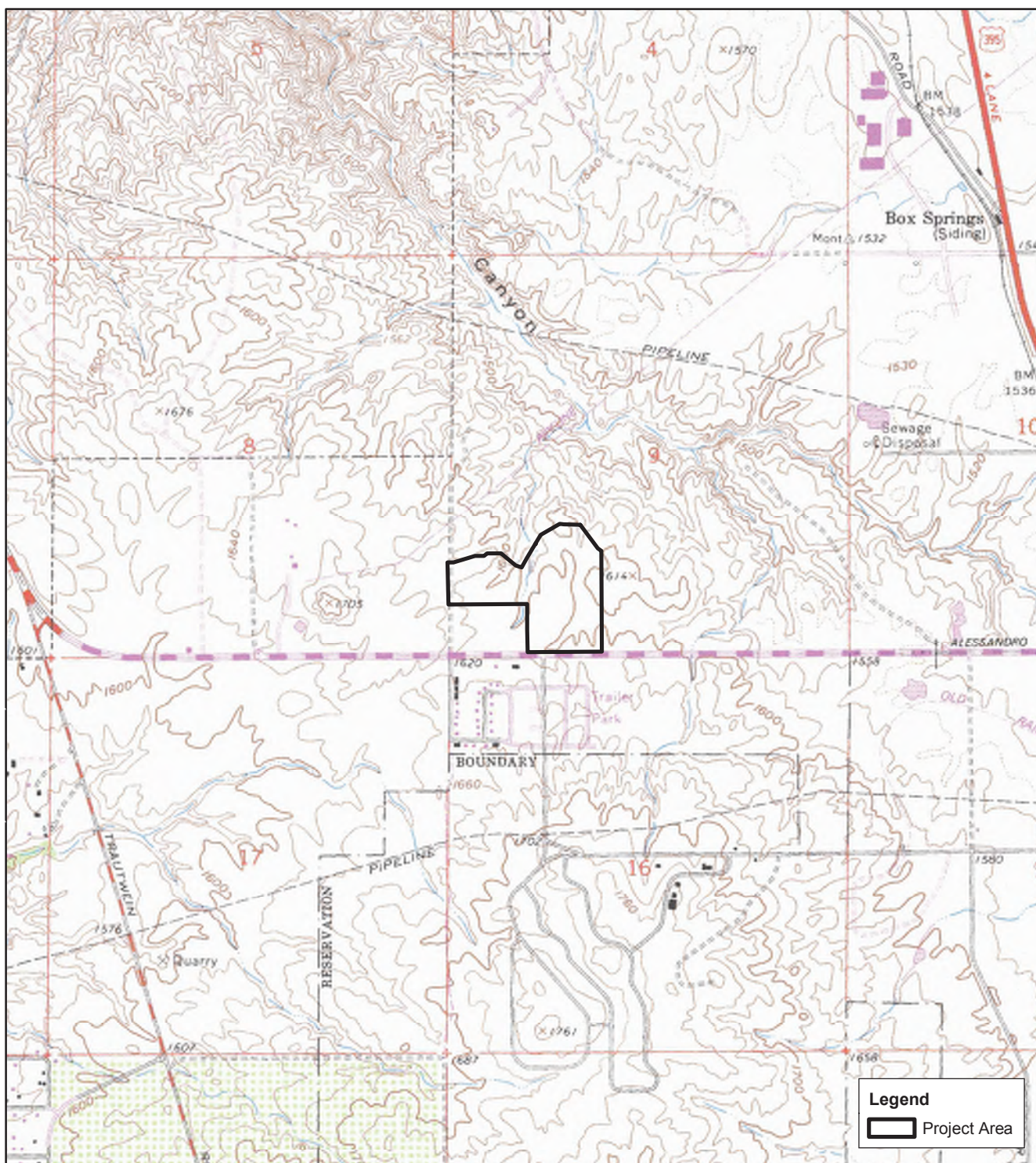
As part of the cultural resource assessment of the Project area, Æ requested a search of the *Sacred Lands File* by the Native American Heritage Commission (NAHC) on September 4, 2018. The NAHC responded on September 11, 2018 noting that Native American cultural sites are present within the Project area. Should your records show that cultural properties exist within or near the Project area shown on the enclosed map, or if you have any concerns regarding Native American issues related to the overall Project, please contact me at (951) 766-2000 or via letter expressing your concerns. You may also e-mail me at [jgeorge@appliedearthworks.com](mailto:jgeorge@appliedearthworks.com). If I do not hear from you within the next two weeks, I will contact you with a follow-up phone call or email.

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

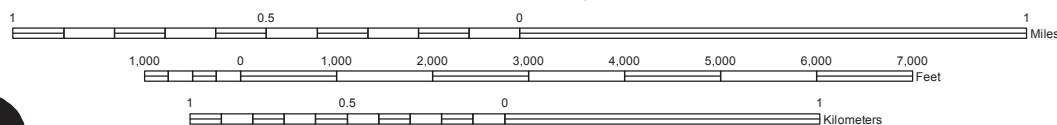
Respectfully yours,

A handwritten signature in black ink that reads "Joan George". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Joan George  
Associate Archaeologist  
Applied EarthWorks, Inc.



SCALE 1:24,000



Township 3 S. /Range 4 W., Sections 8 and 9; SBB&M  
Riverside East (1967, photorevised 1980), CA 7.5' USGS Quadrangle

Location map for the *Sycamore Hills Project - AE #3931*.

October 2, 2018

Steven Estrada  
Chairperson  
Santa Rosa Band of Mission Indians  
P. O. Box 391820  
Anza, CA 92539

Re: Cultural Resource Assessment for the Sycamore Hills Distribution Center Project, City of Riverside, Riverside County, California.

Dear Mr. Estrada:

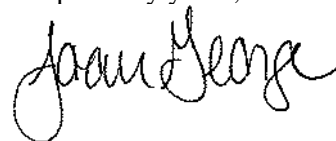
On behalf of Ruth Villalobos & Associates, Inc., Applied EarthWorks, Inc. (Æ) is conducting a cultural resource study for the Sycamore Hills Distribution Center Project (Project). The Project involves the construction of two warehouse buildings on approximately 37 acres of land north of East Alessandro Boulevard, east of Barton Street, and south of the Sycamore Canyon Regional Park, in the City of Riverside. The Project will require a permit from the US Army Corp. of Engineers (USACE) and is also subject to the California Environmental Quality Act (CEQA). The City of Riverside is the lead CEQA agency. As indicated on the attached map, the Project is located on the Riverside East, CA 7.5' USGS quadrangle map within Township 3S / Range 4W, Sections 8 & 9, San Bernardino Baseline and Meridian (S.B.B.M.).

The archaeological literature and records search conducted at the Eastern Information Center housed at the University of California, Riverside, indicates that 21 cultural resources studies have been conducted within a one-mile radius of the Project area. Four of these studies covered the entire Project area. One hundred eighty-one cultural resource sites have been recorded within a one-mile radius of the Project area. Four of these resources (all prehistoric bedrock milling sites) are documented within the Project area. Æ was contracted to perform an archaeological survey of the Project area. The survey was completed on October 1, 2018 and transects spacing ranged from 10 to 15 meters. The four sites were re-identified during the field effort and three prehistoric bedrock milling sites were newly documented during the survey.

As part of the cultural resource assessment of the Project area, Æ requested a search of the *Sacred Lands File* by the Native American Heritage Commission (NAHC) on September 4, 2018. The NAHC responded on September 11, 2018 noting that Native American cultural sites are present within the Project area. Should your records show that cultural properties exist within or near the Project area shown on the enclosed map, or if you have any concerns regarding Native American issues related to the overall Project, please contact me at (951) 766-2000 or via letter expressing your concerns. You may also e-mail me at [jgeorge@appliedearthworks.com](mailto:jgeorge@appliedearthworks.com). If I do not hear from you within the next two weeks, I will contact you with a follow-up phone call or email.

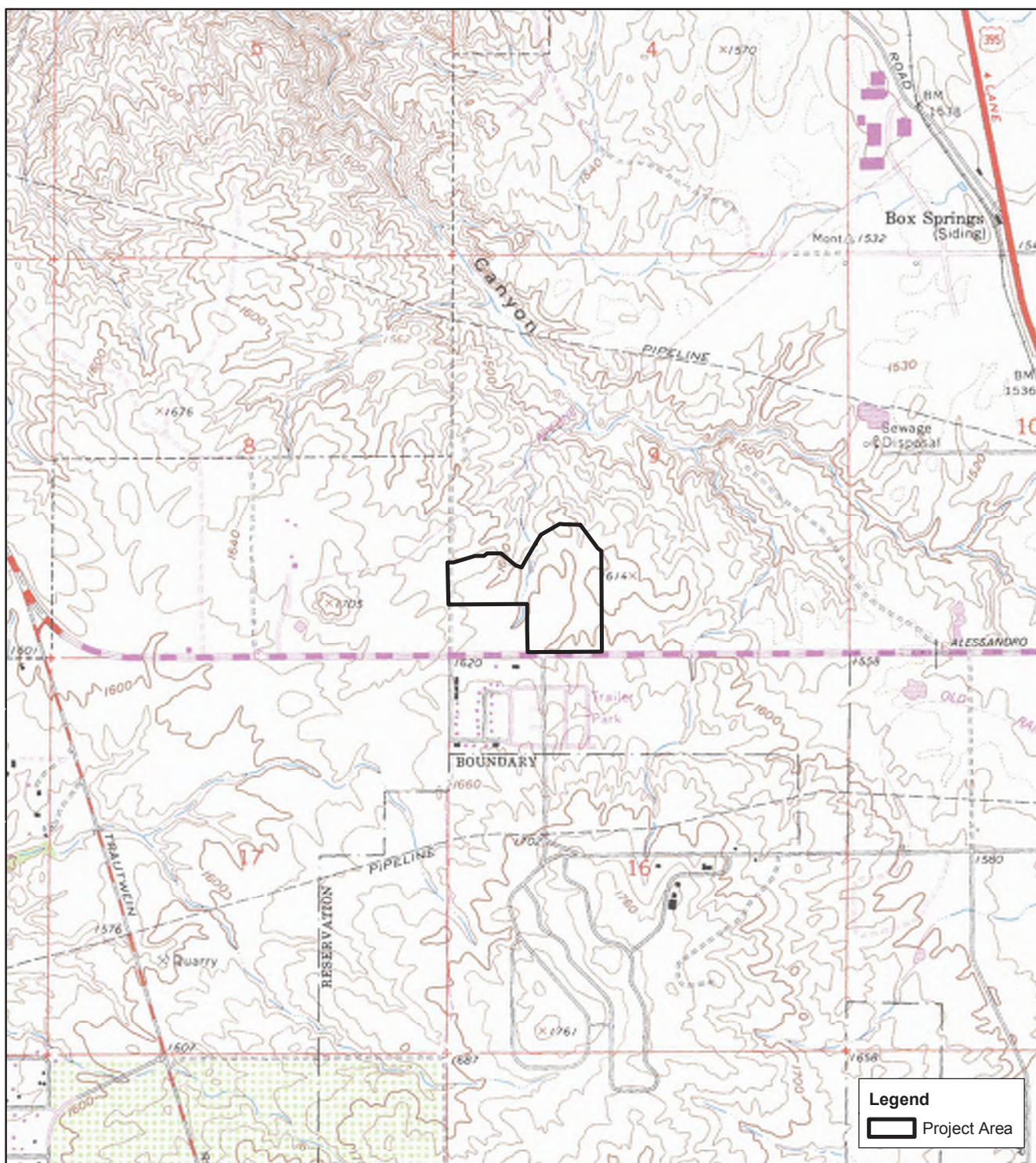
Please be aware that your comments and concerns are very important to us, as well as to the successful completion of this Project. I look forward to hearing from you in the near future. Thank you, in advance, for taking the time to review this request.

Respectfully yours,

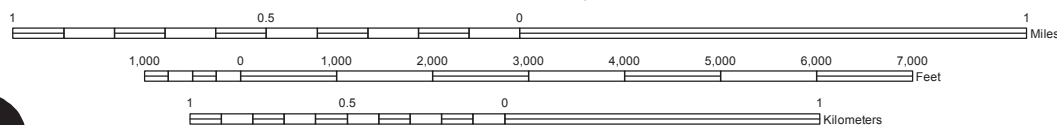


Joan George  
Associate Archaeologist  
Applied EarthWorks, Inc.





SCALE 1:24,000



Township 3 S. /Range 4 W., Sections 8 and 9; SBB&M  
Riverside East (1967, photorevised 1980), CA 7.5' USGS Quadrangle

Location map for the *Sycamore Hills Project - AE #3931*.



October 2, 2018

Patricia Garcia-Plotkin  
Director/Tribal Historic Preservation Officer  
Agua Caliente Band of Cahuilla Indians  
5401 Dinah Shore Drive  
Palm Springs, CA 92264

Re: Cultural Resource Assessment for the Sycamore Hills Distribution Center Project, City of Riverside, Riverside County, California.

Dear Ms. Garcia-Plotkin:

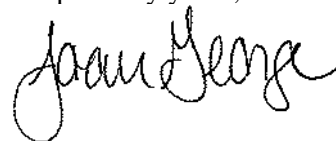
On behalf of Ruth Villalobos & Associates, Inc., Applied EarthWorks, Inc. (Æ) is conducting a cultural resource study for the Sycamore Hills Distribution Center Project (Project). The Project involves the construction of two warehouse buildings on approximately 37 acres of land north of East Alessandro Boulevard, east of Barton Street, and south of the Sycamore Canyon Regional Park, in the City of Riverside. The Project will require a permit from the US Army Corp. of Engineers (USACE) and is also subject to the California Environmental Quality Act (CEQA). The City of Riverside is the lead CEQA agency. As indicated on the attached map, the Project is located on the Riverside East, CA 7.5' USGS quadrangle map within Township 3S / Range 4W, Sections 8 & 9, San Bernardino Baseline and Meridian (S.B.B.M.).

The archaeological literature and records search conducted at the Eastern Information Center housed at the University of California, Riverside, indicates that 21 cultural resources studies have been conducted within a one-mile radius of the Project area. Four of these studies covered the entire Project area. One hundred eighty-one cultural resource sites have been recorded within a one-mile radius of the Project area. Four of these resources (all prehistoric bedrock milling sites) are documented within the Project area. Æ was contracted to perform an archaeological survey of the Project area. The survey was completed on October 1, 2018 and transects spacing ranged from 10 to 15 meters. The four sites were re-identified during the field effort and three prehistoric bedrock milling sites were newly documented during the survey.

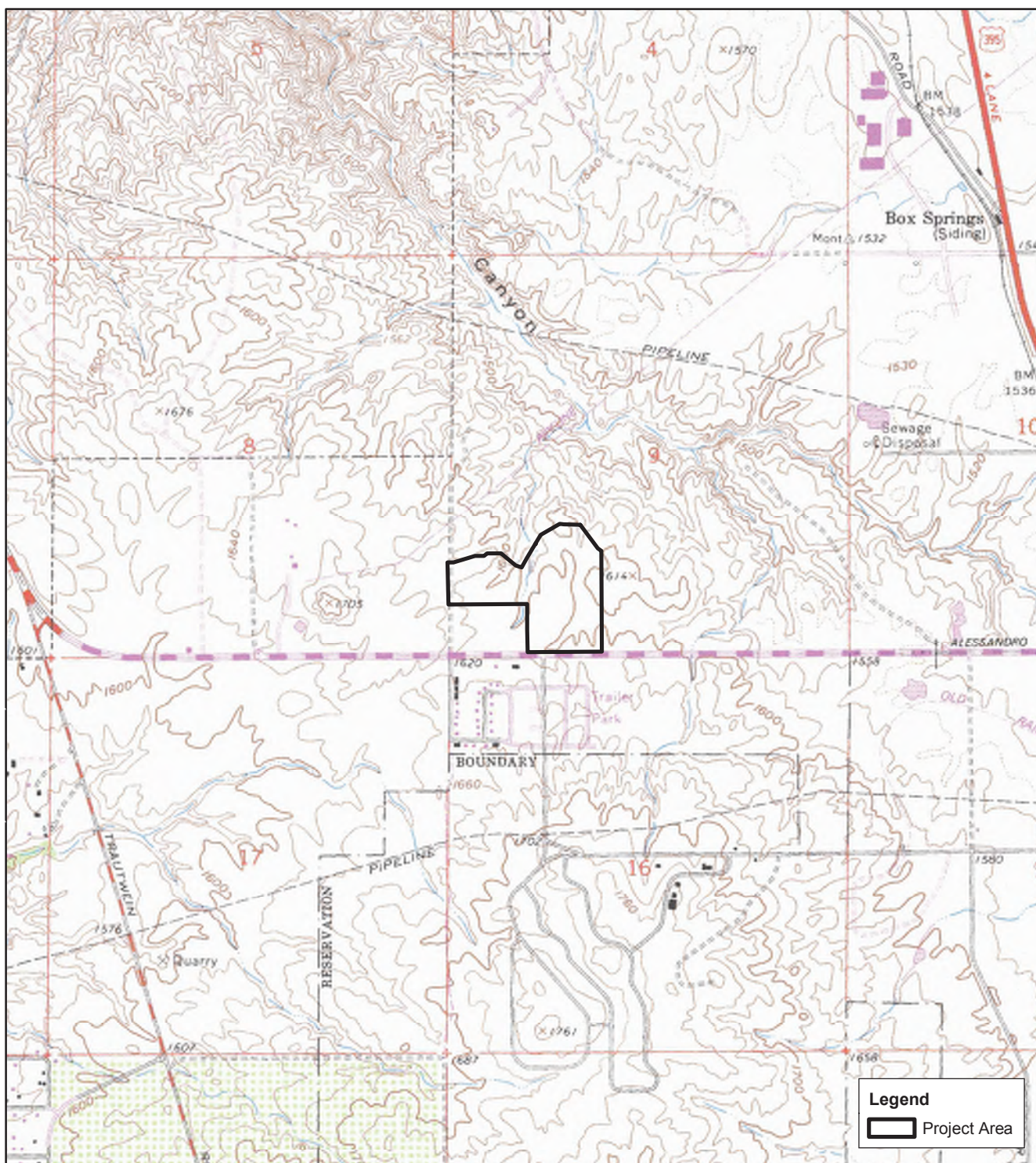
As part of the cultural resource assessment of the Project area, Æ requested a search of the *Sacred Lands File* by the Native American Heritage Commission (NAHC) on September 4, 2018. The NAHC responded on September 11, 2018 noting that Native American cultural sites are present within the Project area. Should your records show that cultural properties exist within or near the Project area shown on the enclosed map, or if you have any concerns regarding Native American issues related to the overall Project, please contact me at (951) 766-2000 or via letter expressing your concerns. You may also e-mail me at [jgeorge@appliedearthworks.com](mailto:jgeorge@appliedearthworks.com). If I do not hear from you within the next two weeks, I will contact you with a follow-up phone call or email.

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

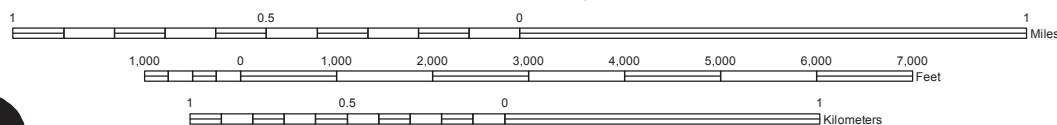
Respectfully yours,



Joan George  
Associate Archaeologist  
Applied EarthWorks, Inc.



SCALE 1:24,000



Township 3 S. /Range 4 W., Sections 8 and 9; SBB&M  
Riverside East (1967, photorevised 1980), CA 7.5' USGS Quadrangle

Location map for the *Sycamore Hills Project - AE #3931*.

October 2, 2018

Joseph Hamilton  
Chairman  
Ramona Band of Cahuilla  
P.O. Box 391670  
Anza, CA 92539

Re: Cultural Resource Assessment for the Sycamore Hills Distribution Center Project, City of Riverside, Riverside County, California.

Dear Mr. Hamilton:

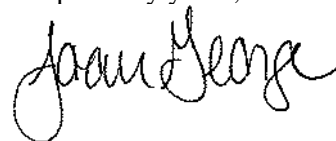
On behalf of Ruth Villalobos & Associates, Inc., Applied EarthWorks, Inc. (Æ) is conducting a cultural resource study for the Sycamore Hills Distribution Center Project (Project). The Project involves the construction of two warehouse buildings on approximately 37 acres of land north of East Alessandro Boulevard, east of Barton Street, and south of the Sycamore Canyon Regional Park, in the City of Riverside. The Project will require a permit from the US Army Corp. of Engineers (USACE) and is also subject to the California Environmental Quality Act (CEQA). The City of Riverside is the lead CEQA agency. As indicated on the attached map, the Project is located on the Riverside East, CA 7.5' USGS quadrangle map within Township 3S / Range 4W, Sections 8 & 9, San Bernardino Baseline and Meridian (S.B.B.M.).

The archaeological literature and records search conducted at the Eastern Information Center housed at the University of California, Riverside, indicates that 21 cultural resources studies have been conducted within a one-mile radius of the Project area. Four of these studies covered the entire Project area. One hundred eighty-one cultural resource sites have been recorded within a one-mile radius of the Project area. Four of these resources (all prehistoric bedrock milling sites) are documented within the Project area. Æ was contracted to perform an archaeological survey of the Project area. The survey was completed on October 1, 2018 and transects spacing ranged from 10 to 15 meters. The four sites were re-identified during the field effort and three prehistoric bedrock milling sites were newly documented during the survey.

As part of the cultural resource assessment of the Project area, Æ requested a search of the *Sacred Lands File* by the Native American Heritage Commission (NAHC) on September 4, 2018. The NAHC responded on September 11, 2018 noting that Native American cultural sites are present within the Project area. Should your records show that cultural properties exist within or near the Project area shown on the enclosed map, or if you have any concerns regarding Native American issues related to the overall Project, please contact me at (951) 766-2000 or via letter expressing your concerns. You may also e-mail me at [jgeorge@appliedearthworks.com](mailto:jgeorge@appliedearthworks.com). If I do not hear from you within the next two weeks, I will contact you with a follow-up phone call or email.

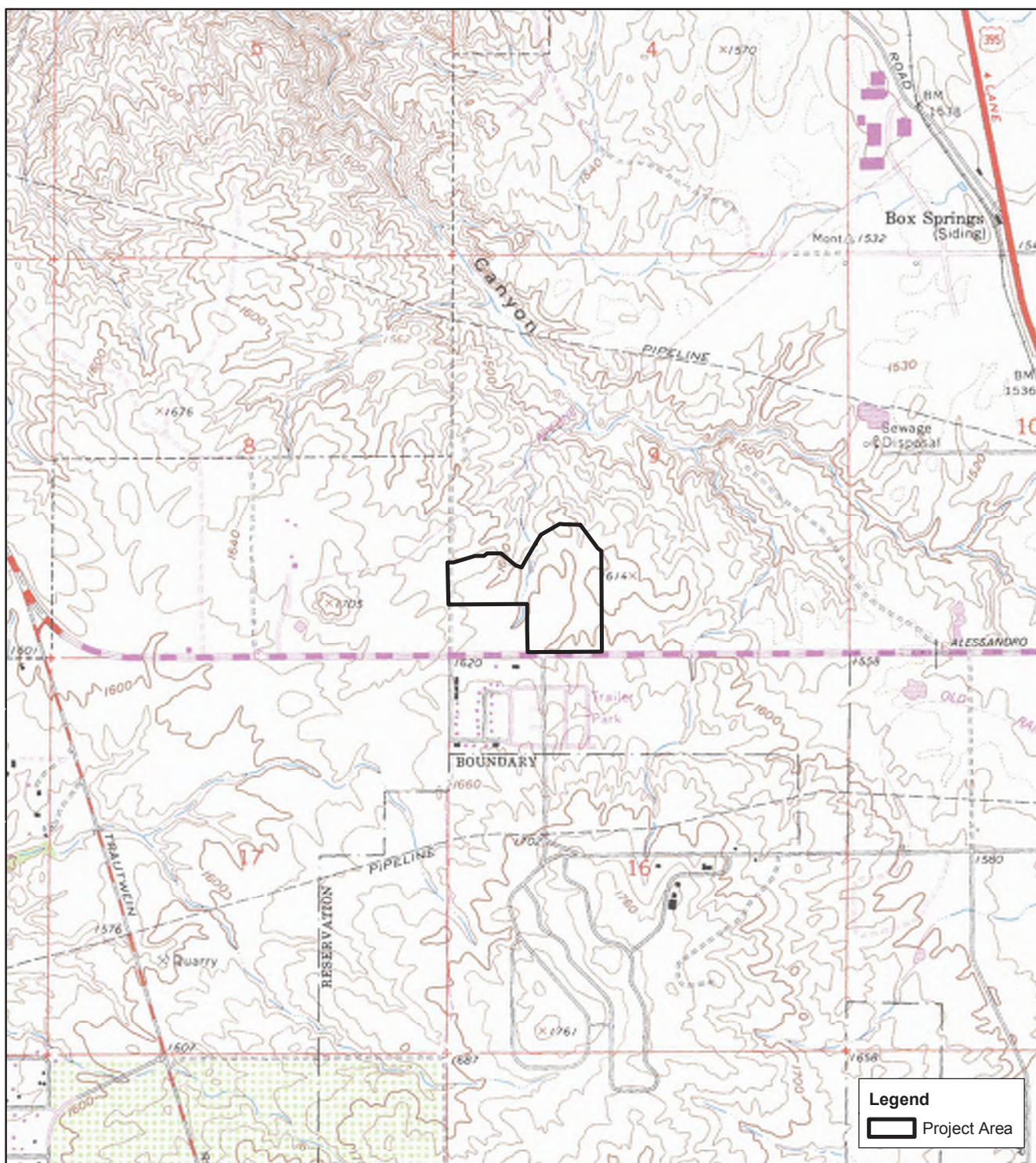
Please be aware that your comments and concerns are very important to us, as well as to the successful completion of this Project. I look forward to hearing from you in the near future. Thank you, in advance, for taking the time to review this request.

Respectfully yours,

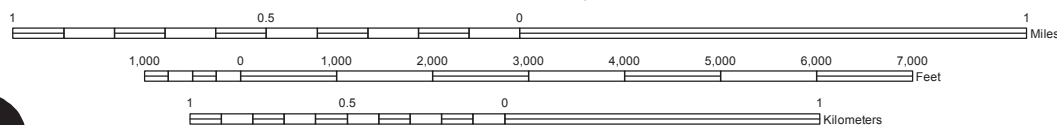


Joan George  
Associate Archaeologist  
Applied EarthWorks, Inc.





SCALE 1:24,000



Township 3 S. /Range 4 W., Sections 8 and 9; SBB&M  
Riverside East (1967, photorevised 1980), CA 7.5' USGS Quadrangle

Location map for the *Sycamore Hills Project - AE #3931*.



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

October 2, 2018

Michael Mirelez  
Cultural Resource Coordinator  
Torres-Martinez Desert Cahuilla Indians  
P. O. Box 1160  
Thermal, CA 92274

Re: Cultural Resource Assessment for the Sycamore Hills Distribution Center Project, City of Riverside, Riverside County, California.

Dear Mr. Mirelez:

On behalf of Ruth Villalobos & Associates, Inc., Applied EarthWorks, Inc. (Æ) is conducting a cultural resource study for the Sycamore Hills Distribution Center Project (Project). The Project involves the construction of two warehouse buildings on approximately 37 acres of land north of East Alessandro Boulevard, east of Barton Street, and south of the Sycamore Canyon Regional Park, in the City of Riverside. The Project will require a permit from the US Army Corp. of Engineers (USACE) and is also subject to the California Environmental Quality Act (CEQA). The City of Riverside is the lead CEQA agency. As indicated on the attached map, the Project is located on the Riverside East, CA 7.5' USGS quadrangle map within Township 3S / Range 4W, Sections 8 & 9, San Bernardino Baseline and Meridian (S.B.B.M.).

The archaeological literature and records search conducted at the Eastern Information Center housed at the University of California, Riverside, indicates that 21 cultural resources studies have been conducted within a one-mile radius of the Project area. Four of these studies covered the entire Project area. One hundred eighty-one cultural resource sites have been recorded within a one-mile radius of the Project area. Four of these resources (all prehistoric bedrock milling sites) are documented within the Project area. Æ was contracted to perform an archaeological survey of the Project area. The survey was completed on October 1, 2018 and transects spacing ranged from 10 to 15 meters. The four sites were re-identified during the field effort and three prehistoric bedrock milling sites were newly documented during the survey.

As part of the cultural resource assessment of the Project area, Æ requested a search of the *Sacred Lands File* by the Native American Heritage Commission (NAHC) on September 4, 2018. The NAHC responded on September 11, 2018 noting that Native American cultural sites are present within the Project area. Should your records show that cultural properties exist within or near the Project area shown on the enclosed map, or if you have any concerns regarding Native American issues related to the overall Project, please contact me at (951) 766-2000 or via letter expressing your concerns. You may also e-mail me at [jgeorge@appliedearthworks.com](mailto:jgeorge@appliedearthworks.com). If I do not hear from you within the next two weeks, I will contact you with a follow-up phone call or email.

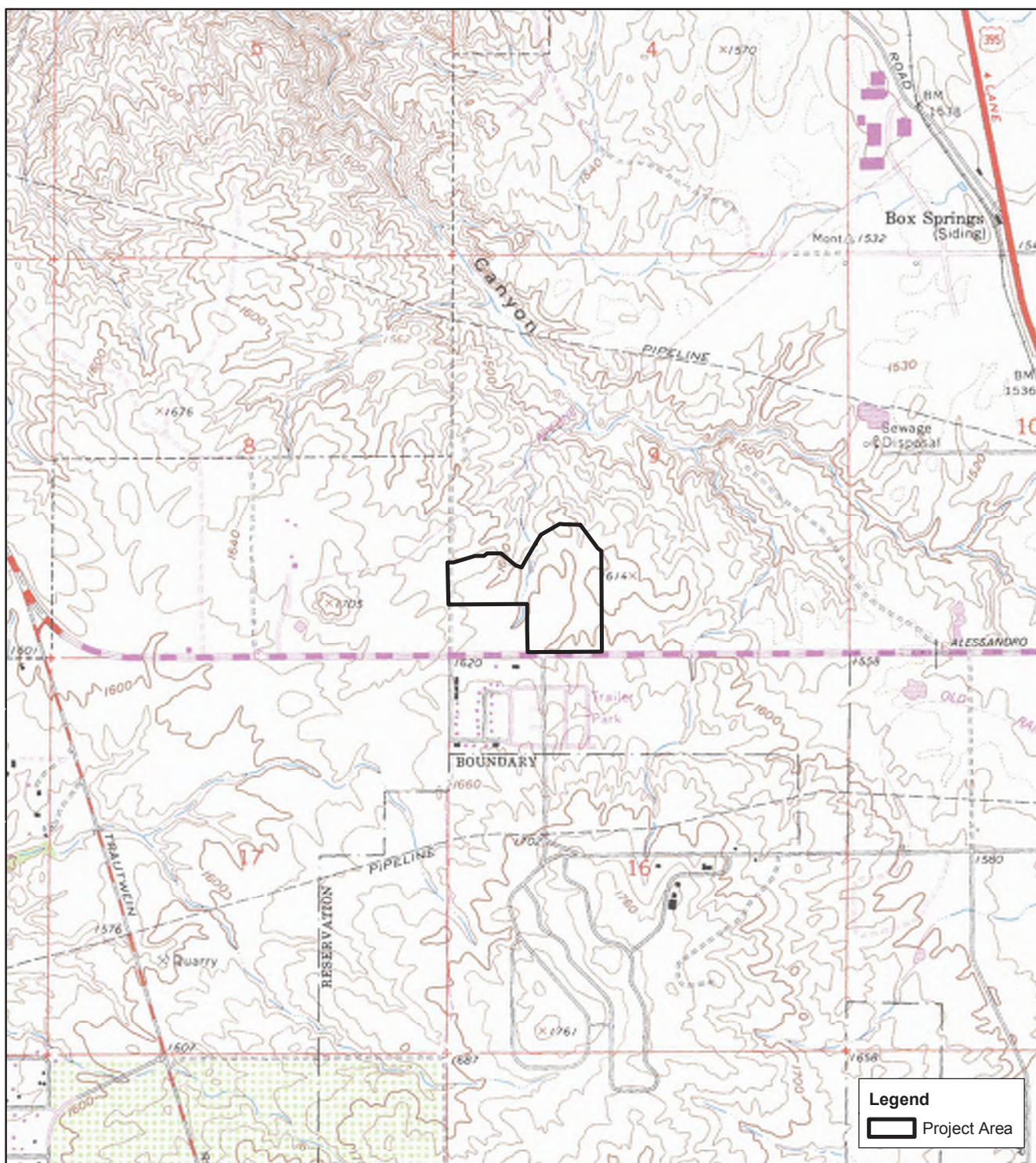
Please be aware that your comments and concerns are very important to us, as well as to the successful completion of this Project. I look forward to hearing from you in the near future. Thank you, in advance, for taking the time to review this request.

Respectfully yours,

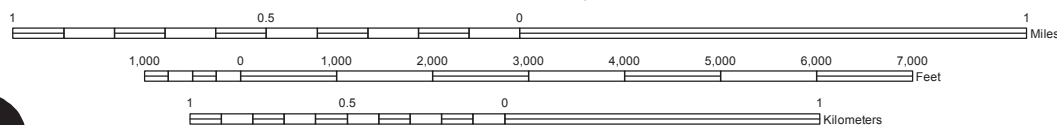
A handwritten signature in black ink that reads "Joan George". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Joan George  
Associate Archaeologist  
Applied EarthWorks, Inc.





SCALE 1:24,000



Township 3 S. /Range 4 W., Sections 8 and 9; SBB&M  
Riverside East (1967, photorevised 1980), CA 7.5' USGS Quadrangle

Location map for the *Sycamore Hills Project - AE #3931*.



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

October 2, 2018

Joseph Ontiveros  
Cultural Resource Department  
Soboba Band of Luiseño Indians  
P.O. Box 487  
San Jacinto, CA 92581

Re: Cultural Resource Assessment for the Sycamore Hills Distribution Center Project, City of Riverside, Riverside County, California.

Dear Mr. Ontiveros:

On behalf of Ruth Villalobos & Associates, Inc., Applied EarthWorks, Inc. (Æ) is conducting a cultural resource study for the Sycamore Hills Distribution Center Project (Project). The Project involves the construction of two warehouse buildings on approximately 37 acres of land north of East Alessandro Boulevard, east of Barton Street, and south of the Sycamore Canyon Regional Park, in the City of Riverside. The Project will require a permit from the US Army Corp. of Engineers (USACE) and is also subject to the California Environmental Quality Act (CEQA). The City of Riverside is the lead CEQA agency. As indicated on the attached map, the Project is located on the Riverside East, CA 7.5' USGS quadrangle map within Township 3S / Range 4W, Sections 8 & 9, San Bernardino Baseline and Meridian (S.B.B.M.).

The archaeological literature and records search conducted at the Eastern Information Center housed at the University of California, Riverside, indicates that 21 cultural resources studies have been conducted within a one-mile radius of the Project area. Four of these studies covered the entire Project area. One hundred eighty-one cultural resource sites have been recorded within a one-mile radius of the Project area. Four of these resources (all prehistoric bedrock milling sites) are documented within the Project area. Æ was contracted to perform an archaeological survey of the Project area. The survey was completed on October 1, 2018 and transects spacing ranged from 10 to 15 meters. The four sites were re-identified during the field effort and three prehistoric bedrock milling sites were newly documented during the survey.

As part of the cultural resource assessment of the Project area, Æ requested a search of the *Sacred Lands File* by the Native American Heritage Commission (NAHC) on September 4, 2018. The NAHC responded on September 11, 2018 noting that Native American cultural sites are present within the Project area. Should your records show that cultural properties exist within or near the Project area shown on the enclosed map, or if you have any concerns regarding Native American issues related to the overall Project, please contact me at (951) 766-2000 or via letter expressing your concerns. You may also e-mail me at [jgeorge@appliedearthworks.com](mailto:jgeorge@appliedearthworks.com). If I do not hear from you within the next two weeks, I will contact you with a follow-up phone call or email.

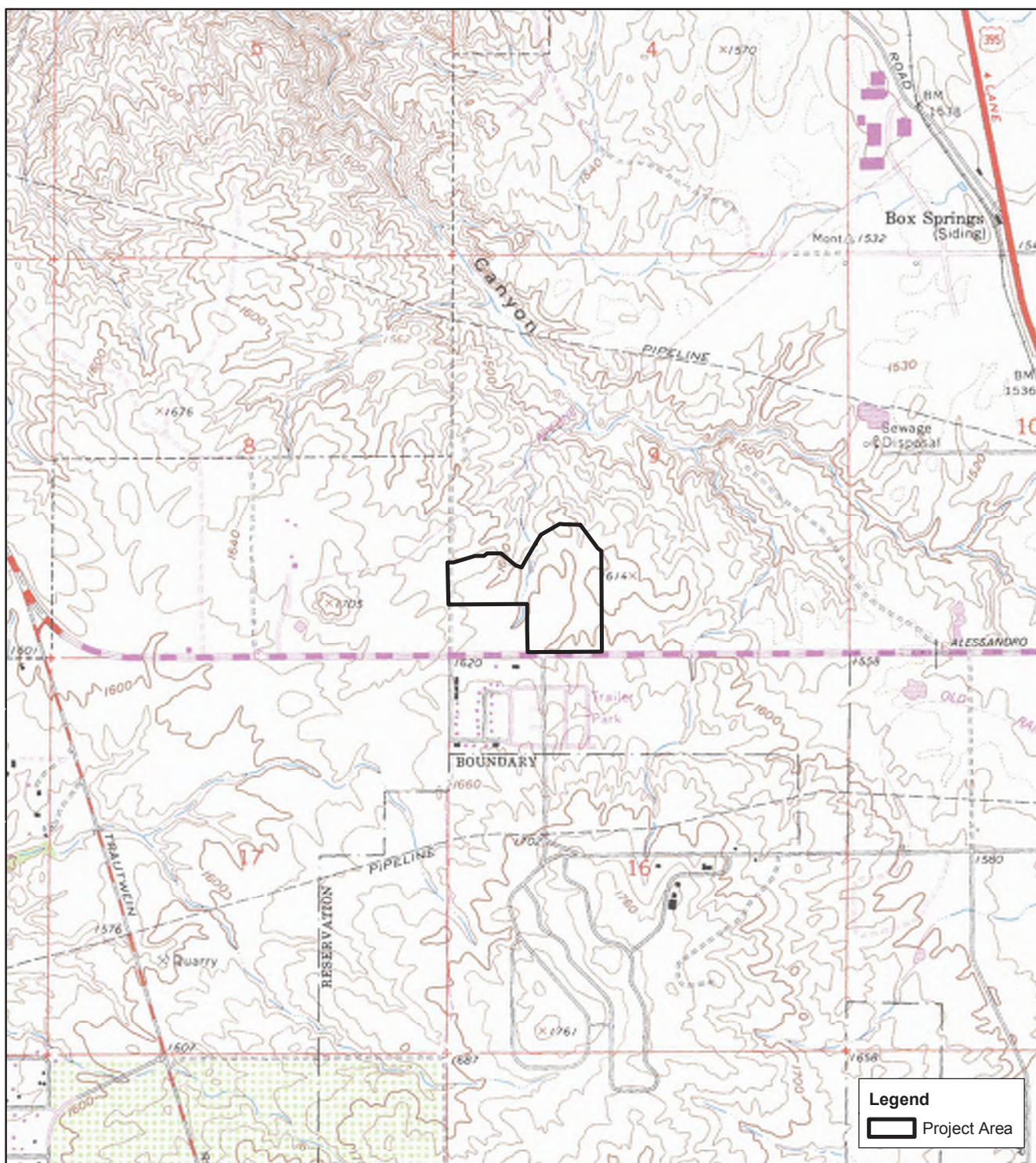
Please be aware that your comments and concerns are very important to us, as well as to the successful completion of this Project. I look forward to hearing from you in the near future. Thank you, in advance, for taking the time to review this request.

Respectfully yours,

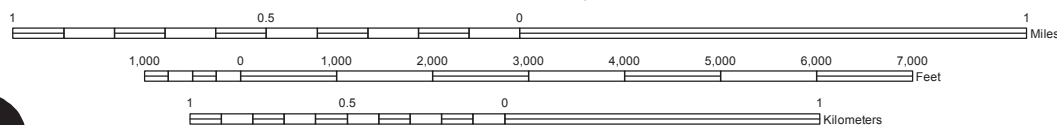
A handwritten signature in black ink that reads "Joan George". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Joan George  
Associate Archaeologist  
Applied EarthWorks, Inc.





SCALE 1:24,000



Township 3 S. /Range 4 W., Sections 8 and 9; SBB&M  
Riverside East (1967, photorevised 1980), CA 7.5' USGS Quadrangle

Location map for the *Sycamore Hills Project - AE #3931*.





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

October 2, 2018

Daniel Salgado  
Chairperson  
Cahuilla Band of Indians  
52701 U.S. Highway 371  
Anza, CA 92539

Re: Cultural Resource Assessment for the Sycamore Hills Distribution Center Project, City of Riverside, Riverside County, California.

Dear Mr. Salgado:

On behalf of Ruth Villalobos & Associates, Inc., Applied EarthWorks, Inc. (Æ) is conducting a cultural resource study for the Sycamore Hills Distribution Center Project (Project). The Project involves the construction of two warehouse buildings on approximately 37 acres of land north of East Alessandro Boulevard, east of Barton Street, and south of the Sycamore Canyon Regional Park, in the City of Riverside. The Project will require a permit from the US Army Corp. of Engineers (USACE) and is also subject to the California Environmental Quality Act (CEQA). The City of Riverside is the lead CEQA agency. As indicated on the attached map, the Project is located on the Riverside East, CA 7.5' USGS quadrangle map within Township 3S / Range 4W, Sections 8 & 9, San Bernardino Baseline and Meridian (S.B.B.M.).

The archaeological literature and records search conducted at the Eastern Information Center housed at the University of California, Riverside, indicates that 21 cultural resources studies have been conducted within a one-mile radius of the Project area. Four of these studies covered the entire Project area. One hundred eighty-one cultural resource sites have been recorded within a one-mile radius of the Project area. Four of these resources (all prehistoric bedrock milling sites) are documented within the Project area. Æ was contracted to perform an archaeological survey of the Project area. The survey was completed on October 1, 2018 and transects spacing ranged from 10 to 15 meters. The four sites were re-identified during the field effort and three prehistoric bedrock milling sites were newly documented during the survey.

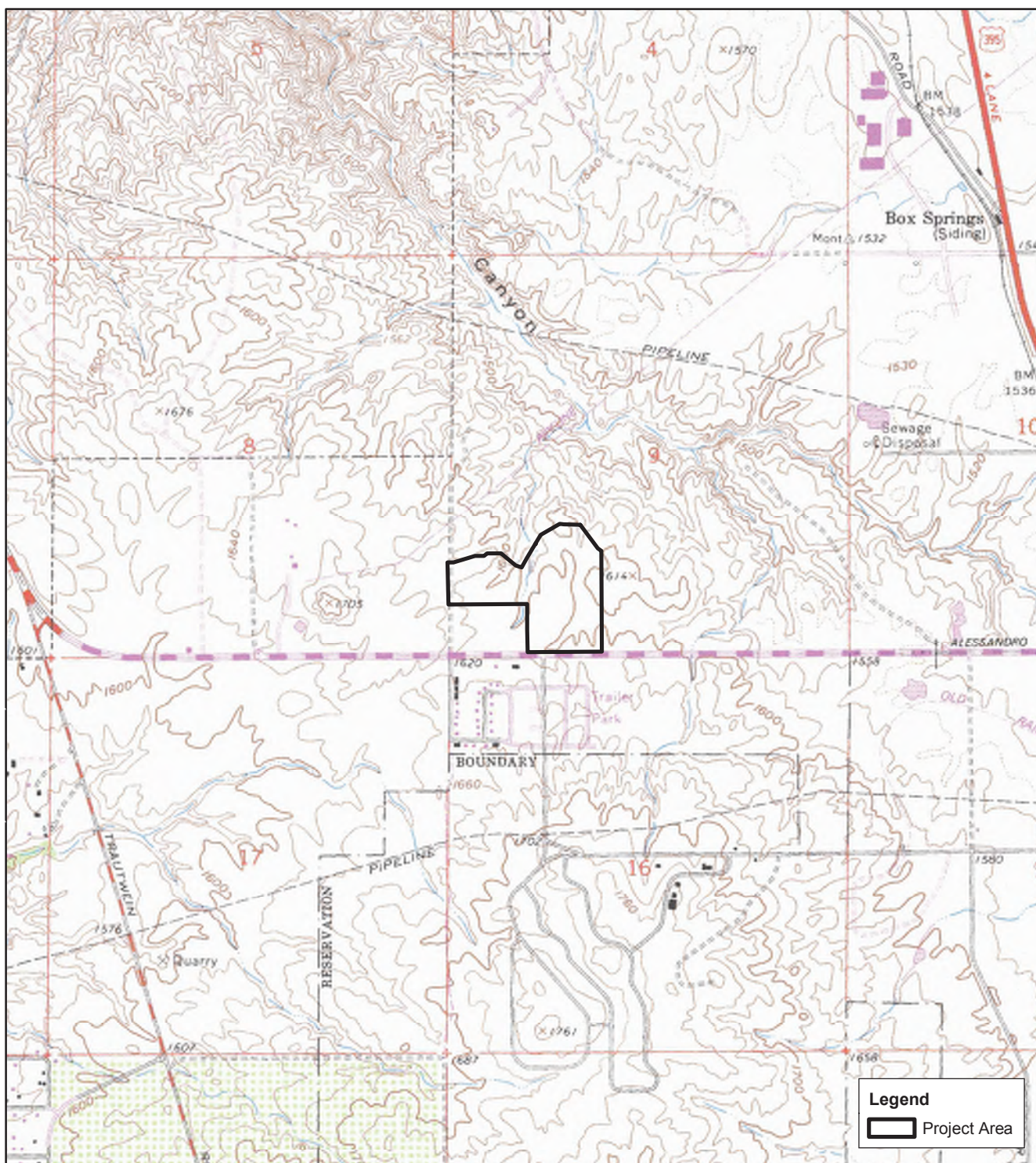
As part of the cultural resource assessment of the Project area, Æ requested a search of the *Sacred Lands File* by the Native American Heritage Commission (NAHC) on September 4, 2018. The NAHC responded on September 11, 2018 noting that Native American cultural sites are present within the Project area. Should your records show that cultural properties exist within or near the Project area shown on the enclosed map, or if you have any concerns regarding Native American issues related to the overall Project, please contact me at (951) 766-2000 or via letter expressing your concerns. You may also e-mail me at [jgeorge@appliedearthworks.com](mailto:jgeorge@appliedearthworks.com). If I do not hear from you within the next two weeks, I will contact you with a follow-up phone call or email.

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

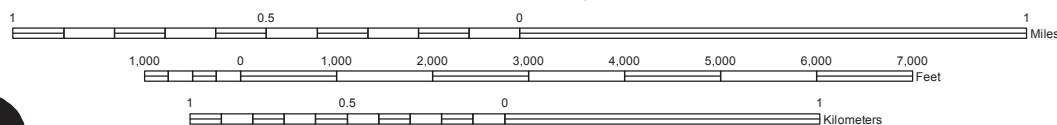
Respectfully yours,

A handwritten signature in black ink that reads "Joan George". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Joan George  
Associate Archaeologist  
Applied EarthWorks, Inc.



SCALE 1:24,000



Township 3 S. /Range 4 W., Sections 8 and 9; SBB&M  
Riverside East (1967, photorevised 1980), CA 7.5' USGS Quadrangle

Location map for the *Sycamore Hills Project - AE #3931*.

October 2, 2018

Amanda Vance  
Chairperson  
Augustine Band of Cahuilla Indians  
P.O. Box 846  
Coachella, CA 92236

Re: Cultural Resource Assessment for the Sycamore Hills Distribution Center Project, City of Riverside, Riverside County, California.

Dear Ms. Vance:

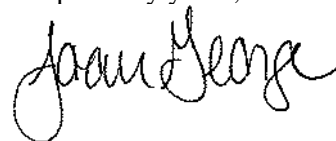
On behalf of Ruth Villalobos & Associates, Inc., Applied EarthWorks, Inc. (Æ) is conducting a cultural resource study for the Sycamore Hills Distribution Center Project (Project). The Project involves the construction of two warehouse buildings on approximately 37 acres of land north of East Alessandro Boulevard, east of Barton Street, and south of the Sycamore Canyon Regional Park, in the City of Riverside. The Project will require a permit from the US Army Corp. of Engineers (USACE) and is also subject to the California Environmental Quality Act (CEQA). The City of Riverside is the lead CEQA agency. As indicated on the attached map, the Project is located on the Riverside East, CA 7.5' USGS quadrangle map within Township 3S / Range 4W, Sections 8 & 9, San Bernardino Baseline and Meridian (S.B.B.M.).

The archaeological literature and records search conducted at the Eastern Information Center housed at the University of California, Riverside, indicates that 21 cultural resources studies have been conducted within a one-mile radius of the Project area. Four of these studies covered the entire Project area. One hundred eighty-one cultural resource sites have been recorded within a one-mile radius of the Project area. Four of these resources (all prehistoric bedrock milling sites) are documented within the Project area. Æ was contracted to perform an archaeological survey of the Project area. The survey was completed on October 1, 2018 and transects spacing ranged from 10 to 15 meters. The four sites were re-identified during the field effort and three prehistoric bedrock milling sites were newly documented during the survey.

As part of the cultural resource assessment of the Project area, Æ requested a search of the *Sacred Lands File* by the Native American Heritage Commission (NAHC) on September 4, 2018. The NAHC responded on September 11, 2018 noting that Native American cultural sites are present within the Project area. Should your records show that cultural properties exist within or near the Project area shown on the enclosed map, or if you have any concerns regarding Native American issues related to the overall Project, please contact me at (951) 766-2000 or via letter expressing your concerns. You may also e-mail me at [jgeorge@appliedearthworks.com](mailto:jgeorge@appliedearthworks.com). If I do not hear from you within the next two weeks, I will contact you with a follow-up phone call or email.

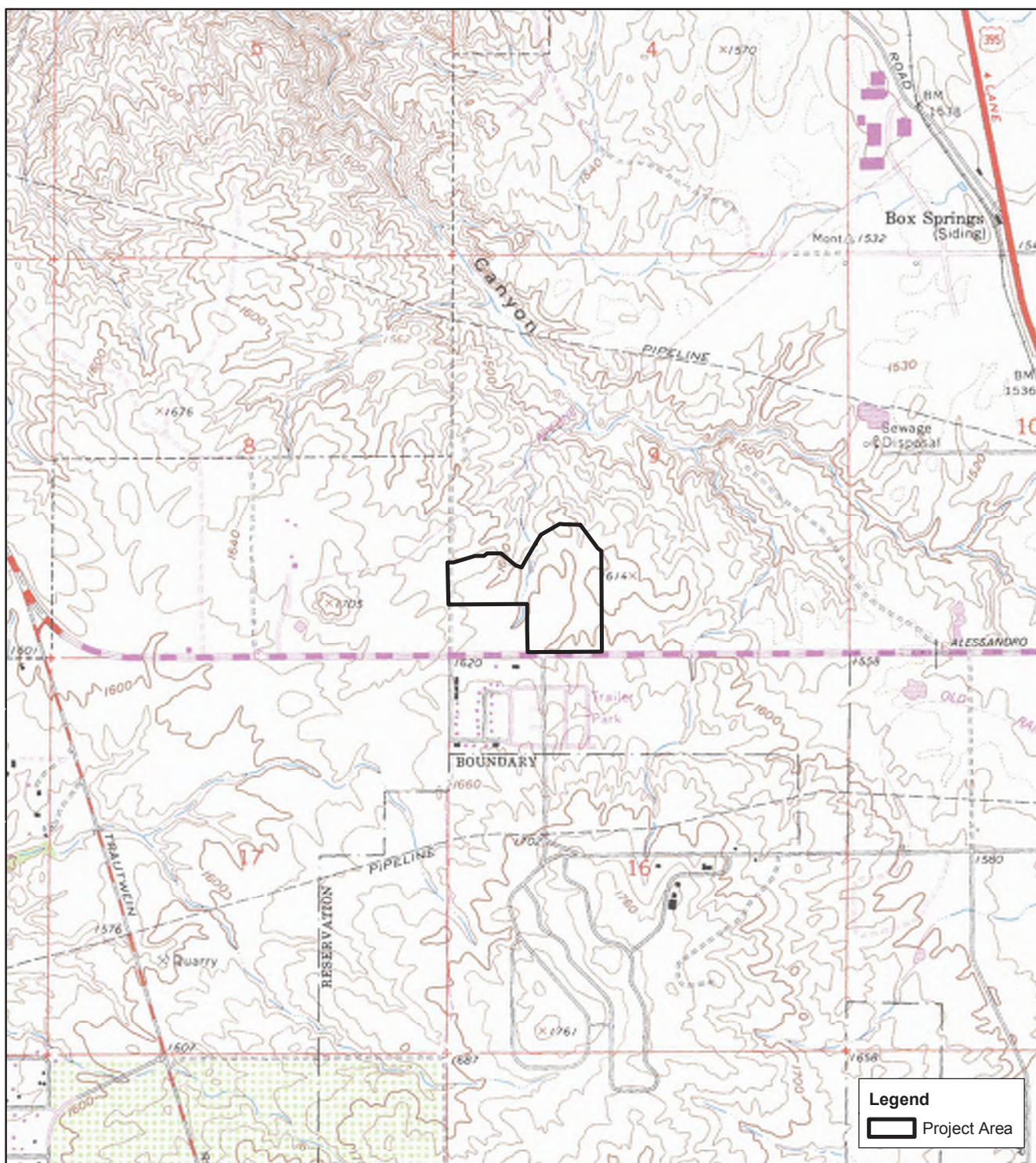
Please be aware that your comments and concerns are very important to us, as well as to the successful completion of this Project. I look forward to hearing from you in the near future. Thank you, in advance, for taking the time to review this request.

Respectfully yours,

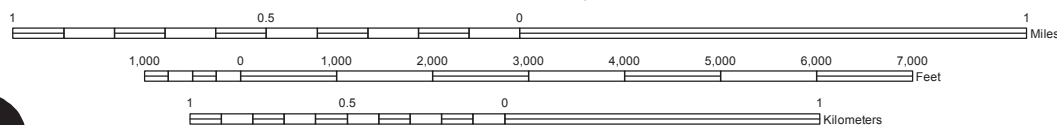


Joan George  
Associate Archaeologist  
Applied EarthWorks, Inc.





SCALE 1:24,000



Township 3 S. /Range 4 W., Sections 8 and 9; SBB&M  
Riverside East (1967, photorevised 1980), CA 7.5' USGS Quadrangle

Location map for the *Sycamore Hills Project - AE #3931*.



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

October 2, 2018

Doug Welmas  
Chairperson  
Cabazon Band of Mission Indians  
84-245 Indio Springs  
Indio, CA 92203

Re: Cultural Resource Assessment for the Sycamore Hills Distribution Center Project, City of Riverside, Riverside County, California.

Dear Mr. Welmas:

On behalf of Ruth Villalobos & Associates, Inc., Applied EarthWorks, Inc. (Æ) is conducting a cultural resource study for the Sycamore Hills Distribution Center Project (Project). The Project involves the construction of two warehouse buildings on approximately 37 acres of land north of East Alessandro Boulevard, east of Barton Street, and south of the Sycamore Canyon Regional Park, in the City of Riverside. The Project will require a permit from the US Army Corp. of Engineers (USACE) and is also subject to the California Environmental Quality Act (CEQA). The City of Riverside is the lead CEQA agency. As indicated on the attached map, the Project is located on the Riverside East, CA 7.5' USGS quadrangle map within Township 3S / Range 4W, Sections 8 & 9, San Bernardino Baseline and Meridian (S.B.B.M.).

The archaeological literature and records search conducted at the Eastern Information Center housed at the University of California, Riverside, indicates that 21 cultural resources studies have been conducted within a one-mile radius of the Project area. Four of these studies covered the entire Project area. One hundred eighty-one cultural resource sites have been recorded within a one-mile radius of the Project area. Four of these resources (all prehistoric bedrock milling sites) are documented within the Project area. Æ was contracted to perform an archaeological survey of the Project area. The survey was completed on October 1, 2018 and transects spacing ranged from 10 to 15 meters. The four sites were re-identified during the field effort and three prehistoric bedrock milling sites were newly documented during the survey.

As part of the cultural resource assessment of the Project area, Æ requested a search of the *Sacred Lands File* by the Native American Heritage Commission (NAHC) on September 4, 2018. The NAHC responded on September 11, 2018 noting that Native American cultural sites are present within the Project area. Should your records show that cultural properties exist within or near the Project area shown on the enclosed map, or if you have any concerns regarding Native American issues related to the overall Project, please contact me at (951) 766-2000 or via letter expressing your concerns. You may also e-mail me at [jgeorge@appliedearthworks.com](mailto:jgeorge@appliedearthworks.com). If I do not hear from you within the next two weeks, I will contact you with a follow-up phone call or email.

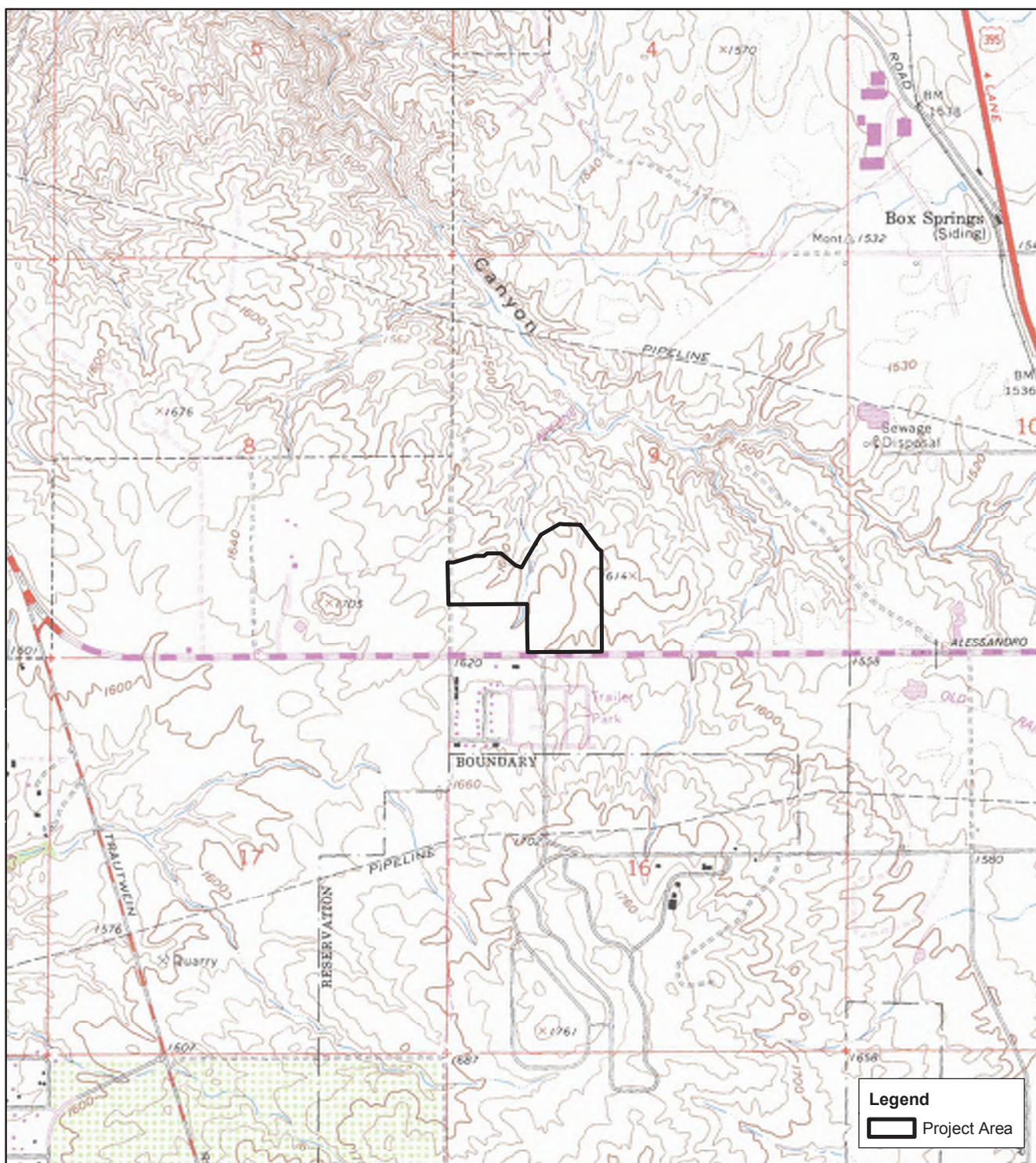
Please be aware that your comments and concerns are very important to us, as well as to the successful completion of this Project. I look forward to hearing from you in the near future. Thank you, in advance, for taking the time to review this request.

Respectfully yours,

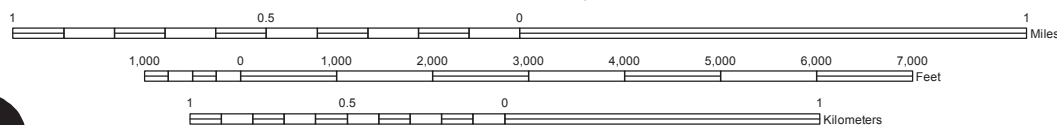
A handwritten signature in black ink that reads "Joan George". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Joan George  
Associate Archaeologist  
Applied EarthWorks, Inc.





SCALE 1:24,000



Township 3 S. /Range 4 W., Sections 8 and 9; SBB&M  
Riverside East (1967, photorevised 1980), CA 7.5' USGS Quadrangle

Location map for the *Sycamore Hills Project - AE #3931*.

## Joan George

---

**From:** Cultural Department  
**Sent:** Tuesday, October 2, 2018 2:59 PM  
**To:** Joan George  
**Cc:** anthonymad2002@gmail.com; DANIEL SALGADO  
**Subject:** Re: Cultural Resource Assessment for Sycamore Hills Distribution Center Project in Riverside

Dear Ms. George,

The Cahuilla Band of Indians received your letter on October 2, 2018 regarding the Sycamore Hills Distribution Center Project in the City of Riverside, Riverside County, Ca. The Cahuilla Band would like to express concern, because there are Native American cultural sites within the project area, there is the possibility of unearthing more cultural resources during construction, therefore we request cultural monitors be present during all ground disturbing activities. Although this project is outside the Cahuilla reservation it is within the Cahuilla traditional land use area. We respectfully request to be notified of all updates and/or changes with the project moving forward and appreciate your help in preserving Tribal Cultural Resources in your project.

Respectfully,

BobbyRay Esparza  
Cultural Coordinator  
Cahuilla Band of Indians  
Cell: (760)423-2773  
Office: (951)763-5549  
Fax:(951)763-2808

---

**From:** Joan George <jgeorge@appliedearthworks.com>  
**Sent:** Tuesday, October 2, 2018 2:02:37 PM  
**To:** Cultural Department; DANIEL SALGADO  
**Subject:** Cultural Resource Assessment for Sycamore Hills Distribution Center Project in Riverside

Good afternoon,

Attached please find a scoping letter and map for an industrial warehouse project in the city of Riverside, Riverside County, California.

Thank you,  
Joan

**Joan George | Applied EarthWorks, Inc.**  
**Associate Archaeologist**



3550 E. Florida Ave., Suite H  
Hemet, CA. 92544-4937  
951.766.2000 x-23

office

[www.appliedearthworks.com](http://www.appliedearthworks.com)



**MORONGO BAND OF MISSION INDIANS**  
**TRIBAL HISTORIC PRESERVATION OFFICE**  
12700 PUMARRA RD BANNING, CA 92220  
OFFICE 951-755-5059 FAX 951-572-6004

Date: 10/3/2018

Re:  
Sycamore Hills Distribution Center Project

Dear,  
Joan George  
Associate Archaeologist  
Applied Earthworks

Thank you for contacting the Morongo Band of Mission Indians Cultural Heritage Department regarding the Sycamore Hills Distribution Center project. The project is within a sensitive area for tribal cultural resources associated with the people of the Morongo Band of Mission Indians. Additionally, past archaeological-based survey of this general location often have failed to reveal or recognize tribal cultural resources until development. Additionally, past cultural resource management reports in this general area have inadequately evaluated the significance of the known resources and their connections over time and space.

In order to further evaluate the project for potential impacts to tribal cultural resources, we would like to formally request the following:

- ☒ A thorough records search be conducted by contacting one of the California Historical Resources Information System (CHRIS) Archaeological Information Centers and a copy of the search results and site records be provided to the tribe.
- ☒ Tribal monitor participation during the initial pedestrian field survey of the Phase I Study of the project and a copy of the results of that study. In the event the pedestrian survey has already been conducted, MBMI requests a copy of the Phase I study be provided to the tribe as soon as it can be made available.
- ☒ MBMI Tribal Cultural Resource Monitor(s) be present during all required ground disturbing activities pertaining to the project.

Please include this response in your report to your client.

Sincerely,  
Travis Armstrong  
Tribal Historic Preservation Officer  
Morongo Band of Mission Indians  
Email: [thpo@morongo-nsn.gov](mailto:thpo@morongo-nsn.gov)  
Phone: (951) 755-5059







October 2, 2018

Joan George  
Associate Archaeologist  
Applied EarthWorks, Inc.  
3550 E. Florida Ave., Suite H  
Hemet, CA 92544-4937

Re.: Cultural Resource Investigation for the Sycamore Hills Distribution Center Project  
City of Riverside  
Riverside County, California

Dear Ms. George,

Thank you for contacting the Cabazon Band of Mission Indians concerning cultural resource information relative to the above referenced project.

The project is located outside of the Tribe's current reservation boundaries. The Tribe has no specific archival information on the site indicating that it may be a sacred/religious site or other site of Native American traditional cultural value within the project area.

We look forward to continued collaboration in the preservation of cultural resources or areas of traditional cultural importance in the Project area.

Best regards,

Judy Stapp  
Director of Cultural Affairs



## Joan George

---

**From:** Steven Estrada  
**Sent:** Tuesday, October 16, 2018 8:55 PM  
**To:** Joan George  
**Cc:** Joseph Ontiveros  
**Subject:** Re: Cultural Resource Assessment for Sycamore Hills Distribution Center Project in Riverside

Thank you for your consultation efforts. We defer further consultation and monitoring for the project to the Soboba Band of Luiseño Indians.

---

**From:** Joan George <jgeorge@appliedearthworks.com>  
**Date:** Tuesday, October 16, 2018 at 9:17 AM  
**To:** Steven Estrada <SEstrada@santarosacahuilla-nsn.gov>  
**Subject:** RE: Cultural Resource Assessment for Sycamore Hills Distribution Center Project in Riverside

Good morning,

Just a quick follow up on the Sycamore Hills Project in the City of Riverside, Riverside County. To summarize, the Project proposes the construction of two warehouse buildings on approximately 37-acres of land north of East Alessandro Boulevard, east of Barton Street, and south of the Sycamore Canyon Regional Park. A literature and records search was conducted and 21 cultural resource studies have been conducted within a one-mile radius of the Project area. One hundred eighty-one cultural resource sites have been recorded within a one-mile of the Project area. Four of these resources (all prehistoric bedrock milling sites) are documented within the Project area. The Sacred Lands File search noted that Native American cultural sites are present within the Project area. Three additional prehistoric bedrock milling sites were identified during the pedestrian survey of the Project area.

Should you have any comments or concerns regarding the Project, please call or email me.

Best,  
Joan

**Joan George | Applied EarthWorks, Inc.**  
**Associate Archaeologist**  
951.766.2000 x-23 office

---

**From:** Joan George <jgeorge@appliedearthworks.com>  
**Sent:** Tuesday, October 2, 2018 1:54 PM  
**To:** Steven Estrada <sestrada@santarosacahuilla-nsn.gov>  
**Subject:** Cultural Resource Assessment for Sycamore Hills Distribution Center Project in Riverside

Good afternoon,

Attached please find a scoping letter and map for an industrial warehouse project in the city of Riverside, Riverside County, California.

Thank you,  
Joan

**Joan George | Applied EarthWorks, Inc.**  
**Associate Archaeologist**



3550 E. Florida Ave., Suite H  
Hemet, CA. 92544-4937  
951.766.2000 x-23

office

[www.appliedearthworks.com](http://www.appliedearthworks.com)

## **APPENDIX C**

### **Confidential DPR 523 Recording Forms (Not Available for Public Review)**