

**Phase 1 and Phase 2 Cultural Resources Assessment  
World Logistics Center Specific Plan  
City of Moreno Valley, Riverside County, California**

Sunnymead and El Casco, California, USGS 7.5-minute Topographic Quadrangle Maps  
Portions of Township 3 South/Range 3 West Sections 1, 12, 13 and,  
Township 3 South/Range 2 West Sections 6, 7, 8, 9, 16, 17, 18, 19, 20, 21

Including a Paleontological Records Review by Dr. Kenneth J. Lord

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## MANAGEMENT SUMMARY

This report documents a California Environmental Quality Act (CEQA)-level cultural resource survey, significance assessment and paleontological resource review for a study area encompassing approximately 4,220 acres in the City of Moreno Valley, California (City). Michael Brandman Associates (MBA) has prepared this investigation for the Highland Fairview Operating Company (the Proponent). The 4,220-acre study area includes property well beyond the Specific Plan area (2,610 acres) and the General Plan/Zone Change area (3,714 acres). This broader study area includes property that has been considered for potential off-site utility extensions and/or infrastructure improvements. Not all of the area within the study area is being proposed for development. The location of the study area is shown on Exhibits 1, 2, 3a, 3b, and 3c in the Assessment. The purpose of this analysis is to determine if any significant historical resources are located in the WLCSP. This assessment includes a Phase 1 archaeological survey, a Phase 2 archaeological test of certain cultural resources within the WLCSP, and an analysis of whether buried paleontological resources might be affected by future construction. Fieldwork was undertaken between September 2005 and April 2012.

Not included in the above total are fourteen parcels in the WLCSP totaling 58.63 acres that could not be surveyed because the parcels are still owner-occupied. These unsurveyed parcels must be surveyed once project-level documents are submitted to the City as part of the mitigation measures discussed herein. MBA staff also surveyed 301.63 acres within 18 offsite parcels.

Because this analysis is in support of a program-level Environmental Impact Report (EIR) for the WLCSP, the Proponent asked MBA to perform an archaeological survey of as many parcels in the study area as was possible. A small amount of acreage in the WLCSP could not be surveyed because it was either occupied by homeowners who had not yet granted the right to trespass to the Proponent, was covered in dense weedy vegetation that was impossible to cross, or was too steep to safely walk. Some of the parcels in the WLCSP are controlled by San Diego Gas and Electric (SDGE) or the California Department of Fish and Game (CDFG). These are proposed to be placed in the Open Space portion of the WLCSP and were not accessible during the survey.

Background data was gathered for this project on several occasions. A cultural resource literature search of the original WLCSP was conducted by MBA staff archaeologist Marnie Kay in May 2005. A second cultural resource literature search was conducted by MBA project archaeologist Jennifer Sanka in June 2007. Both searches took place at the Eastern Information Center (EIC), which is located at the University of California, Riverside. Search radii of 1.0 mile were used. At the EIC in June of 2011, the revised WLCSP project limits were re-examined for changes in the occurrence of sites that may have been recorded by EIC staff since the 2007 search was undertaken. Department of Parks and Recreation (DPR) 523 trinomial site forms were copied at the EIC by Ms. Kay and Ms. Sanka so that these data, some of which was 20 years old, could be used to help relocate the sites in the field.

Block-transect surveys of all accessible WLCSP parcels were performed in August and September of 2005. Additional properties in the WLCSP boundary were surveyed in the summer and fall of 2007 and in July 2011. Finally, three parcels near the northeast corner of the WLCSP were surveyed in January of 2012, and three more parcels in the far southwest portion of the WLCSP were surveyed in early April 2012. These surveys revealed that four historic-era cultural resource sites, 11 prehistoric-era cultural resource sites, and several isolated artifacts are located within the boundaries of the WLCSP. Most of the prehistoric resources are located on the boulder-strewn foothills below the peak of Mt. Russell, and all of the historic resources are located at older farm complexes that were abandoned years ago. Resources were recorded onto modern DPR 523 forms as the fieldwork progressed.

In early 2006, the Proponent authorized a subsurface significance-testing program (Phase 2 testing) on nine of the eleven prehistoric cultural resources located at the foot of Mt. Russell. A monitor representing the Soboba Band of Luiseño Indians attended when these resources were tested. The Proponent wanted to know if these resources should be considered significant resources because they are located near the southern boundary of the planned-for development and impact to them had (originally) been considered as part of project development.

The prehistoric sites that were tested for significance included bedrock milling slick site CA-RIV-610, bedrock milling slick site CA-RIV-860, bedrock milling slick site CA-RIV-3238, bedrock milling slick site CA-RIV-3343, bedrock milling slick site CA-RIV-3344, bedrock milling slick site CA-RIV-3345, bedrock milling slick site and midden CA-RIV-3346, bedrock milling slick site CA-RIV-8006 and bedrock milling slick site CA-RIV-8007. The field crew used a shovel pit test method and screening of soils for artifacts through 1/8" hardware cloth. Testing was observed by a representative from the Soboba Band.

The 2006 testing work revealed that only one of these sites, CA-RIV-3346, exhibited evidence of intact subsurface prehistoric data. For this reason, we determined that CA-RIV-3346 should be considered a significant historical resource for the purposes of CEQA. The other site exhibited no such data. This lack of subsurface cultural information and prehistoric artifacts at the other sites caused us to determine that these sites should not be considered significant because the cultural resource data is believed exhausted. Significance statements for each of the Phase 2 tested prehistoric sites are included in this report. A tenth prehistoric site, bedrock milling slick site CA-RIV-3347, was detected during surveys in 2011 and new DPR 523 forms for that site were issued. The 11th prehistoric site, bedrock milling slick site CA-RIV-2993 was observed in April 2012 and is unchanged since it was originally recorded. Should it be determined in the future that these latter two sites will be directly impacted by construction in the WLCSP; a Phase 2 test of these sites will be required.

In early 2012, the Proponent authorized another Phase 2 testing work effort on two historic-era cultural resource sites located in Section 7 of T3S/R7W, CA-RIV-4201 and CA-RIV-4210. In

addition, MBA staff re-examined historic site CA-RIV-5862 in the far northeast portion of the WLCSP for characteristics of potential significance. The Proponent wanted to know if these historic-era resources should be considered significant resources because future impacts to them during construction were considered extremely likely.

Testing at the CA-RIV-4201 and CA-RIV-4210 required the use of heavy machinery and an archaeological monitor, while site CA-RIV-5862 was reviewed for integrity only. We found that the two former sites appear to have been completely bulldozed and the debris likely hauled off site. The structure at -4210 was likely burned, then demolished. For this reason, both sites are considered not significant and impacts to the sites need not be further mitigated for during construction. Site CA-RIV-5862 was re-examined on survey and found to have little integrity, suggesting that it too should not be considered a significant cultural resource. All DPR 523 forms have been included in the Confidential Appendix E of this report, and all new forms were previously submitted to the Eastern Information Center.

MBA contacted the Native American Heritage Commission (NAHC) in March 2011 requesting a Sacred Lands File search for traditional cultural properties. The response from the NAHC was received on March 25, 2011. The NAHC response indicated that no sacred lands or traditional cultural properties are known for the study area. On March 29, 2011, MBA sent information-request letters to each of the 12 tribal entities named by the NAHC. Two responses to our letters were forwarded to MBA staff: one from the Pala Band and another from the Soboba Band. The Pala Band indicated that the WLCSP lay far outside their sphere of interest. In sum, no tribe has notified MBA staff of the existence of traditional tribal properties or specific lands that might be considered sacred within the confines of the WLCSP.

MBA contacted Eric Scott of the Division of Geological Sciences of the San Bernardino County Museum on June 2005 requesting a paleontological records check of the original WLCSP. Mr. Scott's paleontological review showed that the study area rests entirely on exposures of Holocene (Recent) alluvium and granitic bedrock. Both the alluvium and the bedrock have low potential for fossil deposits to be uncovered during grading. However, the Holocene alluvium rests upon a veneer of Older Pleistocene alluvium and San Timoteo Formation deposits, both of which are highly sensitive for fossil resources. MBA's monitoring work at the Highland Fairview Corporate Park Project, which was originally included in the 2005 version of the WLCSP, included monitoring for paleontological resources. We showed that the shallower soils (0 to 10 feet) were completely devoid of fossil resources and that the types of soils from 10 to -20 feet below grade did not contain strata that would allow paleontologic resources to be preserved. Therefore, we recommend that full time paleontological monitoring should take place in those portions of the project where earthmoving occurs 20 feet or more below grade.

As a result of these work efforts, and the fact that most of the prehistoric sites' cultural components are located on solid bedrock, it is likely that all prehistoric cultural resources in the WLCSP will be

avoided during buildout of the WLCSP. The recorded historic-era cultural resources in the WLCSP need not be further mitigated for because they have been Phase 2 tested and shown to be not significant. A mitigation-monitoring program for both cultural and paleontological resources has been provided herein and should be selectively applied during future project-level EIRs that must be generated for the project.

## SECTION 1: INTRODUCTION

At the request of Highland Fairview Operating Company (HF), MBA has conducted cultural resources surveys, prehistoric cultural resource evaluations, and a paleontological records search on a proposed World Logistics Center Specific Plan (WLCSP) located in the far eastern portion of the City of Moreno Valley, Riverside County, California (City). The study area covers an area totaling approximately 4,220 acres with 2,610 acres within the WLCSP, and is located generally southwest of the intersection of State Route 60 and Gilman Springs Road, and east of Redlands Boulevard. The 4,220-acre study area includes property well beyond the Specific Plan area (2,610 acres) and the General Plan/Zone Change area (3,714 acres). This broader study area includes property that has been considered for potential off-site utility extensions and/or infrastructure improvements. Not all of the area within the study area is being proposed for development. The location of the study area is shown on Exhibits 1, 2, 3a, 3b, and 3c in the Assessment. The proposed use of the 2,610-acre Specific Plan area is for future logistics development. The purpose of this report is to identify the presence or absence of potentially significant cultural and paleontological resources within the WLCSP. Given that the WLCSP shall be built out as a phased project, this report includes recommendations for cultural and paleontological mitigation for use in future project-level CEQA and NEPA compliance documents.

Federal, State, and local agencies have developed laws and regulations designed to protect significant cultural resources that may be affected by projects regulated, funded, or undertaken by a Lead Agency. These laws govern the preservation of historic and archaeological resources of national, State, regional, and local significance. The laws fulfilled in this report include the CEQA, and cultural resource requirements in the City's General Plan. This report closely follows the California Office of Historic Preservation (OHP) procedures for cultural resource surveys and the OHP's Archaeological Resource Management Report (ARMR) reporting format for archaeological reports.

This report has been issued as a Confidential version (specific site locations exposed) and a Non-confidential version (for review by the Public with the location of sites not exposed). This is organized into sections and appendices, which are summarized as follows:

- Section 1 introduces the project, the location, and the cultural resources team.
- Section 2 provides an overview of the project history.
- Section 3 summarizes cultural setting.
- Section 4 describes environmental compliance parameters.
- Section 5 presents the research design and investigative methods for the cultural resource survey and paleontological records search results.
- Section 6 includes the Phase 1 survey and Phase 2 testing results.
- Section 7 provides management recommendations.
- Section 8 contains the project certification.

- Section 9 presents a reference list.
- Appendix A provides list of parcels in the World Logistics Center.
- Appendix B documents the cultural resource correspondence for this report.
- Appendix C provides personnel qualifications.
- Appendix D provides recent photographs of the study area.
- Appendix E contains the DPR 523 forms (provided for in the Confidential report version only).
- Appendix F contains the cultural site locations relative to a modern aerial photograph (provided for in the Confidential report version only).
- Appendix G illustrates historic aerial views of the project.

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## 1.1 - Project Location

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The project is located south of State Route (SR) 60, east of Redlands Boulevard, and west of Gilman Springs Road (Exhibit 1). The study area is specifically located in all or portions of Township 3 South/Range 3 West Section 1, 12, 13, and Township 3 South/Range 2 West Section 6, 7, 8, 9, 16, 17, 18, 19, 20, 21 as depicted on the Sunnymead, California and El Casco, California United States Geological Survey (USGS) 7.5-minute topographic maps (Exhibit 2). Exhibit 3a through 3d show the condition of the property in 2011 per a modern aerial photography. Appendix A provides a list of parcels in the study area, a list of parcels located on anticipated off-site improvement areas that were surveyed, and a list of parcels inside the WLCSP that were not surveyed because there were not owned by the Proponent. Appendix A also documents when these lands were surveyed.

Certain areas are delineated as Open Space: a portion of Mt. Russell delineated as Open Space by the Specific Plan, all lands under the control of California Department of Fish and Game (CDFG), lands under the control of San Diego Gas and Electric (SDGE), and lands controlled by the Metropolitan Water District (MWD). Certain CDFG and all SDGE parcels were not surveyed during this study.

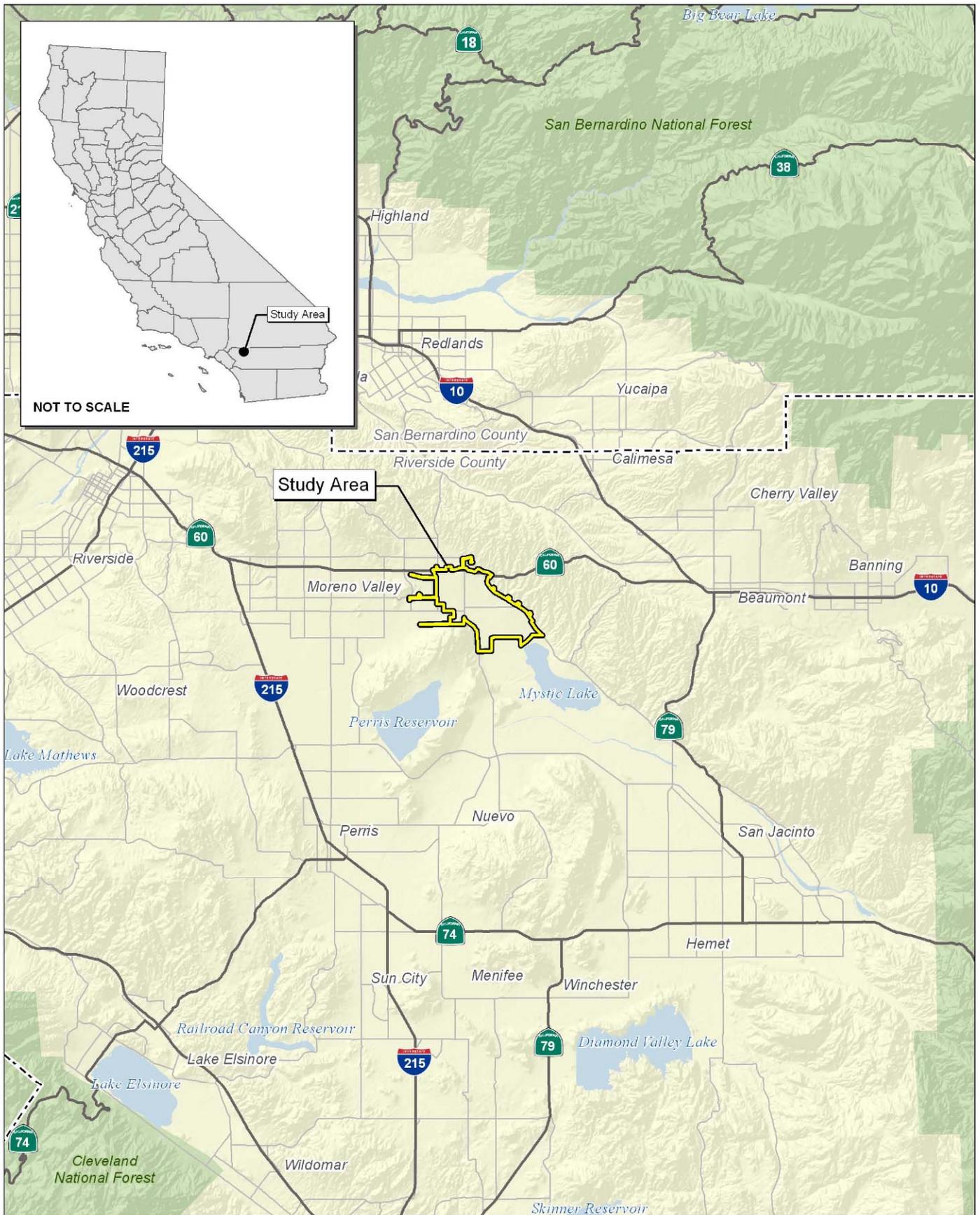
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## 1.2 - Project Description

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The World Logistics Center study area encompasses approximately 4,220 acres of land in eastern Moreno Valley. The proposed project elements (General Plan Amendment, Zone Change, Specific Plan and Tentative Tract Map) are all contained within the area studied in the Assessment. The project proposes to replace the current mixed-use residential plans for the area (Moreno Highlands Specific Plan) with a Specific Plan for job-producing land uses (the 2,610-acre World Logistics Center) and 1,104 acres of open space and public facilities. Seven existing rural residences within the project area would become legal, non-conforming uses. All of the areas within the proposed project (plus 506 acres of potential utility and infrastructure areas) are included in the 4,220 acres, which were evaluated in this Assessment. “Open space” and “public” uses will be provided in the undeveloped areas. The Environmental Impact Report for the project covers the entire 4,220-acre study area. The northerly 70 percent of the study area is within the proposed WLCSP, which will

function as the development regulations for the World Logistics Center, a 2,610-acre master-planned logistics complex. The most southerly 30 percent of the study area (1,104 acres) will not be in the WLCSP and will be designated for “open space” and “public” uses by the General Plan Amendment and Zone Change. The remaining 506 acres includes off-site improvements or other areas that are not a part of the WLCSP, but were inside the study area.

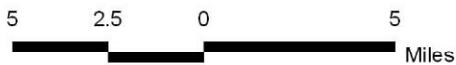


Source: Census 2000 Data, The CaSIL, MBA GIS 2013.



Michael Brandman Associates

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## Exhibit 1 Regional Location Map

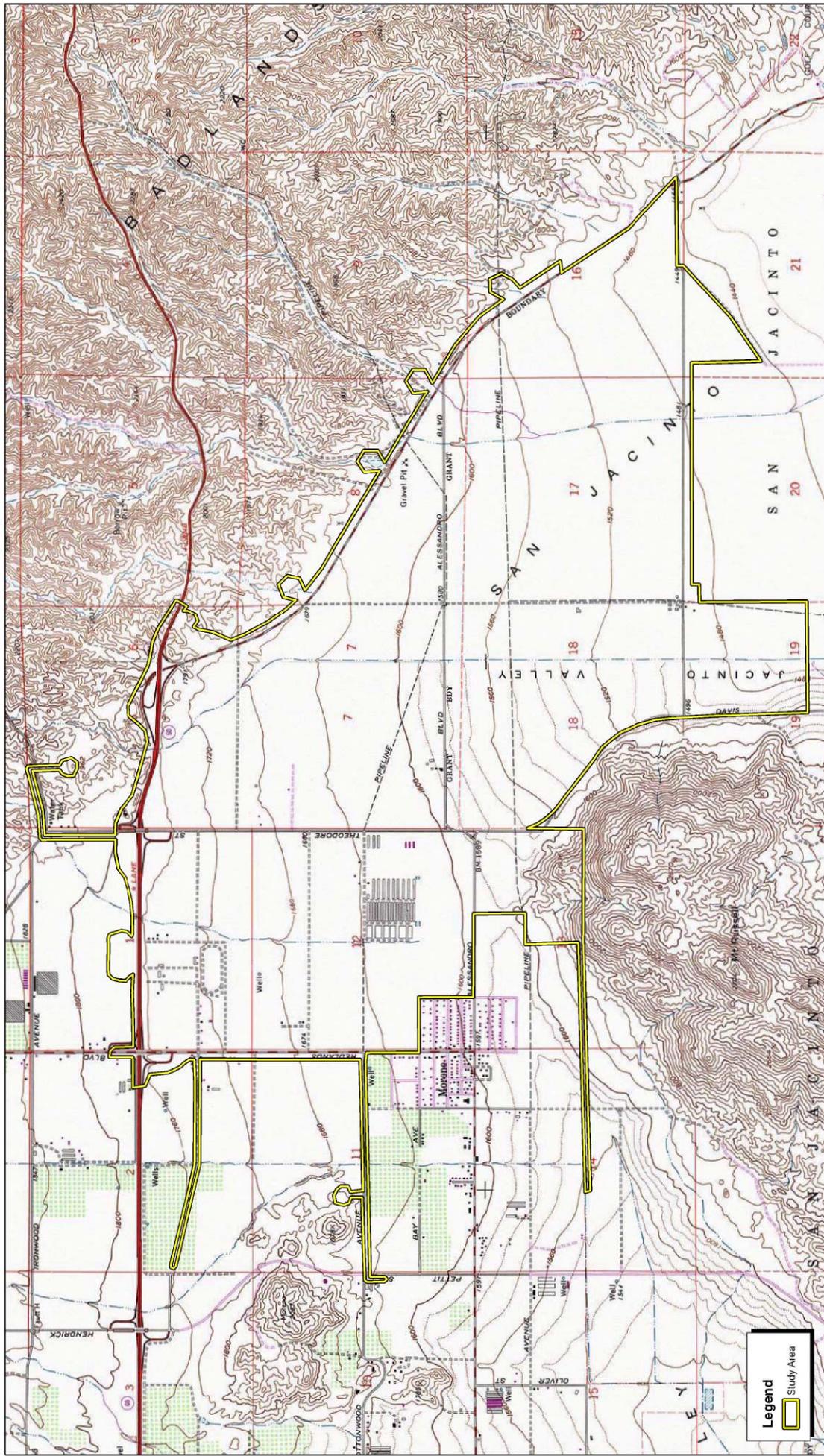


Exhibit 2  
 Project Location Map  
 Topographic Base

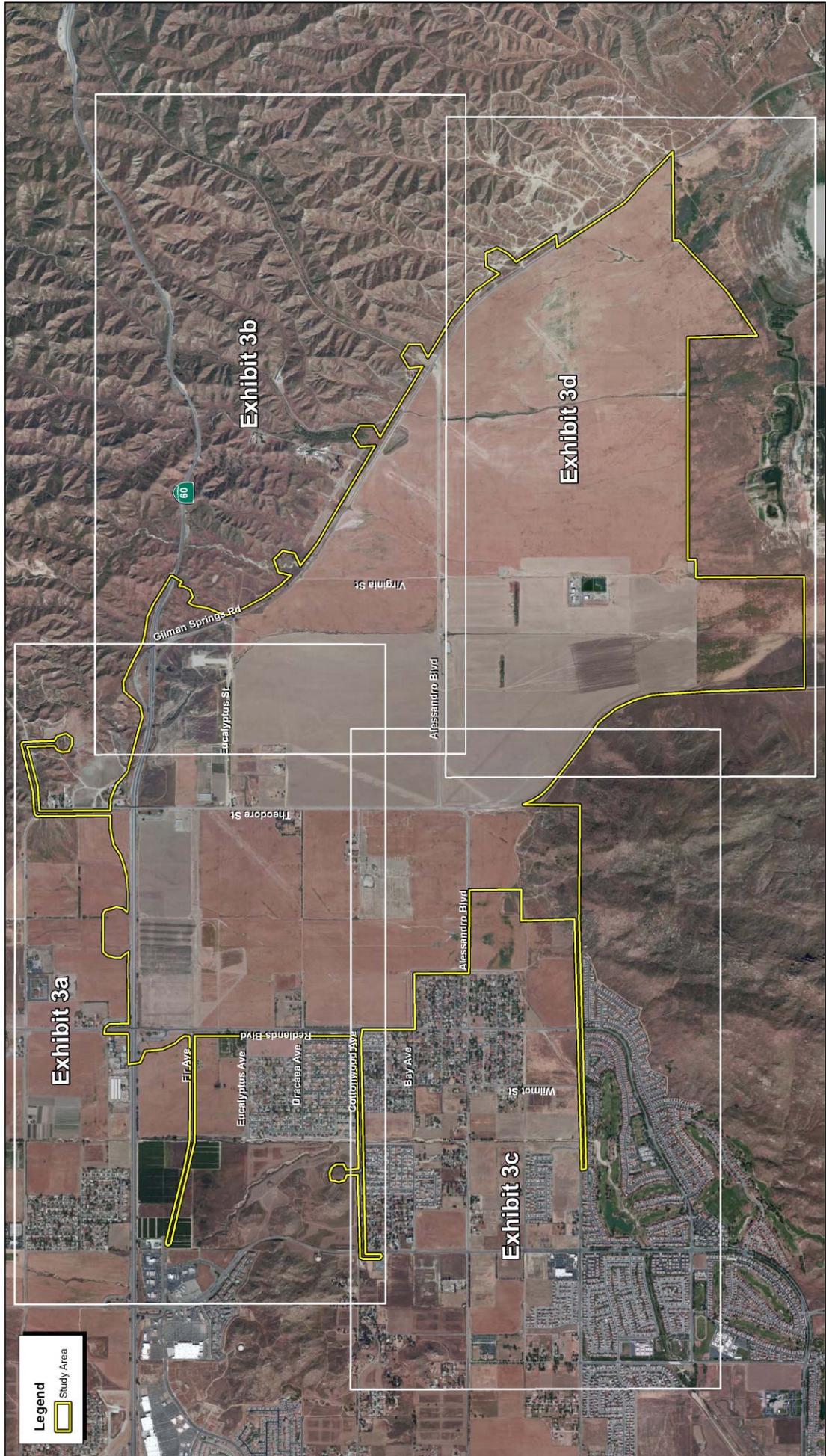
Source: TOPO: USGS Sunnymead, CA (1978) and Et Casco (1976) 7.5' DRG.

2,200 1,100 0 2,200 Feet

Legend  
 Study Area

HIGHLAND FAIRVIEW OPERATING COMPANY • WORLD LOGISTICS CENTER SPECIFIC PLAN  
 PHASE I AND PHASE II CULTURAL RESOURCES ASSESSMENT

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Source: ESRI Aerial Imagery.

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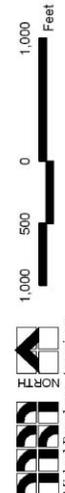
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**Exhibit 3**  
**Study Area Map**  
**Aerial Base - Index**



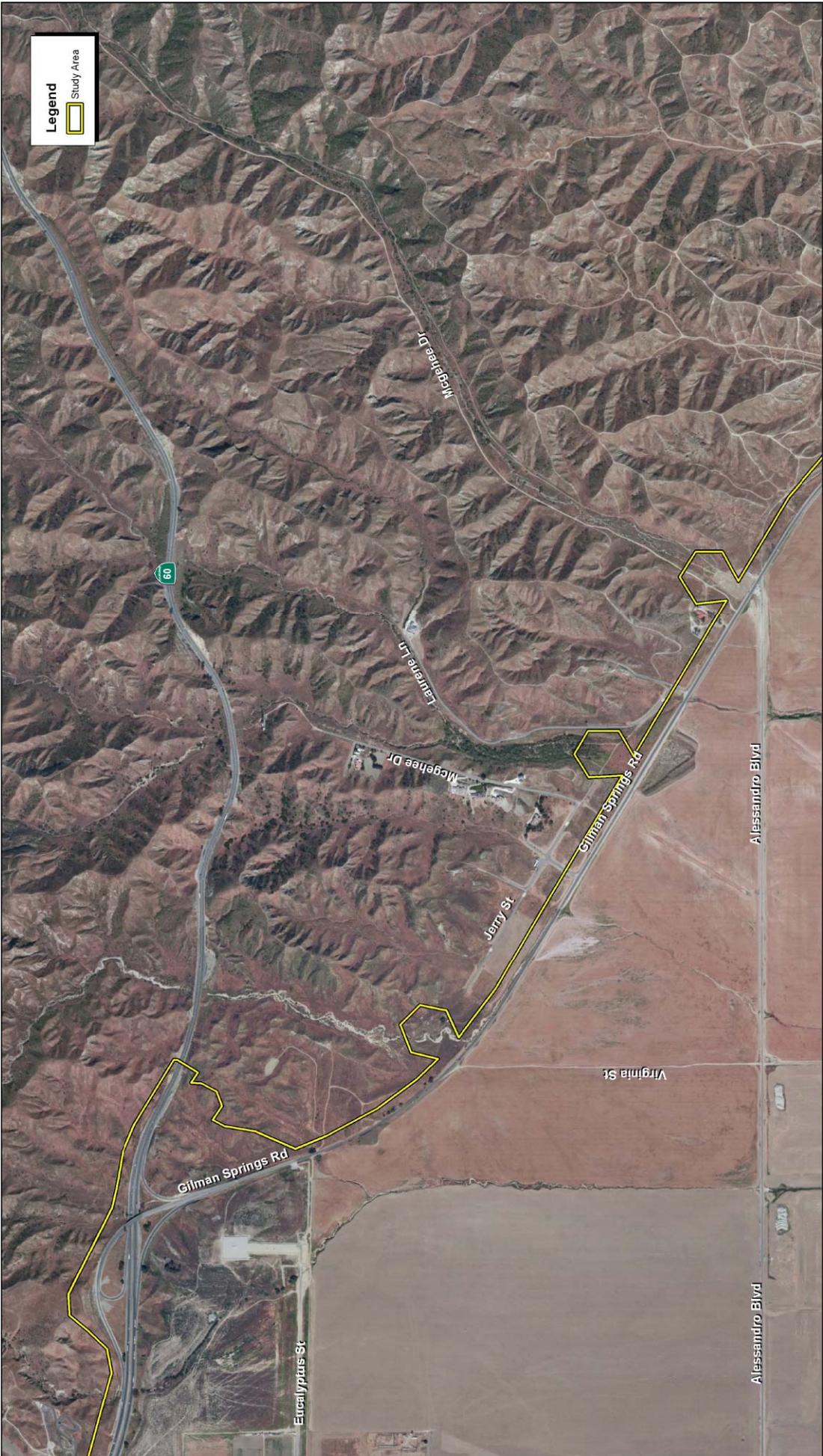
Source: ESRI Aerial Imagery.



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**Exhibit 3a**  
**Study Area Map**  
**Aerial Base - Northwest Quadrant**

HIGHLAND FAIRVIEW OPERATING COMPANY • WORLD LOGISTICS CENTER SPECIFIC PLAN  
 PHASE I AND PHASE II CULTURAL RESOURCES ASSESSMENT



**Legend**  
 Study Area

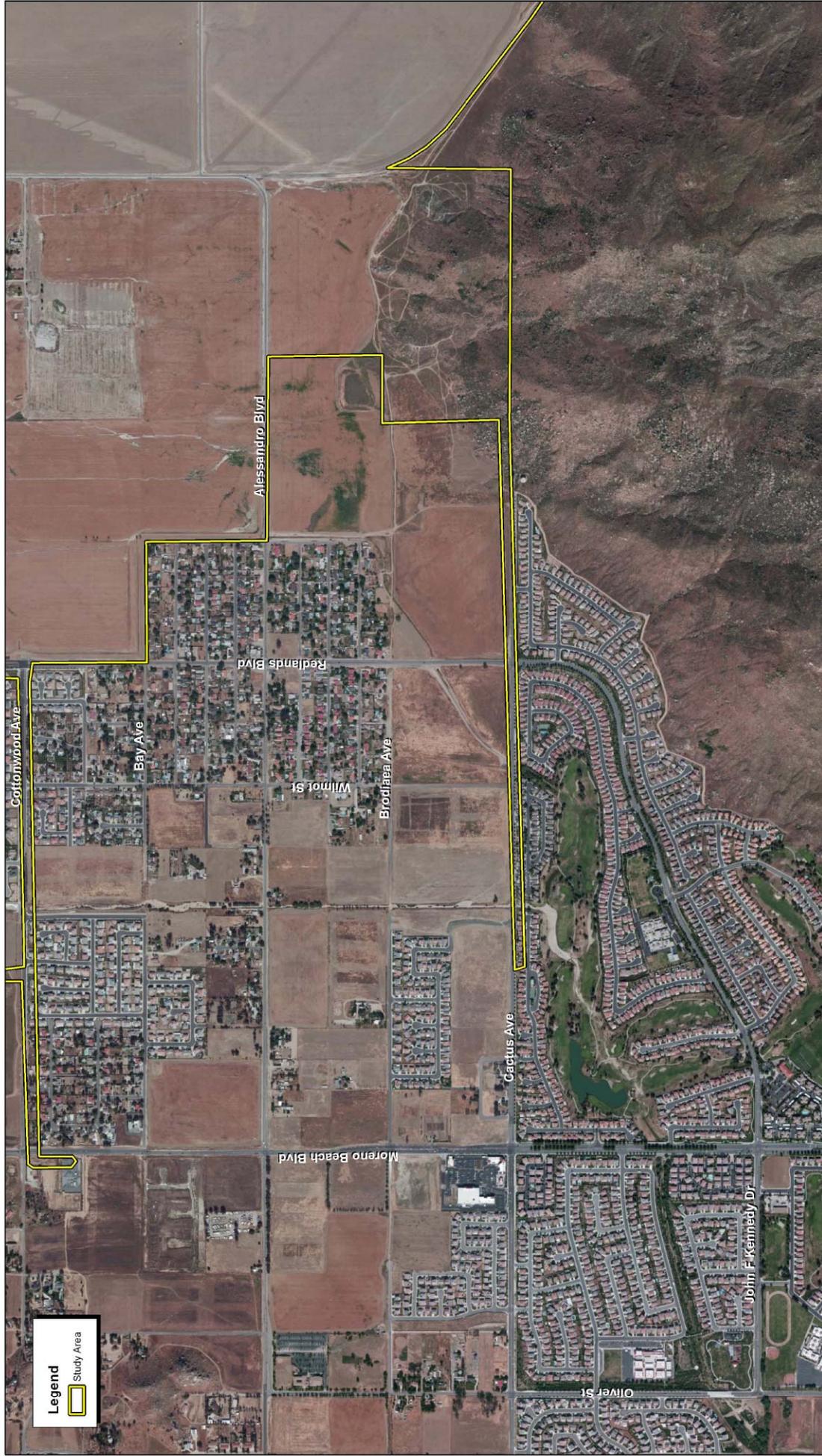
**Exhibit 3b**  
**Study Area Map**  
**Aerial Base - Northeast Quadrant**

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 PHASE I AND PHASE II CULTURAL RESOURCES ASSESSMENT

Source: ESRI Aerial Imagery.



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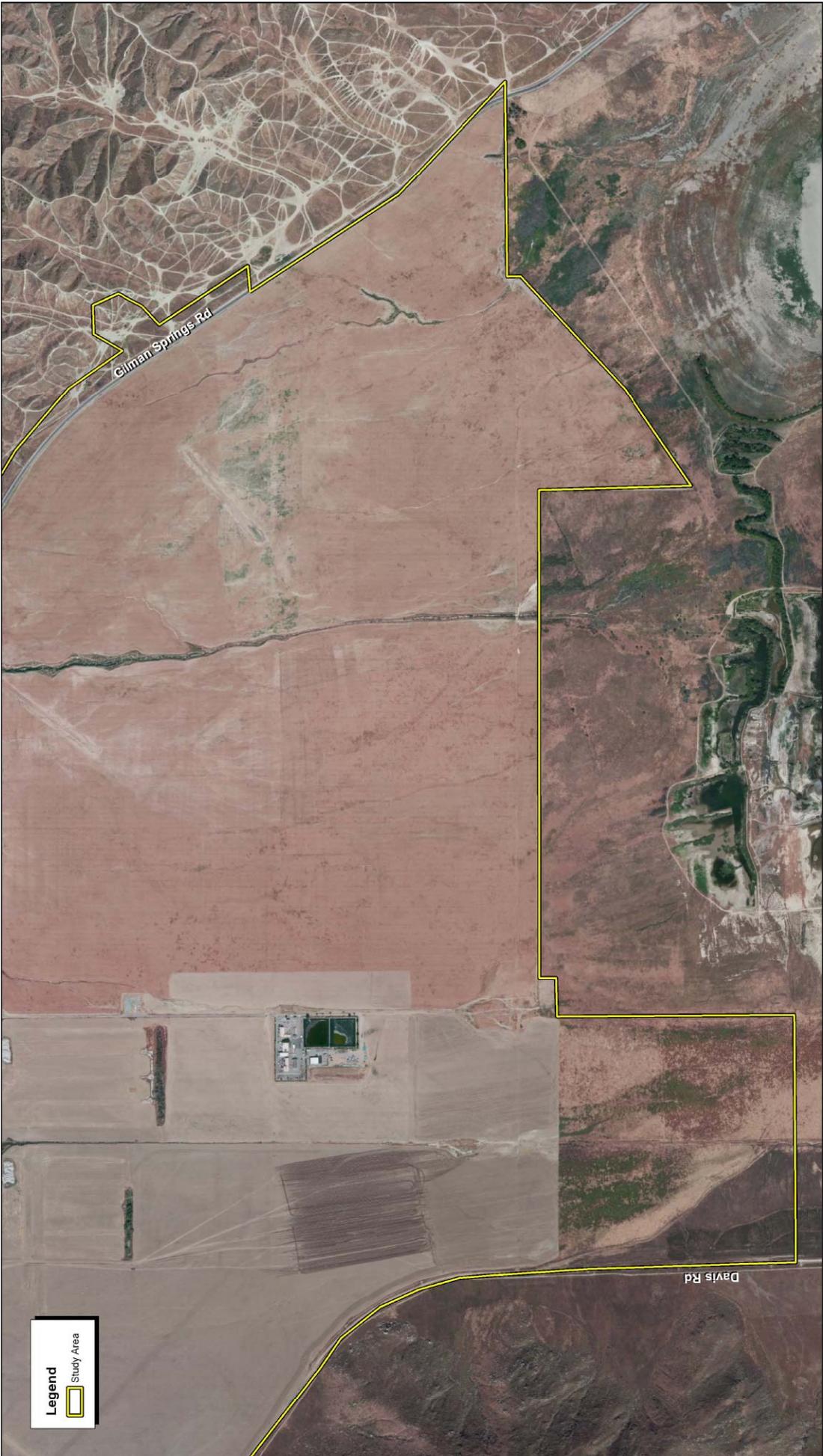


Source: ESRI Aerial Imagery.



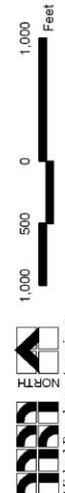
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**Legend**  
Study Area

Source: ESRI Aerial Imagery.



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**Exhibit 3d**  
**Study Area Map**  
**Aerial Base - Southeast Quadrant**

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PHASE I AND PHASE II CULTURAL RESOURCES ASSESSMENT

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## 1.3 - Environmental Setting

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The project is located in the northerly reaches of the San Jacinto Valley several miles east of downtown Moreno Valley. It lies between the plutonic batholith of Mt. Russell, the San Jacinto fault zone, and Pliocene-era non-marine sedimentary rocks of The Badlands. The site elevation is between 1,480 and 1,760 feet, with a gradual slope to the south and southeast. Available evidence suggests that any citrus orchards located within the project, which would represent the first commercial agricultural development, were removed before 1930. After about 1950, these properties were used for grazing of cattle and horses. Limited agricultural development has taken place there, but nearly all of the properties have been plowed at one time or another.

The parcels in the WLCSP are dry most of the year even though irrigation water is available to them. Parcels located in the southeast portion are managed by a State agency and are lands that shall be designated as Open Space. These are located north of a basin known as “Mystic Lake” which represents a portion of the San Jacinto Valley that exhibits groundwater for most months of the year. Other Open Space parcels include a wedge shaped piece along the north edge of Gilman Springs Road and about 64 acres located at the toe of Mt. Russell.

### 1.3.1 - Topography, Geology, and Soils

The WLCSP lies on young Holocene-era floodplain deposits exhibiting surface exposures of Holocene younger alluvium. Soils consist of San Emigdio sandy loams and fine-sandy loams (USDA 1971): only in those few deeply disturbed places could concentrations of cobbles be seen. The existence of buried river cobbles at some of the known archaeological sites and observed during the Highland Fairview Corporate Park monitoring (MBA 2011) suggests that riverine and wash deposits lie buried beneath the plow zone and that the original shallow drainages and washes that once traversed the property had been plowed over.

### 1.3.2 - Vegetation

Most of the WLCSP exhibits weedy vegetation or disked farmland, with small areas of introduced vegetation used to create windbreaks. Remnant patches of olives, palm and eucalyptus tree alignments can be observed, but it is clear that most of the original native vegetation had been cleared long ago. This not the case on the Mt. Russell parcels located at the southwest corner of the WLCSP. Portions exhibit Riverside Sage Scrub vegetation and were never plowed. In 2007 and 2011, land was surveyed after disking for weed control had taken place. Survey after disking revealed a highly consistent sandy loam with few gravels or cobble inclusions. The topsoil appears to be coarser toward the eastern side of the WLCSP, with numerous cobbles in the far northeast corner.

### 1.3.3 - Wildlife

No wildlife was observed during the survey, save for occasional coyote, lizard, birds, and small rodents.

### 1.3.4 - Land Use

Eastern Moreno Valley was first developed for agriculture in the late 1890s part of the town of Morcno; prior to this, the WLCSP had been part of the San Jacinto Nuevo y Potrero Rancho. This land, a subdivision of the massive San Jacinto Rancho (originally 8 square leagues in size or more than 50 square miles) lay vacant during the Spanish era and was not part of any rancho in the Mexican historical era until 1842. Once the Rancho San Jacinto Nuevo y Potrero was platted, the old wagon road between Temecula to San Jacinto was expanded such that and the road was extended into the Box Springs area of the City of Riverside and points beyond. This road probably ran along the track now covered by Gilman Springs Road, headed to Box Springs across what is now Moreno Valley, thence into Riverside. Because of the lack of reliable water, it is unlikely that the WLCSP was used during the early historic period for anything except springtime grazing.

During the historic period, most of the parcels in the WLCSP have been used, albeit sporadically, for dry-land crops and the occasional irrigated farming plots. Horses were raised on one farm in the northwest corner of the WLCSP and one of the older farm structures in the Moreno area can be found near the northeast corner of Draceae and Redlands Boulevard. Although plans were made to bring water from the reservoir at Big Bear to Moreno as part of a regional California land boom scheme (circa 1891), the plan was never completed because the issue of water rights were adjudicated in favor of the City of Redlands. Citrus farms were built east of Redlands Boulevard and relied of pumped well water for irrigation. All of these failed with the onset of the Depression.

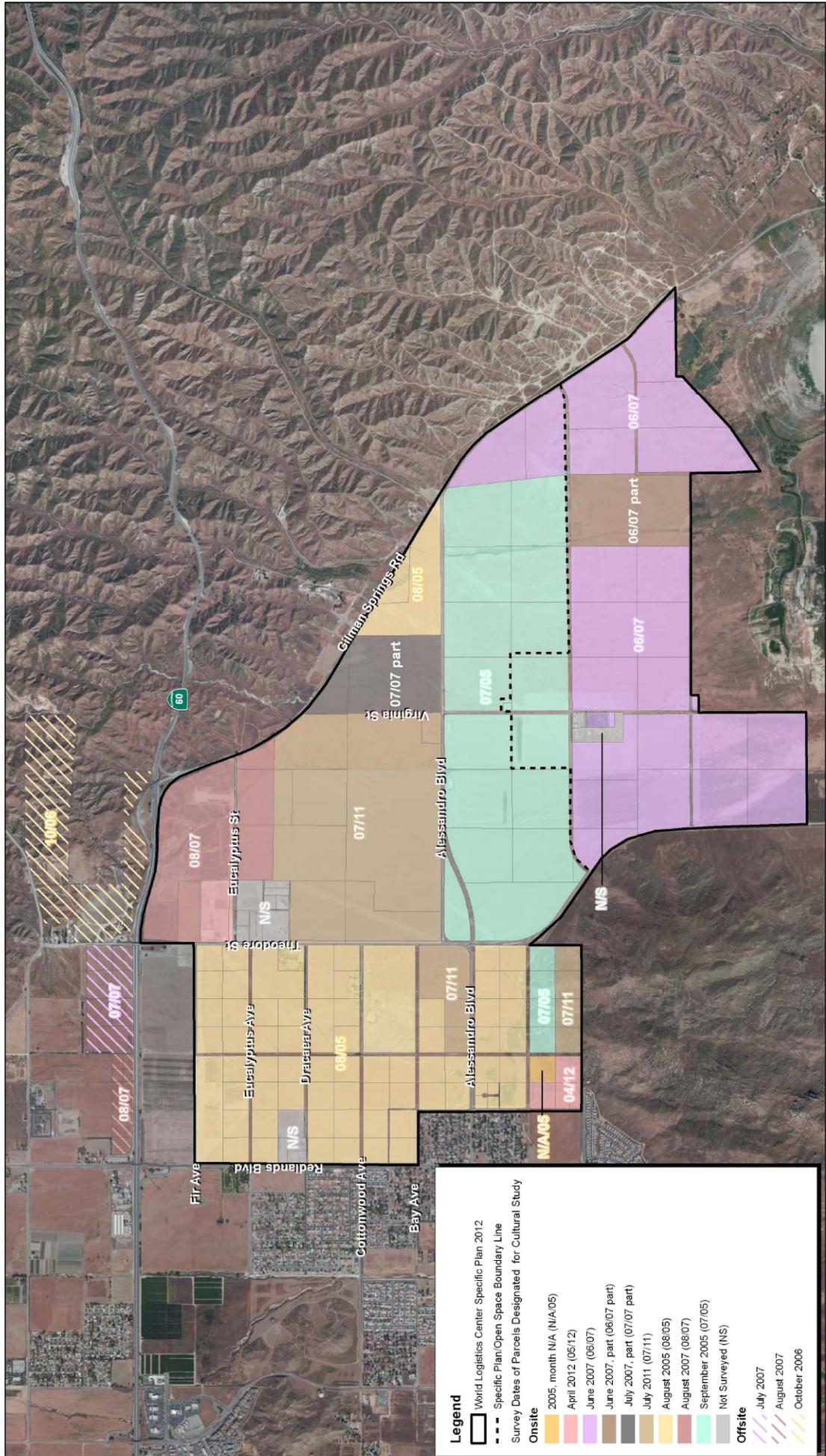
## SECTION 2: PROJECT HISTORY

As shown in Exhibit 4, 4,220 acres of eastern Moreno Valley were surveyed by qualified archeological teams between 2005 and 2012, with Mr. Michael Dice serving as the lead archeologist. A few small properties have not yet been surveyed due to the presence of occupied homes on the parcels. Each of these parcels will be fully surveyed prior to any development proceeds. Areas in colored stripe as shown in Exhibit 4 are not within the project area but were included in the study area because they may be affected by possible infrastructure and utility construction. These areas are generally north of the project area and north of SR 60. Once the nature, location, and details of such infrastructure and utility construction are determined, additional assessments will be required. The portions of the project area owned by the California Fish and Wildlife and SDG&E were also evaluated. They presently are included in the Moreno Highlands Specific Plan and are within the city limits of the City of Moreno Valley. As these areas are not within the proposed WLC Specific Plan, zoning of these properties is being proposed for “Open Space” and “Public” uses.

Offsite environmental impacts are associated with certain roadway and utility improvements. These include a new detention basin near Sinclair Street north of SR-60, detention basins in various canyons along the north side of Gilman Springs Road. Potential water reservoirs and access are proposed for a hilly area west of Moreno Beach Drive/north of Cottonwood and on a hillside west of Theodore Street/south of Ironwood Avenue. Sewer improvements are planned for Redlands Boulevard, Gilman Springs Road, Bay Avenue, Merwin Street, Brodiaea Avenue, and Quincy Street. Water supply improvements are planned for Cottonwood Avenue, Eucalyptus Avenue, Merwin Street, Redlands Boulevard and Gilman Springs Road. Roadway improvements are planned for Redlands Boulevard and Gilman Springs Road. Finally, SR-60 shall be improved with modifications to on and off-ramps: these projects will be undertaken by CALTRANS.

MBA senior archaeologist Michael Dice, M.A. and MBA staff archaeologists Peter Messick, Marnie Kay, Alynne Loupe, Leleua Loupe, Sarah Williams, Greg Chatman, and Erin Shepard began the first surveys of the WLCSP in August-September 2005. These surveys were mostly located north of Alessandro and west of Theodore on property that bore dryland barley that had been recently cut. Properties south of Alessandro and west of Gilman Springs Road were surveyed by this team several months later. Members of this team Phase 2-tested eight prehistoric resource sites in May-June 2006.

MBA project archaeologist Jennifer Sanka, M.A., Ms. Kay and Jay Keasling surveyed additional parts of the WLCSP south of Alessandro and west of Theodore, as well as some of the predicted off-site impact areas in June-October 2007. Mr. Dice, Mr. Keasling, Ms. Loupe, and MBA staff archaeologist Arabesque Said surveyed areas in the WLCSP south of the SR-60 freeway in August 2007. Mr. Dice, Ms. Said, and MBA staff archaeologist Erik Landis surveyed parcels east of Theodore Street and north of Alessandro in the summer of 2011. Mr. Dice and Ms. Williams monitoring testing at two historic-era sites and surveyed the last of the farmland east of Theodore and north of Eucalyptus in January 2012. Finally, Ms. Podratz surveyed several parcels in the southwest corner of the WLCSP in April 2012.



Dr. Kenneth J. Lord, Ph.D. undertook a paleontological assessment of the study area and his data has been added herein. The professional qualifications of Mr. Dice and Dr. Lord are located in Appendix C.

Each of the survey work efforts, unless noted in Appendix A, were undertaken when grass had been cut, the surface of the study area had been plowed, or if the property exhibited little natural vegetation. Attempts were made to avoid survey when ground was 80 percent or more obscured but in some instances that was not possible. Of the 4,220 acres in the study area, 72.69 acres on 16 parcels could not be surveyed because they were not in the control of the Proponent. MBA also surveyed 302 offsite acres in 18 parcels at the request of the Proponent that could be used for future infrastructure improvements.

## SECTION 3: CULTURAL SETTING

The following is a brief overview of the prehistoric and historic background that provides a context in which to understand the background and relevance of sites found in the general vicinity of the WLCSP. This section is not intended to be a comprehensive review of the current resources available but serves as a generalized overview. Descriptions that are more detailed can be found in ethnographic studies, mission records, and major published sources including Kroeber (1925), Wallace (1955), Warren (1968), Heizer (1978), Moratto (1984), and Chartkoff and Chartkoff (1984).

### 3.1 - Prehistoric Background

This section provides a brief overview of the prehistory and history of the WLCSP. A more detailed description can be found in ethnographic studies, mission records and major published sources including Kroeber (1925), Wallace (1955), Warren (1968), Heizer (1978), Moratto (1984), and Chartkoff and Chartkoff (1984). Fagan (2003), Moratto and Chartkoff and Chartkoff provide recent overviews of California archaeology in general and review the history of the desert regions in southern California. The most accepted regional chronology for the coastal and central interior Southern California is derived from Wallace's four-part "Horizon" format, which was later updated and revised by Warren. Presently, regional archaeologists generally follow Wallace's Southern California format but the loosely established times for each period subunit are often challenged. The documented prehistoric stages are as follows:

- Desert Culture Period (12000 to 10000 B.C.)
- Western Hunting Culture or Lake Mohave Period (~9000 to 5000 B.C.)
- Pinto Period (5000 to 2500 B.C.)
- Protohistoric (2500 B.C. to A.D. 1769)

#### 3.1.1 - Desert Culture Period (12000 to 10000 B.C.)

Comparatively, little is known of Paleo-Indian peoples in the California archaeological record, although highly documented archaeological village sites in the Southwest have revealed associated bones of now extinct large mammals, as well as Clovis and Folsom tool traditions (Fagan 2003). However, this period is noted for an increase in drier weather, consequently most of the known California Late Paleo-Indian/early archaic sites are located near extinct desert valley lakes, rock shelters, and on the Channel Islands off the California coast (Chartkoff and Chartkoff 1984; Forbes 1989). These consist of occupation sites, butchering stations and burials. This period ends with a marked extinction of large game native to North America and a distinct change in prehistoric tool kits used to prepare plant foods. Small projectile points, choppers, flat scrapers, drills, and digging sticks are also common (Forbes 1989).

### **3.1.2 - Western Hunting Culture or Lake Mohave Period (~9000 to 5000 B.C.)**

It is thought that as hunting of large mammals became less available as a food resource due to drier weather conditions, the West and Southwest showed an increased reliance in using small game, such as squirrels and rabbits, and wild plants to sustain the small tribal bands (Jennings 1989; Oswalt 1988). This period is also marked by the absence of food-grinding stone implements. However, the period ends when stone grinding implements become increasingly more prevalent in the archaeological record (Forbes 1989; Jennings 1989; Oswalt 1988).

### **3.1.3 - Pinto Period (5000 to 2500 B.C.)**

The Pinto Period highlights a combination of both Desert Culture and Western Hunting Cultures, where an increase in grinding tools appears in the archaeological record. Such tools suggest an increased level of reliance on wild plants and small animals (Forbes 1989; Jennings 1989; Oswalt 1988). The Pinto spear-point tool tradition is the hallmark of this period. This tradition is characterized by small coarsely chipped points, which tend to be triangular and sometimes have parallel sides. These points may have tipped the atlatl, a type of spear. A slight variation in tool type appears towards the end of this period, which is represented by Gypsum points and Elko points. The Gypsum point is typified by its contracting stem, whereas Elko points are corner notched (Jennings 1989).

### **3.1.4 - Protohistoric (~2500 B.C. to A.D. 1769)**

In the southwestern Great Basin, the Protohistoric period is characterized as having cooler and wetter conditions than previous periods and an environment similar to that of today. Protohistoric sites appear in California in areas that were unoccupied in previous periods. The number of sites in some regions, especially near ephemeral lakes, seem to have risen dramatically. In the Owens Valley, permanent village sites were used, along with the addition of upland dry-environment sites. These changes reflect a phenomenon found throughout the western United States where an increase in population and changes in tool kits and living arrangements resulted in more specialized uses of materials and landscapes. Diagnostic artifacts associated with this period consist of Elko and Gypsum projectile points.

### **Late Prehistoric Period, Desert Regions - Saratoga Springs Period (1750 to 800 BC)**

The Late Prehistoric period is environmentally similar to earlier periods. In the southwest Great Basin, this period is characterized by the introduction of the bow and arrow, exploitation of the pine nut, and an increase in logistical complexity relative to landscape use. With these changes came a diversification of resource use and a more sedentary settlement pattern in the Owens Valley. The nature and number of sites attributed to this time period changed such that the “winter villages” became larger, numbers of such villages were reduced, and base camps in the upland areas became larger, more diversified, and more numerous. The abandonment of village sites at the end of the Late Prehistoric Period is attributed to a change in climate, and is an event mirrored in other parts of the

American Southwest, California, and in Mexico. Trade of Coso obsidian in southern California apparently ended during this period.

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## 3.2 - Native American Background

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Research sponsored by the City of Moreno Valley (Moreno Valley 2005) as part of their General Plan Draft EIR, states that the Luiseño and Cahuilla peoples occupied the region during the Late Prehistoric period. Unfortunately, there is a lack of concrete archaeological evidence linking the prehistoric site complexes located within the City limits of Moreno Valley (e.g., Moreno Valley 2005:5.10-6 through 5.10-9) to any single modern tribal group. It is likely that northern Luiseño and western Cahuilla peoples accessed this area during the late prehistoric period for resource gathering. Areas located at the base of Mt. Russell would have been a logical place for a trade route, as it would link prehistoric site complexes, such as Pigeon Pass Valley Complex, Reche Hills Complex, Moreno Hills Complex, at the north end of the City with the marshy areas at the north end of the San Jacinto Valley. Serrano peoples may have used the San Jacinto Valley to link with their more southern groups.

### 3.2.1 - Cahuilla

According to several researchers (Kroeber 1925; Bean 1978), the Cahuilla Indians occupied the San Timoteo valley prior to contact with Spanish Mission padres and military personnel, which places the study area near their traditional use areas. Bean (1972, 1978) forms the primary modern reference for this cultural group. Bean notes that of all the southern California Indians, the Cahuilla existed within the most geographically diverse region, constrained only by water supplies and topography.

Currently, it is thought that a migration of Shoshonean peoples from the Great Basin occurred approximately 1,000 to 600 years ago, with populations moving into much of desert and coastal Southern California. Included among these migrants were the forbearers to the modern Cahuilla. The Cahuilla spoke a language that belongs to the Cupan group of the Takic subfamily of the Uto-Aztecan language family, a language family that includes the Shoshonean groups of the Great Basin.

The prehistoric Cahuilla were characterized by the occupation of sedentary villages in subsistence territories that permitted them to reach the majority of their resources within a day's walk. Villages were commonly located near reliable sources of water. During October to November, much of the village population moved to temporary camps in the mountains to harvest acorns and hunt game. Inland groups also had fishing and gathering spots on the coast that they visited annually. In comparison with the Gabrieliño and Luiseño, the Cahuilla appear to have had a lower population density and a less rigid social structure. The Cahuilla patterns may have been relatively stable until mission secularization in 1834, due to the policy of the Catholic Mission fathers or padres to maintain imported European traditional style settlement and economic patterns (Bean and Shipek 1978).

### 3.2.2 - Luiseño

Of all the southern California native groups, the Luiseño have been the most ethnographically studied and the literature is rich in detail. The Luiseño, belong to the Shoshonean linguistic family a vastly used language family used also by Cahuilla, Gabrieliño, and the Cupeño as well as other desert tribes such as the Kamia, Chemehuevi, Paiute and Serrano (Bean and Shipek 1978; Sparkman 1908; Strong 1972). The Luiseño occupational areas encompass over 1,500 square miles of southern California (Bean and Shipek 1978; Kroeber 1925) as well as the Channel Islands (Sparkman 1908). Luiseño villages could be found along the Pacific Ocean just north of Agua Hedionda and south of Aliso Creek. In addition, villages moved inland from these points to the western base of the San Jacinto River and south to the valley of San Jose, near Fallbrook (Bean and Shipek 1978). The villages were determined according to their proximity to a defined water source, access to a food-gathering locale, and in good defensive locations (Bean and Shipek 1978). Spatially, these villages were commonly located along valley bottoms, streams, or coastal strands. The Luiseño characteristically lived in sedentary villages, therefore one clan or family occupied several food-gathering locations and aggressively guarded these areas against other clans (Bean and Shipek 1978; Sparkman 1908; Strong 1972).

Luiseño homes were constructed in two forms; one variation was typically constructed with forked posts, which supported the wood ceiling beams, and were completely covered in thatch, which was lightly mixed with sand or soil (Bean 1978; Kroeber 1925). This form was generally seen in larger constructions, while the smaller home style had a slightly conical roof made of some locally available brush and the floor was usually excavated two feet below ground surface. All homes were built with a small fire pit in the center, and a slight smoke hole in the roof just above the fire (Bean 1978; Bean and Shipek 1978; Kroeber 1925). Sweat houses were of similar thatch design to that of the smaller home pattern, but varied in its construction in that it stood on two forked posts connected by log and was shaped like an ellipse, with an entrance on one of the longer sides of the structure.

The pottery associated with the Luiseño was functional, and was consequently simply constructed and lacked unique ornamental design features, although Bean and Shipek note that if designs were included, they were characterized by “a simple line decoration was either painted or incised with a fingernail or stick” (1978). Luiseño pots were made using the coil technique, in which pieces of coiled clay are gradually added to the edge of the pot, while it is being shaped with a wooden paddle and finished with a polishing stone. After completion, the pot is sun-baked and fired (Sparkman 1908). Typical uses of pottery were for cooking, water jugs, containers and a water vessel with two spouts used while members were gathering food (Sparkman 1908). Plant fibers were also commonly used for purposeful household implements such as brooms, brushes, nets, pouches twine, and cedar bark skirts for women. The process of creating such items from plant fiber tends to rely on soaking, stretching, and then rolling the fiber (Sparkman 1908; Bean and Shipek 1978).

Ceremony and ritual was of great importance to all native peoples and the Luiseño had their own variety of traditional practices. Frequently practiced ceremonies included a multiple of rituals for the mourning of the dead, the eagle dance, separate boys' and girls' initiation rites ceremonies, and a summer and winter solstice celebration (Kroeber 1925; Sparkman 1908; Strong 1972). These ceremonies offered gatherers an opportunity to witness reenactments, songs, and the oral recitation of their history (Garbarino and Sasso 1994). Equipment important during rituals included blades made of obsidian, stone bowls, clay figurines, and headdresses constructed of eagle-feathers (Bean and Shipek 1978). Ritual dances were limited to only three standard dances such as the fire dance, which was used during the Toloache Cult initiation for boys at puberty. Also of great significance during the boys' initiation were masterfully designed sand paintings. These sand paintings were thought to have originated in the Southwest, yet are completely and culturally Luiseño (Bean and Shipek 1978; Garbarino and Sasso 1994; Kroeber 1925). Although not necessarily limited to ritual, Heizer and Whipple comment that the Luiseño of Riverside County decorate their rock designs in the same form as that of the native peoples of the Great Basin, which appears as pecked abstracts displayed on boulders (1971).

Personal adornment was a common practice among the Luiseño. Ornamental items such as beads and pendants were made of clay, shell, stone, deer hooves, bear claws, and mica sheets. Men would wear ear and nose ornaments sometimes made of bone or cane with beads attached. Body painting and tattooing were practiced purely for rituals (Bean and Shipek 1978).

### 3.2.3 - Serrano

With reference to Bean and Smith (1978), the area where the project lies is near the southern edge of an area used by the Serrano. The Spanish decimated all indigenous groups adjacent to the eastern San Bernardino Mountains, but some Serrano survived for many years thereafter in the far eastern San Bernardino Mountains due to the ruggedness of the terrain and the dispersed population. Kroeber (1925) and Bean and Smith (1978) form the primary historical sources for this group. It is believed that Serrano families inhabited the *Guachama Rancheria* or *Politana* in the early 1800s. This village apparently housed the Rancho San Bernardino *estancia* after about 1819.

The Serrano spoke a language that belongs to the Cupan group of the Takic subfamily of the Uto-Aztecan language family, a language family that includes the Shoshonean groups of the Great Basin. The total Serrano population at contact was roughly 2,000 people. Their range is generally thought to have been located in and east of the Cajon Pass area of the San Bernardino Mountains, north of Yucaipa, west of Twenty-nine Palms and south of Victorville. Like all prehistoric Californians, the range of this group was determined by reliable water sources.

Serrano populations studied in the early part of the last century were a remnant of their cultural form prior to contact with the Spanish Missionaries. Nonetheless, the Serrano are historically viewed as clan and moiety-oriented or local lineage-oriented group tied to traditional territories or use-areas. Typically, a village consisted of a collection of families centered about a ceremonial house, with

individual families inhabiting willow-framed huts with tule thatching. Considered hunter-gatherers, the Serrano exhibited a sophisticated technology devoted to hunting small animals and gathering roots, tubers, and seeds of various kinds. Today, Serrano descendants are found mostly on the Morongo and San Manuel reservations.

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### 3.3 - Historic Background

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#### 3.3.1 - Spanish Period (A.D. 1769 to 1821)

Father Junipero Serra was sent to Alta California to create a chain of Missions and Mission outposts to bring Christianity to the indigenous population, and create a foundation for colonization of the region. Located between the previously established presidios in Monterey and San Diego, Serra had military assistance in his quest and the San Bernardino area came under the early control of Spanish soldier Pedro Fages and Father Francisco Garcés. According to Juan Caballeria (1902 in Lugo 1950), on May 20 1810, Father Francisco Dumetz founded and performed a ceremony to consecrate a new Mission San Gabriel supply station, including a chapel, at the *Guachama Ranchería*. This was an existing native village near the mouth of San Timoteo Canyon. According to Harley (1988 and 1989), it is likely that Dumetz never made this trip and that Caballeria, who was the keeper of Mission San Gabriel history at the time, had fabricated much of the story.

In 1819, Rancho San Bernardino was established. This followed a decision by the heads of the mission system to expand their agricultural holdings into the interior and later establish a chain of additional Missions in the desert interior (Harley 1989). A decision was made to create an *estancia*, or a ranch headquarters with a chapel that was occasionally visited by padres at the *Guachama Ranchería*. Indian attacks forced the *estancia* overseers to move the headquarters from the original site to a better-protected location. The so-called San Bernardino *Asistencia* was located on high ground 1.5 miles to the east-southeast of the original *estancia*. Construction began about 1830, and it was not yet finished when the project was abandoned in 1834. Lugo (1950) noted that between 1830 and 1832, a large house, and other buildings were constructed, which his family occupied after the Rancho was granted to him by Mexican authorities. The rancho traditions were kept once Mexico was established, but without the original authority of the Mission padres.

#### 3.3.2 - Mexican Period (A.D. 1821 to 1848)

After years of internal fighting, Mexico achieved its independence from Spain in 1821 and Alta California became the northern frontier of the State of Mexico (Gunther 1984). The Mission padres were then forced to swear allegiance to Mexico in 1822. Secularization of the missions took place over the next decade and the former mission lands were transferred to the large Mexican families that had settled in the area (Gunther 1984). Affiliated with Mission San Luis Rey, the Rancho San Jacinto was formed on December 21, 1842 and granted to Jose Antonio Estudillo. This rancho provided Estudillo with twice as much land, 8 square leagues (about 46,080 acres), as he had petitioned for the previous August. Lands north of the modern Alessandro Boulevard were not claimed by any family, probably because little reliable water existed in the area, except for the Mystic Lake cienega, and because it was a two-day ride from the closest Missions, San Gabriel, and San Luis Rey. The

property was petitioned for division by Estudillo's brother-in-law Miguel de Pedrona, soon after and a small portion of The Badlands north of Hemet was added to form the Rancho San Jacinto Nuevo y Potrero.

Lech notes (2004) that a wagon road lead from the Rancho San Jacinto headquarters northwest along the base of The Badlands, to the springs in the Box Springs Mountains east of what is now Riverside, and then to other roads near the Santa Ana River. This route, which purportedly lay along Gilman Springs Road, has been used for travel for over 160 years. The primary purpose of the interior ranchos during the Mexican Period was to raise cattle and sheep, however except for the shallow Mystic Lake *cienea* west of Eden Hot Springs, little reliable water can be found in this area. The upper San Jacinto Valley has proved to be agriculturally marginal, a factor that limited agricultural growth expansion until irrigation water could be brought into the area by the Eastern Municipal Water District.

### **3.3.3 - Moreno Valley and the Bear Valley & Alessandro Development Company**

The WLCSP is located on either side of Theodore Street, which was the easternmost border of the old Bear Valley and Alessandro Development Company (BV&A) development. BV&A conceptualized the town of Moreno and the community of Alessandro in 1889. Frank Elwood Brown, an engineer who moved to California in 1876 was the co-founder with Hiram Judson of the town of Redlands. In 1890, Brown and other investors formed the BV&A to "plat out new towns, bring Bear Valley water to the [Moreno] Valley, and open another large area to agricultural and town site development" (Lech 2004). Brown and Judson began growing citrus in Redlands between 1878 and 1882 using meager local water supplies. Brown formed the Bear Valley Land and Water Company (BVLWC) in the early 1880s and constructed the Big Bear Dam in 1883. After successfully creating Big Bear Lake, at that time the largest manufactured reservoir in the world, water began flowing from the dam through a series of flumes and canals to Redlands orchards in 1885. This demonstration led locals to believe that the area could be successfully irrigated using water brought in from the mountains to the north. The potential for Big Bear Lake seemed enormous because the winters between 1875 and 1885 were some of the wettest winters on record. Brown assumed that the abundance of water stored in the reservoir in those years was typical and would continue as such.

With little knowledge of precipitation fluctuations in southern California, water supplies were overblown to prospective investors and Brown and others fostered grandiose schemes for attracting them. Between 1889 and 1890, Brown began trading stocks derived from his own companies to develop land south of Redlands and consolidate his water rights. After organizing the BV&A in 1889, Brown and his associates bought all of the BVLWC stock individually. They then incorporated the Bear Valley Irrigation Company (BVIC), which bought all of the original BVLWC stock, including the dam, from the BV&A (Lech 2004).

Clearly, Frank Brown was hoping to duplicate the success of the City of Redlands, which by 1890 was a thriving commercial citrus center north of the Badlands and located along an established

railroad right-of-way. Turning his attention to the project region and cheap land therein, a 280-acre town site was named the Town of Moreno was established. Initially, the town was to have been named New Haven, after New Haven, Connecticut where many of the investors, including Brown, were from. However to honor Brown, the name Moreno, which is the Spanish word for “brown,” was chosen. North-south streets in the BV&A development in Moreno and Alessandro were named for the corporation leaders, while east-west streets were named for plant and tree species common in California at the time. Hopes were high that Moreno would prosper and local newspapers in 1891 declared that “Moreno will be a rail road town in the future [which has] every advantage of the most favored locality in Southern California and the disadvantages of none.”

In April 1891, an estimated 1,500 and 2,000 people went to the new town site of Moreno to purchase town lots being sold at public auction from Brown and his cronies. In the following eight months a Congregational Church, four brick commercial buildings, a lumberyard, two brickyards, a cement pipe works, and a school were constructed with as many as thirty houses being built at one time. By 1893, the Hotel de Moreno, three stories high and encompassing an entire city block, was operational and doing a brisk business with people needing a place to stay while developing their land. Investors interested in Moreno Valley land were from nearby regions: Los Angeles, San Diego, San Bernardino, and from as far away as Wisconsin, Pennsylvania, and New York. A map was created to show potential buyers what types of irrigation systems would be built and where the land was located (MBA 2006). Most were trying to cash in on the land boom that had swept California.

Moreno had become the latest in a string of small boomtown with new businesses developing, and orchards and crops being planted on nearby fields. The success for both local businesses and the farmers depended on the availability and consistency of water. Although Brown had studied the feasibility of bringing water into the Valley and had initially been successful in bringing water in from Bear Valley, by 1893 Brown and others realized that without a higher dam, the reservoir could not hold enough water to meet the irrigation needs of both Redlands and Moreno. To worsen the situation for Moreno, Redlands was the town for whom the reservoir was initially built and therefore had first rights to the water. A legal suit won by Redlands in 1894, in effect permanently shut off the water to Moreno, although a local judge ordered that domestic water to Moreno homes was allowable (Lech 2004).

In addition to the lack of water, it is likely that the Recession (Panic) of 1893 forced many potential farmers in southern California to reconsider their options, and the new farmers and speculators abandoned their properties. The Panic was caused by railroad overbuilding and speculation, much of which was driven by westward expansion into California. According to several sources, over 15,000 businesses and 500 banks failed during this period, many of them in California. The Northern Pacific Railway, the Union Pacific Railroad, and the Atchison, Topeka & Santa Fe Railroad all failed. The resultant depression lasted for three years and farmers went bankrupt nationwide; good economic times did not resurface until about 1899. By that time, the speculative land boom in this part of Southern California was over.

## SECTION 4: ENVIRONMENTAL COMPLIANCE PARAMETERS

### 4.1 - CEQA and Cultural Resources

Under California law, a cultural resource may be considered a *historical resource* if it is significant within the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California or if it meets the criteria for listing on the California Register of Historical Resources (CRHR). Each cultural resource within a developmental study area must be evaluated by a technical professional to determine if the resource is significant. According to the California Code of Regulations (CCR), Title 14, Chapter 3 Section 15064.5, the term “historical resources” includes the following:

1. *A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code Section 5024.1, Title 14 CCR, Section 4850 et seq.).*
2. *A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.*
3. *Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be “historically significant” if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code Section 5024.1, Title 14 CCR, Section 4852) including the following:*
  - 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*

Typically, cultural resources of an archaeological nature that exhibit buried and intact features qualify for the CRHR under Criterion 4 because such features will likely yield information important to the prehistory of California. If a resource is not listed in or has not yet been determined to be eligible for

listing in the CRHR, not included in a local register of historical resources pursuant to Section (§) 5020.1(k) of the PRC, and/or identified in an historical resources survey meeting the criteria in § 5024.1(g) of the PRC, the lead agency may still choose to determine that the resource is an historical resource as defined in Public Resources Code (PRC) Sections 5020.1(j) or 5024.1.

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## 4.2 - City of Moreno Valley General Plan

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The City approved its latest General Plan in 2006. Objectives and policies associated with prehistoric and cultural resources can be found on-line: [http://www.moreno-valley.ca.us/city\\_hall/general\\_plan.shtml](http://www.moreno-valley.ca.us/city_hall/general_plan.shtml). The Chapter 7 Conservation Element of the GPU discusses the cultural resource background of the City as a whole. The Chapter 9 Goals and Policies section provides the following guidelines to City staff:

**Objective 7.6:** Identify and preserve Moreno Valley’s unique historical and archaeological resources for future generations.

Policies in response to Objective 7.6:

- 7.6.1) Historical, cultural and archaeological resources shall be located and preserved, or mitigated consistent with their intrinsic value.
- 7.6.2) Implement appropriate mitigation measures to conserve cultural resources that are uncovered during excavation and construction activities
- 7.6.3) Minimize damage to the integrity of historic structures when they are altered.
- 7.6.4) Encourage restoration and adaptive reuse of historical buildings worthy of preservation
- 7.6.5) Encourage documentation of historic buildings when such buildings must be demolished.

Although the goals and policies are minimal, one aspect of these requirements is that a professional cultural resource manager must use his/her skills to define when a cultural resource becomes “significant” within the context of Moreno Valley history. This requires an assessment with consideration for a Threshold, and certain types of cultural resources will have an intrinsic value to the City. City policy suggests that, despite the technical manifestations of CEQA policy as discussed above in Section 3.1.1 (Definition of Cultural Resource Sites and Isolates), any cultural resources uncovered during project-related excavation and construction activities should be preserved.

Prehistoric sites on Mt. Russell and located within lands under the jurisdiction of the City and the County of Riverside are part of an unofficial prehistoric district known as the Wolfskill Ranch North Complex, and its general location has been published in the Moreno Valley General Plan Final EIR

(MV 2006). Page 5.10-14 of the Moreno Valley General Plan Final EIR notes that the North Complex is located on Open Space and that the potential impact to all prehistoric cultural resources in the City, including those on the Wolfskill, is considered a significant impact. For this reason, we recommend that all prehistoric resources in the boulder-strewn foothills of Mt. Russell be avoided during construction in the WLCSP.

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### **4.3 - Thresholds of Significance**

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If a professional is asked to determine if a cultural resource is significant under CEQA Guidelines and therefore subject to mitigation prior to development, a threshold of significance should be developed prior to testing/evaluation. This is a procedure recommended to professionals by the Office of Historic Preservation (OHP) / State Prehistoric Preservation Officer (SHPO). The threshold of significance is simply a point where the qualities of significance are defined during the analysis such that the resource can be defined as a historical resource. An adverse effect to a historic resource is regarded as the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the resource will be reduced such that it no longer meets the significance criteria. In lay terms, should an analysis show that future development will destroy elements that make the cultural resource historical, but leave non-unique elements intact, then the significance of the resource will be lost and there must be mitigation for that loss.

If a prehistoric cultural resource is tested, it is traditionally held that buried features such as, hearths, burials, middens, etc., could hold analytical information that will pass the significance threshold and make the site eligible for the CR under Criterion D alone. For resources created after the historic period began (post-1769 AD) and which are at least 45 years old, analysis of the condition and integrity of exposed features may cause the resource to pass Criterion A, B, C, and/or D thresholds. For buildings and other structures at least 45 years old, the completeness and integrity of the structural architecture may cause the site to pass Criterion A, B, and/or C thresholds.

The threshold should be associated with the site context or theme. If sets of unusual artifacts, buried but unusual buildings, or human remains are detected during tests of cultural resources in the study area, or if a historical review of the resource finds that it was once associated with a person and/or event of historical significance at the State/National level, such resources will likely be considered potentially significant for CR/National Register of Historic Places (NRHP) listing. In the event that the significance of the historical resource will be reduced below the threshold because of development, feasible mitigation must be developed.

#### **4.3.1 - Definition of Cultural Resource Sites and Isolates**

Prehistoric and historic cultural resources can vary in form and function from area to area, but it is a “site” as opposed to isolated artifacts and certain features that could be considered significant. Prehistoric and historic cultural resource sites are defined in this study as three or more items, such as

flaked lithics, projectile points, grinding tools, glass, cans, etc., that are not from a single source or material found within a 10 square meter area. There is no limit to the physical size of a site.

Sites that could qualify as significant are typically more than 45 years old or have the potential to be more than 45 years old. These definitions assume that items found in an area with a diversity of materials can represent more than a single activity at a location. Discrete components of a site may be identified to represent repeated activity, such as milling stations, hearths, or isolated structures.

Isolated artifacts and certain isolated features do not meet these minimal criteria. Isolates could consist of one or two cans, stone flakes, one metate fragment or fence posts, brass section markers, or well heads. Potential impacts to isolates need not be mitigated for.

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#### **4.4 - Paleontology**

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Although not specifically discussed in the Moreno Valley General Plan, potential impacts to Paleontological resources are covered in Appendix G - Section 5(c) of the CEQA Guidelines. This requires that during Initial Study screening, the Lead Agency must determine whether a project could directly or indirectly destroy a unique paleontological resource or site or a unique geologic feature. A qualified paleontologist should undertake a determination of this aspect of the environmental compliance analysis, then offer their conclusions to the City for its review and concurrence.

## SECTION 5: RESEARCH DESIGN AND BACKGROUND RESEARCH RESULTS

### 5.1 - Phase 1 Cultural Resource Survey Research Design

Previous research can provide a general basic understanding of cultural resources that might be found within the WLCSP. General topic areas common to California prehistory include: 1) prehistoric chronology, 2) subsistence strategies, 3) settlement patterning, 4) exchange, and 5) tool technology. Historic topic areas include: 1) land use, 2) personal backgrounds and 3) construction timetables. These general topics as contexts for research are difficult to address at the inventory level of analysis, but do provide a background for making statements about what is seen during an inventory. These topics allow for resource type and potential content to be understood and evaluated within a local historical framework as well as within the broader historical context of the region.

The purpose of a cultural resource survey is to find and describe all cultural resources more than 45 years old that could be affected by the construction of the proposed project. Thus, the ultimate goal of the Phase 1 survey was to determine whether cultural resources are located within or near the WLCSP, what type of resources are present or could be present, then predict the chance for future discoveries of cultural resources once construction began. Survey research assumptions for prehistoric-era resources consisted of the following:

1. Prehistoric resources will be found in areas that exhibit exposed bedrock or springs.
2. If prehistoric sites were used as more than a temporary encampment, they would likely exhibit milling slicks, stone artifacts, and other indications of long-term occupation, such as rock art, house pits, animal bones, or pottery. Some of this could be buried, and obscured from view.
3. Permanent habitation sites should be located near reliable water sources and should be located in areas that supported more than a single biological zone within a reasonable travel in the prehistoric past.

Survey research assumptions for historic-era resources consisted of the following. Research on the late historic period should be augmented with a review of any historic aerial photographs that could be obtained during the background analysis:

1. It is unlikely that historic buildings would have been built in or near the study area prior to the establishment of a pipeline leading from Big Bear Dam, through Redlands, San Timoteo Canyon and south along Redlands Boulevard. Historic buildings therefore should date no earlier than 1891.
2. Due to a lack of natural water resources that could be used for farm irrigation in this area, historic-era cultural resources should be located near the irrigation systems purportedly established in 1891.

During most of the surveys, the archaeological crews were lead in the field by the lead author, Mr. Dice. All cultural resources detected were photographed and plotted using hand-held Global Positioning System (GPS) devices. Background research showed that at least nine prehistoric sites and three historic-era sites were located in the study area. Each site had been previously recorded by a professional archaeologist and a trinomial number issued by the EIC.

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## **5.2 - Phase 2 Testing Research Design**

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Cultural resource sites found in the study area that cannot be avoided by construction should be tested for significance during the planning phase of the project. All archaeological excavations in the State of California require a scientifically-oriented research design following professional standards. Research questions associated with the sites in the study area should be designed to provide some scientific data, and allow a determination of significance as part of the CEQA process, without total site loss through the Phase 2 testing fieldwork. This subsection describes how a data sample at each individual cultural resource site will be collected such that a reasonable set of statements about the potential prehistory or history of each resource can be made. Once the archaeologists have collected an appropriate amount of data, the significance determination can proceed. A local Native American group (the Soboba Band of Luiseño Indians) were contacted in advance of testing and provided a representative while the fieldwork was undertaken. Although the significance test is the main priority, the following research issues can be addressed at the Phase 2 testing level of analysis:

### **5.2.1 - Time**

#### **When was this site occupied?**

The MBA Team shall attempt to amplify the distinguishing temporal characteristics of the site(s) such that a more detailed model of the date of occupation and the socio-functional activities of the site can be drawn. Historic-era sites can be evaluated utilizing historic maps and aerial photographs that might be able to be obtained.

### **5.2.2 - Economics**

#### **What types of resource procurement was occurring on or near the site?**

Knowledge of how people survived year after year is a crucial parameter in the analysis of economic functions. We assume that prehistoric cultural resources may represent an encampment or small village because adjacent water resources were likely limited to small springs. It may be possible to determine this if economically important features are located within the site(s) boundary. Prehistoric resource procurement modes will allow for local modeling of site activities. Historic-era sites were built by farming families for the purpose of citrus and ranching. The types of products grown there and how day-to-day economic activities occurred will allow for a better understanding of small communities during the historic period.

### **5.2.3 - Site Function**

#### **What types of subsurface features exist and what might be their function?**

It is possible that prehistoric hearths, house depressions, or other types of permanent fixtures will be located onsite during the testing. Human remains in the form of cremations (later occupation horizons) or inhumations (earlier occupation horizons) are also possible. An evaluation of those features and whether they are reasonably well preserved may be possible through subsurface excavation. Historic-era resources could include foundations of buildings plus superstructures, buried and abandoned features such as vaults, seepage pits, cisterns and sublevel foundations and rooms.

### **5.2.4 - Site Behavior**

#### **What was the aboriginal subsistence strategy during the Prehistoric Period?**

A summary of findings associated with research questions regarding Time, Economics, and Site Function, may allow for a description of local subsistence strategy. This analysis may permit an estimate of the types of prehistoric sites that may be encountered if the study area is developed.

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## **5.3 - Test Excavation Plan**

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### **5.3.1 - Prehistoric Sites**

Nine of 11 known prehistoric cultural resources in the WLCSP underwent the Phase 2 testing program in 2006, at the Proponents request. The 9 tested sites were originally recorded as bedrock milling sites and one (trinomial number CA-RIV-3346) exhibited a midden in a drainage that may have had spring water flows during the prehistoric period. Site CA-RIV-3347 and CA-RIV-2993 were the two prehistoric sites of the 11 known sites that were not tested. The former lies amongst bedrock boulders about 150 yards south of the developable area, and the latter was not tested because the site is a single slick of a bedrock outcrop and the parcel within which it lies was added to the WLCSP study area in April 2012.

Sites CA-RIV-610, CA-RIV-860, CA-RIV-3238, CA-RIV-3343, CA-RIV-3344, CA-RIV-3345, CA-RIV-3346, CA-RIV-8006, and CA-RIV-8007 were tested for significance in 2006. All are bedrock milling sites. Background review of these 9 sites shows that the lowermost slopes of Mt. Russell were never plowed for agricultural use likely because topsoil depth was very thin; in some places less than 20cm deep therefore it was not expected that the soil near these sites had been plowed, a factor that tends to destroy subsurface features. The surface qualities of each tested prehistoric resource were described in detail on new DPR 523 forms and the locations of the prehistoric features (milling slicks on bedrock outcrops and slabs) were plotted using a GPS device.

Subsurface testing took place using the shovel-test pit method, where the bedrock outcrops that hold the milling features are surrounded by excavated shovel test pits, each designed to investigate whether artifacts and features are located near the milling surfaces. When a standard shovel test was undertaken, at least four shovel test pits 50 centimeters (cm) in diameter and at least 50cm deep or to bedrock were excavated around each bedrock slab that exhibited milling surfaces within each

prehistoric site. Most of the individual bedrock slabs in these sites were defined as a Feature, and any number of milling slicks and mortars could appear upon them. Typically, there were 3 milling surfaces on each Feature.

Soils removed during excavation of the test pits were screened through quarter-inch mesh. All artifacts encountered shall be plotted using a GPS device and those found in the screen shall be examined and their data collected. Any horizontal stratified deposits that exhibit artifacts or samples shall be drawn on engineering paper and the ends of the cultural strata plotted using a GPS device. The DPR 523 forms with the maps and the shovel test pit locations shall be provided in Appendix E, Confidential DPR 523 Forms.

Although the research method was designed to collect and preserve artifacts following professional protocols, none were collected nor were any potential samples of soil containing macrobotanicals or microflakes collected as no items were observed. No stratified sediments were detected, so diagrams plotting soil strata and its relationship to the modern ground surface were not needed. Photographs of each test pit were made, as were overview photographs of each prehistoric resource.

### **5.3.2 - Historic Sites**

There are two historic cultural resources in the WLCSP that the Proponent had authorized Phase 2 testing on in January 2012: CA-RIV-4201 and CA-RIV-4210. Both of these sites were recorded by previous archaeologists in the 1990s and were identified as historic-era farm complexes or homesteads. These sites are located in plowed fields and although a level of testing was planned for these sites that mirrored the techniques used during work on the prehistoric sites, the veneer of plowed topsoil needed to be removed to gauge how much of the sites were actually left before testing could begin.

Removal of the upper two feet of soil proved that both structure complexes had been completely demolished and nearly all of the associated debris removed. Complete removal of debris likely took place because the nearby properties were being planted in dryland barley and the debris fields would disrupt planting and harvesting.

In connection with the development of the Town of Moreno in the 1890s as part of the Bear Valley and Alessandro Development Company's real estate venture, Alessandro Boulevard was constructed across much of the project site. The roadway has been in continuous use in largely its same location since that time. In 1988, the City adopted Resolution CPAB 88-2 recognizing the landmark status of this roadway and providing for the preservation of its 120-foot right-of-way through the City. In recognition of the historical significance of Alessandro Boulevard and in compliance with Resolution CPAB 88-2, the project will retain and protect the Alessandro Boulevard right-of-way through the project.

The conceptual circulation plan for the WLC contained in the Specific Plan (Exhibit 3-1) incorporates nearly all of the current Alessandro alignment. Where the ultimate roadway right-of-way varies from the historic right-of-way, the historic right-of-way will be retained and may be improved with walks, trails, landscaping or similar compatible improvements. Prior to approval of any development including or adjacent to the historic Alessandro Boulevard right-of-way, a concept plan for its entire length shall be submitted to and approved by the Planning Commission. These requirements are contained in the Specific Plan in Section 12.9 “Alessandro Boulevard – Historical Landmark.”

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## 5.4 - Paleontological Resource Research Design

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The potential for impacts to paleontological resources follow a different discovery pathway. Background information will be drawn from various geological and earth-science studies associated with the central portion of the County of Riverside and paleontological resource records search(es) were undertaken by Mr. Eric Scott of the San Bernardino County Museum at the request of Dr. Kenneth J. Lord. Surface manifestations of significant fossil resources were not expected in the WLCSP because most of the WLCSP has been plowed, and plowing destroys fossil deposits. However, because a certain amount of subsurface excavation must take place during construction it is assumed that there is some possibility that significant paleontologic resources could be uncovered. Our goal is to determine the potential for such finds and the depth upon which it is moderately likely that the resources will be encountered.

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## 5.5 - Cultural Background Check Results

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### 5.5.1 - Eastern Information Center Data

A series of searches were undertaken for the project as the project expanded and new parcels were added to the total. The initial cultural resource literature search was conducted by MBA Staff Archaeologist Marnie Kay in May 2005. A second cultural resource literature search was conducted by MBA Project Archaeologist Jennifer Sanka in June 2007. Both searches took place at the EIC, which is located at the University of California - Riverside. To identify any historic properties, both researchers examined the current inventories of the NRHP, CR, California Historical Landmarks (CHL), and California Points of Historical Interest (CPHI). In addition, both researchers reviewed the California State Historic Resources Inventory (HRI) and archival maps for the County and the City to determine the existence of previously documented local historical resources. A search radius of 1.0 mile was used. A third check was undertaken by MBA staff archaeologist Arabesque Said in early 2011. This check was undertaken because a few years had elapsed since the original records searches had been made.

Table 1 and Table 2 list the results of the cultural resources records search for cultural resources in and near the study area. Those listed cultural resources in the “Site Name” column that are highlighted in **bold** are located inside the margin of the study area. The “Location Comments” column provides a summary of the potential impacts to each resource on the basis of location only. The Wolfskill North Ranch Complex, discussed in Moreno Valley General Plan Final EIR (2006), is not listed as a potential district or complex on any EIC database.

Table 1: Sunnymead Quad Map: Previously Recorded Cultural Resources

Site Name	Location	Type	>0.25 mile	>0.5 mile	>1 mile	Location Comments
CA-RIV-21	Sect 18 T3S R2W	The Moreno Maze, a pictograph site.	●			
CA-RIV-202	Sect 19 T3S R2W	Probable village site		●		
CA-RIV-265	Sect 30 T3S R3W	Milling features and artifacts.			●	
CA-RIV-455	Sect 19 T3S R3W	Milling feature			●	
CA-RIV-464	Sect 24 T3S R2W	Pictographs and artifacts: the Charles Mott Site.		●	●	
CA-RIV-480	Sect 30 T3S R3W	Milling features.			●	
CA-RIV-481	Sect 25 T3S R3W	Milling feature			●	
CA-RIV-493	Sect 24 T3S R3W	Milling features are artifacts.			●	
CA-RIV-608	Sect 18 T3S R2W	Milling features.	●			
CA-RIV-609	Sect 18 T3S R2W	Milling features and may have spring/weep.	●			
<b>CA-RIV-610</b>	Sect 18 T3S R2W In WLCSP	Milling features.				<b>In the WLCSP Boundary near the foothills of Mt. Russell.</b>
<b>CA-RIV-860</b>	Sect 13 T3S R3W In WLCSP	Milling features.				<b>In the WLCSP Boundary near the foothills of Mt. Russell.</b>
CA-RIV-1020	Sect 4 T3S R3W	Many milling features and some artifacts			●	
CA-RIV-2587	Sect 4 T3S R3W	Milling slicks			●	
CA-RIV-2588	Sect 4 T3S R3W	Milling slicks			●	
CA-RIV-2589	Sect 4 T3S R3W	Milling slicks			●	
CA-RIV-2590	Sect 4 T3S R3W	Milling slicks			●	

Table 1 (cont.): Sunnymead Quad Map: Previously Recorded Cultural Resources

Site Name	Location	Type	>0.25 mile	>0.5 mile	>1 mile	Location Comments
CA-RIV-2775	Sect 13 T3S R3W In WLCSP, renamed resource	Milling features.				Resource renamed CA-RIV-8007 (see below)
CA-RIV-2776	Sect 13 T3S R3W In WLCSP, renamed resource	Milling features.				Resource renamed CA-RIV-8007 (see below)
CA-RIV-2777	Sect 13 T3S R3W In WLCSP, renamed resource	Milling features.				Resource renamed CA-RIV-8007 (see below)
CA-RIV-2863	Sect 11 T3S R3W	Milling features	●			
CA-RIV-2864	Sect 11 T3S R3W	Milling features	●			
CA-RIV-2865	Sect 11 T3S R3W	Milling features	●			
CA-RIV-2950	Sect 13 T3S R2W	Milling features.		●		
CA-RIV-2959	Sect 13 T3S R3W	Milling features.	●			
CA-RIV-2960	Sect 13 T3S R3W	Milling features.	●			
CA-RIV-2961	Sect 13 T3S R3W	Milling features.	●			
CA-RIV-2967	Sect 13 T3S R3W	Milling features.		●		
CA-RIV-2969	Sect 19 T3S R2W	Boulder feature.	●			
CA-RIV-2993	Sect 13 T3S R3W	Milling features.				In the WLCSP Boundary near the foothills of Mt. Russell.
CA-RIV-2995	Sect 18 T3S R2W	Milling features and rock alignments.	●			
CA-RIV-3238	Sect 13 T3S R3W In WLCSP Plan	Milling features.				In the WLCSP Boundary near the foothills of Mt. Russell.
CA-RIV-3340	Sect 19 T3S R2W	Lithic scatter on flats.	●			In the WLCSP Boundary near the foothills of Mt. Russell.

Table 1 (cont.): Sunnymead Quad Map: Previously Recorded Cultural Resources

Site Name	Location	Type	>0.25 mile	>0.5 mile	>1 mile	Location Comments
CA-RIV-3343	Sect 13 T3S R3W In WLCSP	Milling features.				In the WLCSP Boundary near the foothills of Mt. Russell.
CA-RIV-3344	Sect 13 T3S R3W In WLCSP	Milling features.				In the WLCSP Boundary near the foothills of Mt. Russell.
CA-RIV-3345	Sect 13 T3S R3W In WLCSP	Milling features.				In the WLCSP Boundary near the foothills of Mt. Russell.
CA-RIV-3346	Sect 13 T3S R3W In WLCSP	Milling features and a "middens."				In the WLCSP Boundary near the foothills of Mt. Russell.
CA-RIV-3347	Sect 13 T3S R3W In WLCSP	Milling features.				In the WLCSP Boundary near the foothills of Mt. Russell.
CA-RIV-4210H	Sect 19 T3S R2W In WLCSP	Historic structure, foundations, and trash deposit. Old topographic maps and photographs show a farm complex at this location.				In the flats of the WLCSP: phase 2 tested and found Not Significant.
CA-RIV-4211	Sect 30 T3S R2W	Extensive artifact scatter at base of hills			●	
CA-RIV-4212	Sect 19 T3S R2W	Lithic scatter on flats.	●			
CA-RIV-6065 (P33-8168)	Sect 18 T3S R2W In WLCSP	Buried prehistoric artifacts found during trench work				Buried artifacts found along the MWD pipeline.
CA-RIV-6066 (P33-8169)	Sect 18 T3S R2W In WLCSP	Buried prehistoric artifacts found during trench work				Buried artifacts found along the MWD pipeline.
CA-RIV-6067 (P33-8170)	Sect 19 T3S R2W In WLCSP	Buried prehistoric artifacts found during trench work				Buried artifacts found along the MWD pipeline.
CA-RIV-6068 (P33-8171)	Sect 19 T3S R2W In WLCSP	Buried prehistoric artifacts found during trench work				Buried artifacts found along the MWD pipeline.
CA-RIV-6084 (P33-8266)	Sect 30 T3S R2W	Isolated artifacts found during trenching.	●			Isolate, no need to mitigate for any impact

Table 1 (cont.): Sunnymead Quad Map: Previously Recorded Cultural Resources

Site Name	Location	Type	>0.25 mile	>0.5 mile	>1 mile	Location Comments
CA-RIV-6200 (P33-8709)	Sect 6 T3S R2W	Deeply buried (21 feet) hearth	●			Site located within the EMWD tunnel. No impacts foreseen during construction in the WLCSP.
P33-7275	Sect 6 T3S R2W	1920s house along Theodore Street.	●			
P33-7278	Sect 11 T3S R3W	1928 Moreno School.	●			
P33-7291	Sect 6 T3S R2W	1915? Armstrong Home.	●			
CA-RIV-8006	Sect 13 T3S R3W In WLCSP.	Milling slick site.				In the WLCSP Boundary near the foothills of Mt. Russell.
CA-RIV-8007	Sect 13 T3S R3W In WLCSP.	Milling slick site. Renamed from RIV-2775, -2776 and -2777 during MBA testing project				In the WLCSP Boundary near the foothills of Mt. Russell.
P33-16655 thru 16671	Sect 1 T3S R2W	Kerr Stock Farm complex (on the Skechers property)	●			Previously mitigated for and demolished

Table 2: El Casco Quad Map: Previously Recorded Cultural Resources

Site Name	Location	Type	>0.25 mile	>0.5 mile	>1 mile	Location comment
CA-RIV-2025	Sect 22 T3S R2W	Historic farm structure complex.	●	---	---	
CA-RIV-4201H	Sect 7 T3S R2W	Historic foundation remnants and historic trash along Virginia Street. Old topographic maps and photographs show a farm complex here.				In the flats of the WLCSP: Phase 2 tested and found Not Significant.
CA-RIV-5862	Sect 6 T3S R2W	Historic-era two room farm structure				In WLCSP but on MWD property. Considered not significant due to loss of integrity.
CA-RIV-6200	Sect 6 T3S R2W	Prehistoric firepit 22 feet below				Site found during the Gilman tunnel excavation. No

Site Name	Location	Type	>0.25 mile	>0.5 mile	>1 mile	Location comment
P33-12933 (CA-RIV-7172)	Sect 22 T3S R2W	grade Isolated grinding tools.			●	impacts foreseen during construction in the WLCSP.
P33-12937 (CA-RIV-7173)	Sect 22 T3S R2W	Isolated grinding tools and a scraper.	●			
P33-11621	Sect 21 T3S R2W	Historic farmstead.		●		In the Open Space portion of the WLCSP, cannot be directly impacted by construction in the WLCSP.
P33-11622	Sect 17 T3S R2W	Single stone tool fragment.				
P33-12934	Sect 22 T3S R2W	Single mano.		●		
P33-12935	Sect 22 T3S R2W	Single core.		●		
P33-12938	Sect 22 T3S R2W	Single mano.	●			
P33-13848	Sect 15 T3S R2W	Single metate fragment.		●		
P33-13849	Sect 22 T3S R2W	Single mano.		●		
P33-13850	Sect 15 T3S R2W	Single thinning flake.	●			

Table 1 and Table 2 show that there are a total of 67 previously recorded cultural resources located in and within various distances from the WLCSP. Numerous prehistoric sites are located in the WLCSP on the foothills of Mt. Russell and many significant prehistoric resources are located south of the mountain peak near once-active springs. CA-RIV-6200 was found near the MWD feeder pipe tunnel on MWD land near Gilman Springs Road. This was a prehistoric hearth located about 22 feet below the modern ground surface. The depth of the feature suggested that it had been buried in alluvium derived from floods out of the nearby canyon. CA-RIV-6065, CA-RIV-6066, CA-RIV-6067 and CA-RIV-6068 are artifact deposits that were detected during trenching of a Metropolitan Water District (MWD) feeder pipe along the base of Mt. Russell. These sites were seen in the feeder pipe trench wall only and were not exposed to view at the modern ground surface level. The presence of all these prehistoric resources suggest that the area was habitable for much of the year because reliable water (in Mystic Lake) was available for most of the year. This lake is a semi-desert playa that was probably filled to some degree during most of the prehistoric period, similar to that today. People were likely living along and near the lake margin and used the WLCSP as part of their general resource gathering area. Site CA-RIV-4201, -4210 and -5862 are in the WLCSP and are historic-era farmstead sites. A few other sites consist of historic resources that were mitigated for during land clearance of the Kerr Stock Farm (MBA 2006). Isolated artifacts are also found just outside the southeast corner of the WLCSP near Gilman Springs Road.

### **5.5.2 - Native American Heritage Commission Commentary**

MBA contacted the Native American Heritage Commission (NAHC) in March 2011 requesting a Sacred Lands File search for traditional cultural properties. This request letter was an update to the 2005 information request (both copies added to this report). The response from the NAHC was received on March 25, 2011. The NAHC response indicated that no sacred lands or traditional cultural properties are known for the WLCSP. MBA sent information-request letters to each of the 12 tribal entities named by the NAHC on March 29, 2011. Two responses to our letters were forwarded to MBA staff: one from the Pala Band and another from the Soboba Band. We responded to the Soboba Band by requesting an on-site consultation with Joseph Ontiveros, but as of the date of this report Mr. Ontiveros has not requested to consult with us. Comment letters on the Draft Environmental Impact Report were received from both the Soboba Band and Pechanga Cultural Resources on April 8, 2013. These comments have been addressed both in this document, in a Response to Comment, and within the Final EIR. Letters received from the tribal contacts subsequent to the date of the final report will be forwarded to the Proponent and the City of Moreno Valley as they are received. .

### **5.5.3 - Historic Aerial Photograph Review**

MBA reviewed a group of aerial photographs curated in the now-closed Whittier-Fairchild Aerial Photograph Collection at Whittier College, and two 1953 aerial photographs belonging to the now-closed Rupp Aerial Photography, Inc. of Corona. The purpose of this review was to provide background information on the WLCSP as related to changes in the condition of each individual parcel over time as well as to identify historic-era structures and features that might be encountered during survey or construction.

Three 1932 photos (Flight C-1940), three 1936 photos (Flight C-4058, one 1951 photo (Flight C-16123), and three 1958 photos (Flight C-23023) were purchased from Whittier to assist in interpretation of the WLCSP. Each photograph purchased was a contact print that was then scanned with large pixel counts. The Rupp Aerial photographs were taken by the Department of Agriculture in 1953, with Rupp purchasing the negatives many years later (Flight AKM-8K-86 and AXM-2K-11), and the digital record sent to MBA staff via email.

The photographs were carefully examined for project landmarks then evaluated prior to the field survey for 1) the types of agricultural practices performed upon them over time by the land or leaseholders that might have an effect on the condition of the land and 2) the existence of structures that might have been demolished and plowed over between 1932 and 1960. Such structure remnants can usually be seen or inferred during survey due to the presence of foundations and historic trash. The narrative below discusses areas in the WLCSP that were available as part of the aerial review. Not all portions of the WLCSP for each date were rendered on the photographs.

In February 1932, those portions of the northwest quadrant of the WLCSP (Exhibit 4a, 1932 Aerial - Northwest Portion of Specific Plan) were planted in citrus, alfalfa, hay and possibly grapes. Redlands Blvd may have been paved but it is more likely that it was still dirt. Large-scale flood control features do not exist. The fact that so much of the land elsewhere in this image was growing citrus suggests that groundwater supplies had not yet been depleted. A structure and treed landscaping located northeast of the corner of Redlands and Eucalyptus is still located there. The house is gone but trees and outbuildings/garage are still there. In the northeast corner of the WLCSP (Exhibit 4b), the mouths of the canyons leading into the Badlands had been plowed for dryland crops and a few structures can be seen, including buildings at CA-RIV-5862. Washes carry generally southeast and merge. Gilman Springs Road had not yet been built and dirt roads lead from the Anderson Ranch property (CA-RIV-7297) at the base of the foothills to the Virginia Street farm complex (CA-RIV-4201). In the southeast corner of the WLCSP (Exhibit 4c, 1932 Aerial - Southeast Portion of Specific Plan), Alessandro carries eastward from Theodore, passes the farm complex at CA-RIV-4210, then joins Gilman Springs Road. This is the only street that is paved in the area.

On June 8 1936, the community of Moreno can be seen in the southwest quadrant of the WLCSP (Exhibit 5a, 1936 Aerial - Southwest Portion of Specific Plan). The unplowed foothills of Mt. Russell can be observed and the directional trend in which creeks and washes flow (to the southwest) is clearly evident. Cactus Avenue crosses one of these washes south of Moreno and plowed ground to the east is being used for hay and pasture. On certain properties in the northwest corner of Alessandro and Redlands Blvd grasses (hay) were recently cut with a mechanical mower and left to dry before baling. Ten acres of land is being farmed for citrus, with other citrus groves can be found to the north near the corner of Redlands and Dracaea. The majorities of the properties in this image are in grass. Only Alessandro is paved. Exhibit 5b, 1936 Aerial - Eastern Portion of Specific Plan, shows much of the eastern half of the WLCSP in 1936.



Source: Fairchild Aerial Photography Collection.



Michael Brandman Associates

26100025 • 12/2013 | 4a\_1932\_NW.cdr

## Exhibit 4a 1932 Aerial - Northwest Portion of Specific Plan

HIGHLAND FAIRVIEW OPERATING COMPANY • WORLD LOGISTICS CENTER SPECIFIC PLAN  
PHASE I AND PHASE II CULTURAL RESOURCES ASSESSMENT



Source: Fairchild Aerial Photography Collection.



Michael Brandman Associates

26100025 • 12/2013 | 4b\_1932\_NE.cdr

## Exhibit 4b 1932 Aerial - Northeast Portion of Specific Plan

HIGHLAND FAIRVIEW OPERATING COMPANY • WORLD LOGISTICS CENTER SPECIFIC PLAN  
PHASE I AND PHASE II CULTURAL RESOURCES ASSESSMENT



Source: Fairchild Aerial Photography Collection.

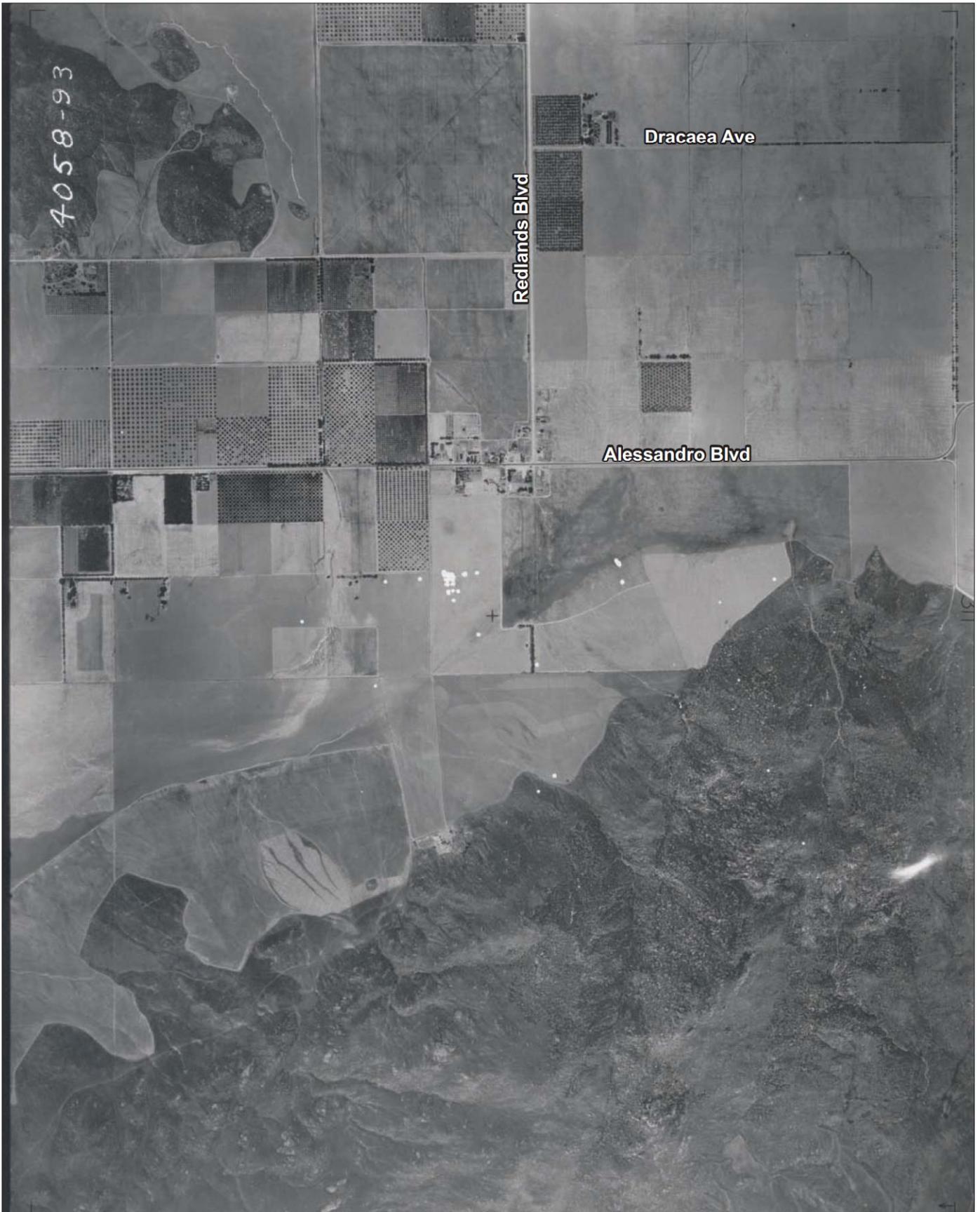


Michael Brandman Associates

26100025 • 12/2013 | 4c\_1932\_SE.cdr

## Exhibit 4c 1932 Aerial - Southeast Portion of Specific Plan

HIGHLAND FAIRVIEW OPERATING COMPANY • WORLD LOGISTICS CENTER SPECIFIC PLAN  
PHASE I AND PHASE II CULTURAL RESOURCES ASSESSMENT



Source: Fairchild Aerial Photography Collection.



Michael Brandman Associates

26100025 • 12/2013 | 5a\_1936\_SW.cdr

## Exhibit 5a 1936 Aerial - Southwest Portion of Specific Plan

HIGHLAND FAIRVIEW OPERATING COMPANY • WORLD LOGISTICS CENTER SPECIFIC PLAN  
PHASE I AND PHASE II CULTURAL RESOURCES ASSESSMENT



Source: Fairchild Aerial Photography Collection.



Michael Brandman Associates

26100025 • 12/2013 | 5b\_1936\_E.cdr

## Exhibit 5b 1936 Aerial - Eastern Portion of Specific Plan

HIGHLAND FAIRVIEW OPERATING COMPANY • WORLD LOGISTICS CENTER SPECIFIC PLAN  
PHASE I AND PHASE II CULTURAL RESOURCES ASSESSMENT

A large historic era farm can be seen near the southern margin: this has been replaced with a SDGE gas compression station. Historic site CA-RIV-4201 and CA-RIV-4210 are clearly visible as homesteads and much of the hay and grass surrounding the farm has been cut. The absence of horse corrals and feedlots at these farms (hay can be stored in the open if covered and hay barns are not always needed) suggest that the cut grasses were being baled and sold elsewhere, possibly in Sunnymead.

Images from the end of December 1946 and early January 1947 are found in Exhibit 6a and Exhibit 6b. Exhibit 6a, 1946-7 Aerial - Southwest Portion of Specific Plan, shows the southwest portions with the town of Moreno exhibiting a few more structures. 10-acre parcels north of Alessandro Blvd were surrounded by a small ditch for water and flood control, fencing and roads: these can be seen in this photograph. Redlands Blvd was paved, but the remainder of roads were not except for Alessandro Blvd. This image shows that most of the land in this portion of the WLCSP had been plowed repeatedly except for lands located at the toe of Mt. Russell, which is covered in Riversidean sage scrub vegetation. Exhibit 6b, 1946-7 - Southeast Portion of Specific Plan, shows much of the southeast portion of the WLCSP including farms at CA-RIV-4210 and CA-RIV-4201. Hay storage may have been taking place at the former site because a large open barn or flat-roofed tractor shed can be seen. The farmhouse is in the lower southwest portion of the site and the remaining buildings spread to the north. The deep color surrounding the single building at CA-RIV-4201 may be due to extensive watering. The paved Gilman Springs Road had been built probably just after World War II and as a result Virginia Street was little used.

In the 1958 and 1960 periods, the historical development of farms in the area had matured and many of the parcels that supported citrus in 1932 had been converted to grains and pasture. SR-60 had been put through the Badlands by this time and forms the primary developmental change. Greyvillea Street was removed to allow for the passage of a 2-lane both directions freeway plus a few structure complexes in the right of way. Overpasses were construction: these are now being replaced (2011-2012). The large citrus orchard on the old Kerr Ranch at the corner of Redlands Boulevard and Greyvillea in the 1930s had been demolished and replaced by a horse farm (Dice 2006) facing the SR-60 freeway. The north portion of the WLCSP can be observed on a February 1958 aerial (Exhibit 7a, 1958 Aerial - North Portion of Specific Plan), whereas the southern portion can be observed in a 1960 aerial (Exhibit 7b, 1960 Aerial - South Portion of Specific Plan).



Source: Fairchild Aerial Photography Collection.



Michael Brandman Associates

26100025 • 12/2013 | 6a\_1946-7\_SW.cdr

## Exhibit 6a 1946-7 Aerial - Southwest Portion of Specific Plan

HIGHLAND FAIRVIEW OPERATING COMPANY • WORLD LOGISTICS CENTER SPECIFIC PLAN  
PHASE I AND PHASE II CULTURAL RESOURCES ASSESSMENT



Source: Fairchild Aerial Photography Collection.

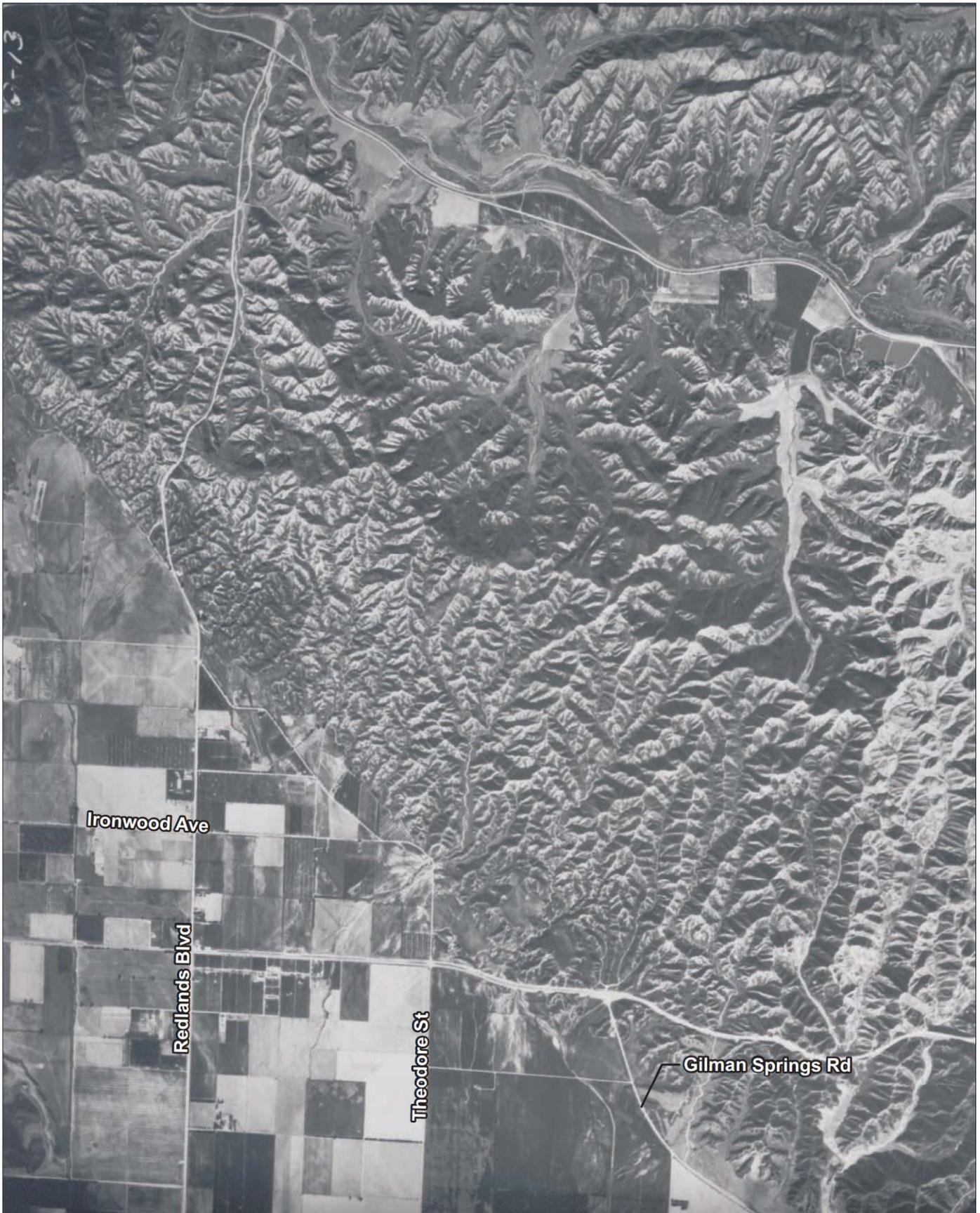


Michael Brandman Associates

26100025 • 12/2013 | 6b\_1946-7\_SE.cdr

## Exhibit 6b 1946-7 Aerial - Southeast Portion of Specific Plan

HIGHLAND FAIRVIEW OPERATING COMPANY • WORLD LOGISTICS CENTER SPECIFIC PLAN  
PHASE I AND PHASE II CULTURAL RESOURCES ASSESSMENT



Source: Fairchild Aerial Photography Collection.



Michael Brandman Associates

26100025 • 12/2013 | 7a\_1958\_N.cdr

## Exhibit 7a 1958 Aerial - North Portion of Specific Plan

HIGHLAND FAIRVIEW OPERATING COMPANY • WORLD LOGISTICS CENTER SPECIFIC PLAN  
PHASE I AND PHASE II CULTURAL RESOURCES ASSESSMENT



Source: Fairchild Aerial Photography Collection.



Michael Brandman Associates

26100025 • 12/2013 | 7b\_1960\_S.cdr

## Exhibit 7b 1960 Aerial - South Portion of Specific Plan

HIGHLAND FAIRVIEW OPERATING COMPANY • WORLD LOGISTICS CENTER SPECIFIC PLAN  
PHASE I AND PHASE II CULTURAL RESOURCES ASSESSMENT

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## 5.6 - Paleontological Records Search Results

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A series of paleontological records checks were requested by MBA's project paleontologist Dr. Kenneth J. Lord between 2005 and 2008, and responses to our inquiries were received from Mr. Eric Scott of the Paleontological Division of the San Bernardino County Museum. Each response has been reproduced in Appendix B.

Mr. Scott's paleontological review showed that the whole of the WLCSP and region, in an area south of SR-60, north of the toe of Mt. Russell to a point toward Gilman Springs Road, rests entirely on exposures of Holocene recent alluvium. This alluvium has low potential for fossil deposits to be uncovered during grading. However, the Holocene alluvium rests upon a veneer of Older Pleistocene alluvium and San Timoteo Formation deposits, both of which are highly sensitive for fossil resources.

In 2004, LSA conducted monitoring during geotechnical testing within portions of what was to become the World Logistics Center Specific Plan. These trenches were placed south of the Corporate Park Project between Redlands Boulevard and Theodore Street. Both trenches were excavated to a depth of 25 feet. A fossil rib bone was found in Trench 1 at a depth of 17 feet. The specimen compared well with *Bison* sp. (LSA 2004). This finding is consistent with other finds in the region and is indicative of Pleistocene age sediments within the WLCSP area.

Research on the subject of potential impacts to buried paleontological resources was recently undertaken by MBA staff during construction monitoring of the Highland Fairview Corporate Park project (MBA 2011), which was built by the Proponent. Deep excavations showed that the Holocene/Pleistocene alluvium is likely to be quite thick and at least 20 feet of this existed in the Highland Fairview Corporate Park project site. We believe that a similar condition exists elsewhere in the WLCSP and that the upper 10 feet of soil (at a minimum) has low sensitivity for potential impacts to paleontologic resources. Impacts to sensitive paleontologic resources moves to "moderate" once a depth below grade of 10 feet is reached. This may vary across the study area, since obviously prehistoric archaeological remains were found 21 feet below grade during archaeological monitoring at site CA-RIV-6200. This particular resource is near the northeast corner of the study area.

## SECTION 6: RESULTS

### 6.1 - Phase 1 Survey

MBA Senior Archaeologist Michael Dice, M.A. guided all fieldwork associated with the many cultural resource surveys in the WLCSP. MBA staff archaeologists Peter Messick, Marnie Kay, Alynne Loupe, Leleua Loupe, Sarah Williams, Greg Chatman, Erin Shepard, Jennifer M. Sanka, James Keasling, Arabesque Said, Eric Landis and Audrey Podratz surveyed portions of the study area at various times between late 2005 and April of 2012 (see Section 2). The vast majority of the study area exhibited barren, tilled earth with at least 50 percent ground visibility. Certain portions of the WLCSP could not be examined with good intensity because they were covered in tall and dense weedy vegetation with poor ground surface visibility (80 percent obscured plus), and in a few places the lands were too steep to walk safely.

#### 6.1.1 - Observed Prehistoric-era Cultural Resource Sites

Cultural resources listed in bold/grey in Table 1 and Table 2 (column “Site Name” and column “Location Comments”), are previously recorded sites the survey teams were able to observe. Most of these were located on the lower slopes of Mt. Russell in the northern portion of Section 13 T3S/R3W (see Appendix F, Confidential Site Locations).

Prehistoric bedrock milling slick sites CA-RIV-2775, CA-RIV-2776, CA-RIV-2777 and CA-RIV-2993 were poorly defined and the original DPR 523 forms were confusing. After considerable amount of review in the field, the plotted locations of the milling slick features that defined these sites showed that they were located very close together: so close that there were legitimately combined into single prehistoric resource now known as CA-RIV-8007. One additional previously unrecorded prehistoric resource was detected during survey on Mt. Russell in 2011: site CA-RIV-8006. Finally, site CA-RIV-6200 was identified by archaeologists during construction of the EMWD tunnel near Gilman Springs Road in the 1990’s. It is unlikely that this site will be directly impacted by development in the WLCSP due to its depth.

#### 6.1.2 - Observed Historic-era Cultural Resource Sites

Site CA-RIV-4201 and CA-RIV-4210 are located on lands inside the WLCSP near Alessandro and Virginia streets. These two sites were Phase 2 tested for significance in January 2012. Site CA-RIV-5862 is located on MWD property near the intersection of Gilman Springs and SR60 and was evaluated for significance during surveys in January 2012.

An unrecorded historic-era structure was observed in historic aerial photographs and is located in Assessor’s Parcel Number (APN) 478-220-009. One of the structures on this parcel was built in 1900, and appears to be one of the oldest remaining structures in the former community of Moreno. Once access to this parcel is gained by the Proponent, the structure should be recorded onto DPR 523

forms and evaluated for significance by a qualified architectural historian before the Draft EIR is submitted to the City for public review.

### **6.1.3 - Isolated Finds**

Two isolated prehistoric artifacts were identified during the surveys. Isolate #1 was detected in a plowed field, to the southeast of the intersection of Alessandro Boulevard and Theodore Street, east of Theodore Street. This resource consists of a single grey meta-volcanic core, measuring 15 cm (Length) x10 cm (Width). Some portions of the core exhibited heavy patination, and several plow scars were observed. Isolate #2 was detected to the east of Davis Road, which is the southern extension of Theodore Street. This resource consists of a single quartz tertiary flake with 4 dorsal scars, and it retains an orange inclusion. Because they are isolates, no additional mitigative efforts are required.

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## **6.2 - Phase 2 Testing Results**

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### **6.2.1 - Prehistoric Resources**

Site CA-RIV-610, CA-RIV-860, CA-RIV-3238, CA-RIV-3343, CA-RIV-3344, CA-RIV-3345, the northern portion of site CA-RIV-3346, CA-RIV-8006, and CA-RIV-8007 were tested for significance in 2006. Site CA-RIV-2995, originally thought to lie adjacent to the margin of the WLCSP and authorized by the Proponent for Phase 2 testing, was relocated using a GPS and found to be located beyond the WLCSP footprint. As noted in Table 1, sites CA-RIV-2775, CA-RIV-2776, and CA-RIV-2777 were merged to form one large site (CA-RIV-8007) during the Phase 2 test fieldwork.

Subsurface testing consisted of the use of 50cm diameter shovel test pits excavated near the Features in each site and the soil screened through 0.25-inch hardware cloth. Any artifacts (stone tools, stone flakes, pottery, bone, etc.) in the test pits would have been captured through this procedure would have been examined, photographed, analyzed in the field. They were to be returned to the pit when the pit was backfilled. Despite the fact that over 100 test pits were excavated, no buried artifacts or hidden buried features were detected in any site except the northern portion of CA-RIV-3346 (the southern half of this site was scanned by the crew for surface artifacts but no test pits were placed in it). The crew also scanned the perimeter of each site for concentrations of artifacts and/or isolated artifacts before digging the pits.

We believed that the nine prehistoric sites should be considered part of the unofficial Wolfskill Ranch North Complex. This Complex is discussed in the City General Plan but is not an officially recognized prehistoric district.

The following cultural resource descriptions are taken and edited from lines P3 and A4 of the individual DPR 523 forms created for this study. The DPR forms are in Appendix E, Confidential DPR 523 forms. Conclusions regarding the potential significance of each resource are made herein.

Section 6, Summary and Recommendations, of this report delineates our general conclusions as well as appropriate mitigation measures.

### **CA-RIV-610**

This prehistoric resource exhibits sets of milling features on four granitic outcrops labeled Feature A, B, C, and D. The granite blocks are large and the milling surfaces are difficult to see. Feature A and B are located near the eastern edge of the resource and exhibit a single slick apiece. Feature C is located near the center-west of the resource and exhibits one slick and three saucer mortars. Feature D is located near the western edge of the resource and exhibits two milling slicks. The granite blocks exhibited a greenish lichen, which leads to deterioration of the granite surfaces.

Four standard shovel test pits were placed around each of the 4 Features for a total of 16 to determine if any buried resources were noted in the area. No buried features were noted, nor were any artifacts observed. The resource was mapped, shovel tests plotted, and located using a GPS device, photographed, and the test pits were refilled and smoothed.

According to CCR 15064.5, any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code Section 5024.1, Title 14 CCR, Section 4852) including the following: *4. Has yielded, or may be likely to yield, information important in prehistory or history.*

In our view, the potential information available for research purposes for CA-RIV-610 has been exhausted through recordation and testing. Because there did not appear to be any additional buried cultural resources that may yield information important to California prehistory at this site, we believe that the Phase 2 test demonstrates that the site is limited in its ability to fulfill Criterion 4. Our analysis suggests that the site should not be considered a historical resource under CEQA Guidelines. We do recognize that it could be considered a unique resource, but we do not consider the site eligible for listing on the California Register. If additional information is brought forward to the lead agency per guidelines in CCR 15064.5, the City may choose to proclaim this cultural resource significant following General Plan Policy 7.6.1 in response to Objective 7.6.

It is possible that CA-RIV-610 will be directly impacted by construction and although we find that the site is not significant, the location of all features on solid bedrock suggests that it will be avoided. However, development within the WLCSP may bring an increase in visitations and possible inadvertent and indirect damage to this resource.

## CA-RIV-860

This prehistoric resource exhibits seven sets of milling features on granitic outcrops located along the sides of a granite sentincl. Each granite block exhibiting a milling surface as deemed a Feature. The Features are large and the milling surface difficult to see. Feature A and B are located near the southern end of the resource: Feature A exhibits three saucer mortars and Feature B exhibits two slicks. Feature C is located near the center-east of the resource and exhibits two milling slicks. Feature D is located near the center of the resource and exhibits two milling slicks. Feature E and G are located at the near the north end of the resource: Feature E exhibits two slicks, while Feature G exhibits three mortars. Feature F was located during a final site check after fieldwork; it exhibited one slick.

A total of 32 standard shovel test pits were placed around each of the seven Features to determine if any buried cultural resources were noted near the Features. Extremely thin or non-existent soil was observed near some of these Features, so areas of the site believed to contain deep soil were also tested. No buried features were noted, nor were any artifacts observed. The resource was mapped, shovel tests plotted and located using a GPS device, photographed, and the test pits were refilled and smoothed.

According to CCR 15064.5, any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code Section 5024.1, Title 14 CCR, Section 4852) including the following: *4. Has yielded, or may be likely to yield, information important in prehistory or history.*

In our view, the potential information available for research purposes for CA-RIV-860 has been exhausted through recordation and testing. Because there did not appear to be any additional buried cultural resources that may yield information important to California prehistory at this site, we believe that the Phase 2 test demonstrates that the site is limited in its ability to fulfill Criterion 4. Our analysis suggests that the site should not be considered a historical resource under CEQA Guidelines. We do recognize that it could be considered a unique resource, but we do not consider the site eligible for listing on the California Register. If additional information is brought forward to the lead agency per guidelines in CCR 15064.5, the City may choose to proclaim this cultural resource significant following General Plan Policy 7.6.1 in response to Objective 7.6.

It is possible that CA-RIV-860 will be directly impacted by construction and although we find that the site is not significant, the location of all features on solid bedrock suggests that it will be avoided.

However, development within the WLCSP may bring an increase in visitations and possible inadvertent and indirect damage to this resource.

### **CA-RIV-3238**

This prehistoric resource exhibits one milling slick on a single exposed granitic outcrop. The slick and outcrop are of granite and are in good condition. Six shovel test pits were placed around the outcrop to determine if any buried resources were noted in the area. No buried features were noted, nor were any artifacts observed. The resource was mapped, shovel tests plotted and located using a GPS device, photographed, and the test pits were refilled and smoothed.

According to CCR 15064.5, any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code Section 5024.1, Title 14 CCR, Section 4852) including the following: *4. Has yielded, or may be likely to yield, information important in prehistory or history.*

In our view, the potential information available for research purposes for CA-RIV-3238 has been exhausted through recordation and testing. Because there did not appear to be any additional buried cultural resources that may yield information important to California prehistory at this site, we believe that the Phase 2 test demonstrates that the site is limited in its ability to fulfill Criterion 4. Our analysis suggests that the site should not be considered a historical resource under CEQA Guidelines. We do recognize that it could be considered a unique resource, but we do not consider the site eligible for listing on the California Register. If additional information is brought forward to the lead agency per guidelines in CCR 15064.5, the City may choose to proclaim this cultural resource significant following General Plan Policy 7.6.1 in response to Objective 7.6.

It is possible that CA-RIV-3238 will be directly impacted by construction and although we find that the site is not significant, the location of all features on solid bedrock suggests that it will be avoided. However, development within the WLCSP may bring an increase in visitations and possible inadvertent and indirect damage to this resource.

### **CA-RIV-3343**

This prehistoric resource exhibits one milling slick on a single exposed granitic outcrop. The slick and outcrop are of granite and are in good condition. Six standard shovel test pits were placed around the outcrop to determine if any buried resources were noted in the area. No buried features were noted, nor were any artifacts observed. The resource was mapped, shovel tests plotted and located using a GPS device, photographed, and the test pits were refilled and smoothed.

According to CCR 15064.5, any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code Section 5024.1, Title 14 CCR, Section 4852) including the following: *4. Has yielded, or may be likely to yield, information important in prehistory or history.*

In our view, the potential information available for research purposes for CA-RIV-3343 has been exhausted through recordation and testing. Because there did not appear to be any additional buried cultural resources that may yield information important to California prehistory at this site, we believe that the Phase 2 test demonstrates that the site is limited in its ability to fulfill Criterion 4. Our analysis suggests that the site should not be considered a historical resource under CEQA Guidelines. We do recognize that it could be considered a unique resource, but we do not consider the site eligible for listing on the California Register. If additional information is brought forward to the lead agency per guidelines in CCR 15064.5, the City may choose to proclaim this cultural resource significant following General Plan Policy 7.6.1 in response to Objective 7.6.

It is possible that CA-RIV-3343 will be directly impacted by construction and although we find that the site is not significant, the location of all features on solid bedrock suggests that it will be avoided. However, development within the WLCSP may bring an increase in visitations and possible inadvertent and indirect damage to this resource.

#### **CA-RIV-3344**

This prehistoric resource exhibits one milling slick on a single exposed granitic outcrop. The slick and outcrop are of granite and are in good condition. Six standard shovel test pits were placed around the outcrop to determine if any buried resources were noted in the area. No buried features were noted, nor were any artifacts observed. The resource was mapped, shovel tests plotted and located using a GPS device, photographed, and the test pits were refilled and smoothed.

According to CCR 15064.5, any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code Section 5024.1, Title 14 CCR, Section 4852) including the following: *4. Has yielded, or may be likely to yield, information important in prehistory or history.*

In our view, the potential information available for research purposes for CA-RIV-3344 has been exhausted through recordation and testing. Because there did not appear to be any additional buried cultural resources that may yield information important to California prehistory at this site, we believe that the Phase 2 test demonstrates that the site is limited in its ability to fulfill Criterion 4. Our analysis suggests that the site should not be considered a historical resource under CEQA Guidelines. We do recognize that it could be considered a unique resource, but we do not consider the site eligible for listing on the California Register. If additional information is brought forward to the lead agency per guidelines in CCR 15064.5, the City may choose to proclaim this cultural resource significant following General Plan Policy 7.6.1 in response to Objective 7.6.

It is possible that CA-RIV-3344 will be directly impacted by construction and although we find that the site is not significant, the location of all features on solid bedrock suggests that it will be avoided. However, development within the WLCSP may bring an increase in visitations and possible inadvertent and indirect damage to this resource.

### **CA-RIV-3345**

This prehistoric resource exhibits three milling surfaces on two exposed granitic outcrop Features. Feature A is located at the north end of the resource and exhibits a single large milling slick in good condition. Feature B is located at the southern end, which was newly discovered during our Phase 1 survey, and lies amongst a circle of dirt roads. Two poorly preserved milling surfaces are located on the Feature B bedrock outcrop.

Four standard shovel test pits were placed around each Feature to determine if any buried resources could be found. No buried features were noted, nor were any artifacts observed. The resource was mapped, shovel tests plotted and located using a GPS device, photographed, and the test pits were refilled and smoothed.

According to CCR 15064.5, any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code Section 5024.1, Title 14 CCR, Section 4852) including the following: 4. Has yielded, or may be likely to yield, information important in prehistory or history.

In our view, the potential information available for research purposes for CA-RIV-3345 has been exhausted through recordation and testing. Because there did not appear to be any additional buried cultural resources that may yield information important to California prehistory at this site, we believe that the Phase 2 test demonstrates that the site is limited in its ability to fulfill Criterion 4. Our

analysis suggests that the site should not be considered a historical resource under CEQA Guidelines. We do recognize that it could be considered a unique resource, but we do not consider the site eligible for listing on the California Register. If additional information is brought forward to the lead agency per guidelines in CCR 15064.5, the City may choose to proclaim this cultural resource significant following General Plan Policy 7.6.1 in response to Objective 7.6.

It is possible that CA-RIV-3345 will be directly impacted by construction and although we find that the site is not significant, the location of all features on solid bedrock suggests that it will be avoided. However, development within the WLCSP may bring an increase in visitations and possible inadvertent and indirect damage to this resource.

### **CA-RIV-3346**

Prehistoric site CA-RIV-3346 was originally recorded as a large resource exhibiting many individual milling slick surfaces and mortars. Numerous artifacts were noted, as was soil of a type suggestive of a midden. The resource extends south and uphill along a small canyon and it was believed that the site might represent a village or extensive encampment. It was considered significant when originally recorded by previous archaeologists. MBA staff rerecorded the resource based on observation made at the time of testing so that all aspects of the site could be delineated on a map, but subsurface shovel testing was limited to the northern portion of the site only.

The northern half of this resource exhibits 18 exposed granitic outcrops (Features). There are a total of 14 milling surfaces, seven conical mortars, one basin milling feature and five saucer mortars in the resource. All are moderately exfoliated and range from good to poor condition. Some additional milling surfaces may be buried in eroding soil. Midden-like soil noted on earlier DPR forms was not found, but it is possible that this midden exists but has been picked clean of surface artifacts by pothunters. The site is bisected by a drainage and many actively used dirt bike tracks. All outcrops are moderately exfoliated. It is possible that much of the resources surface artifacts were removed by pothunters as only five stone artifacts were noted during survey and testing.

Seventy-two shovel test pits were placed around the granite outcrops in the northern half of the site to determine if any buried resources could be observed. Several excavated levels in several of these pits exhibiting artifacts were noted. These were mostly ground stone fragments that had been cracked by fire, and five flaked stone artifacts were observed. These artifacts were examined and replaced in the shovel test pits from whence they came. The resource was mapped, shovel tests plotted and located using a GPS device, photographed, and the test pits were refilled and smoothed.

According to CCR 15064.5, any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource

shall be considered by the lead agency to be “historically significant” if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code Section 5024.1, Title 14 CCR, Section 4852) including the following: 4. Has yielded, or may be likely to yield, information important in prehistory or history.

In our view, the potential information available for research purposes at CA-RIV-3346 does exist, and the southern half of this site has yet to be examined through subsurface testing. We conclude that there does appear to be additional buried cultural resource elements that may be able to yield additional information important to California prehistory. We therefore confirm that the Phase 2 test demonstrates the site is not limited in its ability to fulfill Criterion 4 as noted above and therefore must be considered a historical resource under CEQA Guidelines.

It is possible that CA-RIV-3346 will be directly impacted by construction and although we find that the site is indeed a significant cultural resource, the location of all milling slick features on solid bedrock suggests that it can be avoided. However, development within the WLCSP may bring an increase in visitations and possible inadvertent and indirect damage to this resource. Should it be determined that the site must be directly impacted by construction, Phase 3 data collection on the whole of this site must take place.

#### **CA-RIV-8006**

This prehistoric resource consists of a single bedrock outcrop (Feature 1) exhibiting four saucer mortars and one milling slick. Feature 1 is in fair condition and is a coarse granitic outcrop 4.40 by 2.00 meters in size. Each milling surface is about 102cm off the ground. Mortar A measures 16 by 13cm in size and is 3.5cm deep. Mortar B measures 18 by 16cm in size and is 0.5cm deep. Mortar C measures 18 by 18cm in size and is 3cm deep. Mortar D measures 23 by 18cm in size and is 4cm deep. Milling slick E measures 24 by 18cm in size. All are moderately exfoliated. No artifacts were detected within the site boundary.

One shovel test of this site took place. Four standard shovel test pits (STPs) were placed around Feature 1 to determine if any buried resources were noted near the outcrop. No buried features were noted, nor were any artifacts observed. The resource was mapped, shovel tests plotted and located using a GPS device, photographed, and the test pits were refilled and smoothed.

According to CCR 15064.5, any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be “historically significant” if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code Section 5024.1, Title 14

CCR, Section 4852) including the following: 4. *Has yielded, or may be likely to yield, information important in prehistory or history.*

In our view, the potential information available for research purposes for CA-RIV-8006 has been exhausted through recordation and testing. Because there did not appear to be any additional buried cultural resources that may yield information important to California prehistory at this site, we believe that the Phase 2 test demonstrates that the site is limited in its ability to fulfill Criterion 4. Our analysis suggests that the site should not be considered a historical resource under CEQA Guidelines. We do recognize that it could be considered a unique resource, but we do not consider the site eligible for listing on the California Register. If additional information is brought forward to the lead agency per guidelines in CCR 15064.5, the City may choose to proclaim this cultural resource significant following General Plan Policy 7.6.1 in response to Objective 7.6.

It is possible that CA-RIV-8006 will be directly impacted by construction and although we find that the site is not significant, the location of all features on solid bedrock suggests that it will be avoided. However, development within the WLCSP may bring an increase in visitations and possible inadvertent and indirect damage to this resource.

#### **CA-RIV-8007**

This prehistoric resource was previously known as CA-RIV-2775, CA-RIV-2776, and CA-RIV-2777. With the addition of new feature elements discovered during the survey and GPS rendering of the original site locations, it became clear that the three original sites, which were all within an 80-meter radius of each other, should be combined into a single site with the newly discovered site elements added. CA-RIV-8007 consists of 12 bedrock outcrops with a total of 29 milling surfaces. During the Phase 2 test, at least 4 shovel test pits were placed around each of the 12 outcrops.

Locus A exhibits 7 exposed granitic outcrops with a total of 11 milling slicks of varying sizes. Each of the bedrock outcrops in Locus A are moderately exfoliated and range from good to fair condition. Locus B contains all milling surfaces associated with CA-RIV-2775, CA-RIV-2776, and CA-RIV-2777 and therefore exhibits the following features:

- **Former site RIV-2775** exhibits 1 milling feature on a large granitic outcrop.
- **Former site RIV-2776** exhibits 7 milling slicks on a large granitic outcrop adjacent to a dirt road.
- **Former site RIV-2777** exhibits 3 different boulder outcrops. Outcrop A is located at the north end and consists of a decomposing granitic ‘sentinel’ with a single milling slick originally recorded (now lost). Outcrop B is located near the ground with five milling surfaces observed. Outcrop C is located at the south end of the resource and is the most clearly visible of the group. The outcrop exhibits five milling slicks.

Fifty-two shovel test pits were excavated within this site to identify buried cultural features and artifacts. No buried features were noted, nor were any artifacts observed. The resource was mapped, shovel tests plotted and located using a GPS device, photographed, and the test pits were refilled and smoothed.

According to CCR 15064.5, any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code Section 5024.1, Title 14 CCR, Section 4852) including the following: *4. Has yielded, or may be likely to yield, information important in prehistory or history.*

In our view, the potential information available for research purposes for CA-RIV-8007 has been exhausted through recordation and testing. Because there did not appear to be any additional buried cultural resources that may yield information important to California prehistory at this site, we believe that the Phase 2 test demonstrates that the site is limited in its ability to fulfill Criterion 4. Our analysis suggests that the site should not be considered a historical resource under CEQA Guidelines. We do recognize that it could be considered a unique resource, but we do not consider the site eligible for listing on the California Register. If additional information is brought forward to the lead agency per guidelines in CCR 15064.5, the City may choose to proclaim this cultural resource significant following General Plan Policy 7.6.1 in response to Objective 7.6.

It is possible that CA-RIV-8007 will be directly impacted by construction and although we find that the site is not significant, the location of all features on solid bedrock suggests that it will be avoided. However, development within the WLCSP may bring an increase in visitations and possible inadvertent and indirect damage to this resource.

## **6.2.2 - Historic-era Resources**

### **CA-RIV-4201**

Aerial photos show this historic-era resource exhibited residential buildings, outbuildings, and linear landscaping with large peppertrees. The site was split by a dirt road used by local drivers until before 1947, when local travel north of Alessandro Blvd and east of Sunnymead was augmented by the construction of Gilman Springs Road (see Exhibit 5b and Exhibit 6b). The site was first recorded in 1990 by Greenwood and Associates (Schmidt and Romani 1990) and featured an exposed concrete pad, scattered historic and animal bone artifacts, a peppertree, and a rubble mound.

Various modern images found on Google Earth (magnified) showed that the rubble scatter shown in the original DPR 523 site form had been pushed around presumably by farming equipment, but in

2002 the debris scatter measured 100 feet (E-W) by 50 feet (N-S) in size. The amount of rubble on the property was extensive in 1990, but by 2012 most of this had been lost and likely plowed/scattered into the surrounding soil. Presumably used for farming, this small structure complex was extant at least between 1932 and 1937 according to the aerial photographs obtained for the purposes of our WLCSP analysis. A 1947 image shows the farmhouse and outbuildings were mostly gone and the area was unplowed compared to the clearly plowed pasture/dryland crops grown nearby. In 1967 ([www.historicaerials.com](http://www.historicaerials.com)), the site exhibited a series of live peppertrees extending west from the unpaved Virginia Street approximately 400 feet (E-W) and were 80 feet wide (N-S). A few small outbuildings were noted at that time but no primary structures.

Phase 2 testing was contingent on the removal of plowed topsoil in a potentially highly productive sample area such that intact subsurface sediments would be exposed to view. Before work commenced, the area was inspected for the presence of rubble and artifact densities. Once done, a sample rectangle of ground roughly 50x100 feet in size was placed on the site in a diagonal fashion so that the long edge of the rectangle crossed from the southern edge of the peppertrees and across the abandoned W-E dirt road that could be seen in the 1936 aerial photo (see Exhibit 5b and Exhibit 6b). Soils were removed with a rubber tired wheel loader equipped with a multi-purpose front bucket that could bulk soil out plus strip topsoil off in thin levels. Once approximately 2 feet of plowed earth was removed from the test area, the ground was cleaned to reveal the unplowed surface.

Work results showed that nearly all components of the site had been removed during the demolition process and that no buried features remained. The quantity of historic artifacts remaining on the property was slight: far less than that indicated in the 1991 site record. Although a grassy rubble mound did exist before earthmoving took place, this lacked substantive artifacts in any density that might have suggested buried intact resources. The foundation observed in 1990 when the site was first recorded could not be found. Buried remnants of a main irrigation standpipe was uncovered at about 488847mE/3753919mN, but no structures, wells, outbuildings or the roots of peppertrees were observed.

According to CCR 15064.5, any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code Section 5024.1, Title 14 CCR, Section 4852) including the following: *4. Has yielded, or may be likely to yield, information important in prehistory or history.*

In our view, the potential information available for research purposes for CA-RIV-4201 has been exhausted through recordation and testing. Because there did not appear to be any additional buried

cultural resources that may yield information important to California history at this site, we believe that the Phase 2 test demonstrates that the site is limited in its ability to fulfill Criterion 4. Our analysis suggests that the site should not be considered a historical resource under CEQA Guidelines. We do recognize that it could be considered a unique resource, but we do not consider the site eligible for listing on the California Register. If additional information is brought forward to the lead agency per guidelines in CCR 15064.5, the City may choose to proclaim this cultural resource significant following General Plan Policy 7.6.1 in response to Objective 7.6.

Given the current design of the WLCSP, it is likely that CA-RIV-4201 will be directly impacted by construction. Because this site is considered a not significant historic-era site, no further archaeological mitigative efforts are required.

### **CA-RIV-4210**

Aerial photos show that this historic farm complex exhibited residential buildings, outbuildings, a 15-foot frame and stucco “teepee,” driveways and landscaping (see Exhibit 4c, Exhibit 5b, and Exhibit 6b). The farming property appears to have been abandoned in the 1980’s but was extant at least between 1932 and 1978 according to aerial photographs obtained for the purposes of WLCSP analysis. The site was first recorded in 1990 and at that time the structures had been demolished and an extensive scatter of debris remained. The sole remaining building, the “teepee” structure, was still standing.

Various modern images found on Google Earth’s historical database showed that the rubble scatters shown in the original DPR 523 site form had been pushed around presumably by farming equipment, but in 1990 there were four debris scatters north of Alessandro Blvd and west of a slight wash depression that had been flattened by repeated plowing. The site was fully visible and measured 120 feet (N-S) by 80 feet (E-W) in size in that year. The amount of rubble on the property was extensive in 1990, but by 2012 most of this had been lost and likely plowed/scattered into the surrounding soil. Presumably used for farming, this small structure complex was extant before 1932 according to the aerial photographs obtained for the purposes of our WLCSP analysis. In 1967 ([www.historicaerials.com](http://www.historicaerials.com)), the site exhibited a large farm complex with several outbuildings. A large open-walled structure near the former wash on the east side of the complex probably shielded hay from the sun. This structure is also plotted on the Sunnymead topographic map (1967).

Phase 2 testing was contingent on the removal of plowed topsoil in a potentially highly productive sample area such that intact subsurface sediments would be exposed to view. Before work commenced, the area was inspected for the presence of rubble and artifact densities. Once done, a sample rectangle of ground roughly 100x50 feet in size was placed on the site with the long axis running N-S so that the long edge of the rectangle missed the teepee structure slightly. Soils were removed with a rubber tired wheel loader equipped with a multi-purpose front bucket that could bulk soil out plus strip topsoil off in thin levels. Once approximately 2 feet of plowed earth was removed from the test area, the ground was cleaned to reveal the unplowed surface.

Work results showed that nearly all original components of the site had been removed during the demolition process. Remnants of the farmhouse were there, but had been reduced to the location of the foundation cut below grade. This had been filled in with crushed brick, concrete and burned structural rubble: no time-sensitive materials had been observed. A vault, the walls of which had been demolished away, was found a few dozen feet north of the farmhouse plot. This likely held water valves underground. A 6" sewer line ran north-south between the farmhouse and outbuildings and the street: remnants were detected during the scrape. A dump containing modern artifacts was located on the western side of the testing area. Overall, the quantity of historic artifacts remaining on the property was slight: far less than that indicated in the 1991 site record, and no historic glass or ceramics were observed in the scraped fill or in those site remnants located below the plow zone. The "teepee" is essentially unchanged from the original record and the pipes and concrete slabs lie near it but this feature has little to convey to the overall nature of the site itself. Based on interior construction, the teepee was a weakly built frame and stucco structure that we believe was used as a playhouse for the farm children. It serves no other apparent purpose and for some reason was never demolished. In sum, the remnants of this site have been removed such that little elements of the original site remain and it is unlikely that new discoveries will be made on this resource during construction that could change the significance of the property.

According to CCR 15064.5, any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code Section 5024.1, Title 14 CCR, Section 4852) including the following: *4. Has yielded, or may be likely to yield, information important in prehistory or history.*

In our view, the potential information available for research purposes for CA-RIV-4210 has been exhausted through recordation and testing. Because there did not appear to be any additional buried cultural resources that may yield information important to California history at this site, we believe that the Phase 2 test demonstrates that the site is limited in its ability to fulfill Criterion 4. Our analysis suggests that the site should not be considered a historical resource under CEQA Guidelines. We do recognize that it could be considered a unique resource, but we do not consider the site eligible for listing on the California Register. If additional information is brought forward to the lead agency per guidelines in CCR 15064.5, the City may choose to proclaim this cultural resource significant following General Plan Policy 7.6.1 in response to Objective 7.6.

It is likely that CA-RIV-4210 will be directly impacted by construction in the WLCSP. Because this site is considered a not significant historic-era resource, no further archaeological mitigative efforts are required.

### **CA-RIV-5862**

At one time, this historic resource was a small farm on a piece of hilly property that was truncated by the SR-60 freeway construction (circa 1957). Available aerial photographs from Whittier were few for this area: the 1958 image shows a small roof and surrounding Eucalyptus and peppertree landscaping but the structure is not clear at high magnification. The [www.historicaerials.com](http://www.historicaerials.com) images (dated 1967 and 1978) both show the building to be very small: a two-room structure with a shed roof covering a small concrete slab porch. These photographs also show the footprint of a deep cistern, which at one time held water possibly brought onto the site from seeps in the hills to the north. The original site record form provided a drawing of the complex in 1990. Today most of the superstructure has collapsed and while the five large peppertrees and one Eucalyptus drawn on the DPR forms are still alive, the privy noted at the time of original recordation could not be found.

Given the fact that the parcel is owned by the Metropolitan Water District (MWD), it is unlikely that CA-RIV-5862 will be directly impacted by construction in the WLCSP. Development within the study area may bring an increase in visitations and possible inadvertent and indirect damage to this resource. We recommend that once the portions of the WLCSP nearest this site are programmed for development, the site should be revisited by a historic architectural specialist for review if and only if the structure complex must be destroyed by proposed development.

## SECTION 7: SUMMARY AND RECOMMENDATIONS

### 7.1 - Cultural Resource Summary

Review of all cultural resource factors in and near the WLCSP suggests that the cultural resource sensitivity of the WLCSP has a varying probability of containing significant buried cultural resources from both the prehistoric and historic era of City and Riverside County history. Certain locations in the study area do contain surface evidence of prehistoric cultural resources, especially near the slopes of Mount Russell. Other areas exhibit surface expressions of historic-era resources that have not yet been tested for significance. These facts suggest that the whole of the WLCSP can be treated in different ways as part of a cultural resource mitigation monitoring program (CRMMP). A City-approved Project Archaeologist can devise and apply appropriate CRMMPs to the various projects in the WLCSP as it is built out.

Although we believe that certain local Native American tribes consider some or all of this area to be sacred, no Native American tribe provided MBA staff with a list of traditional cultural properties that may be located in or near the WLCSP. One tribe did send a representative to observe our testing of prehistoric sites in 2006, but did not report to us any specific issues or problems during the fieldwork.

Nine prehistoric cultural resources located near the southern edge of the WLCSP were Phase 2 tested for significance: CA-RIV-610, CA-RIV-860, CA-RIV-3238, CA-RIV-3343, CA-RIV-3344, CA-RIV-3345, CA-RIV-3346, CA-RIV-8006, and CA-RIV-8007. Of these nine sites, only CA-RIV-3346 is considered a historical resource under CEQA Guidelines.

Two historic archaeological sites were Phase 2 tested for significance: CA-RIV-4201 and CA-RIV-4210. Results showed that neither historic site should be considered a historical resource under CEQA Guidelines.

Of the sites plotted in Confidential Appendix F, only CA-RIV-3346 is considered significant. If avoidance of this site is not possible then it must undergo Phase 3 data collection prior to construction.

Two additional sites were not tested for significance: CA-RIV-2993 and CA-RIV-3347. If it is determined that these latter two sites will be directly impacted by construction, they must be Phase 2 tested for significance.

Realignment of Cactus Avenue has the potential to impact three prehistoric sites. CA-RIV-3238 and CA-RIV-8007 were determined to be not significant in the Phase 2 testing conducted in 2006. CA-RIV-3346 was determined to be significant but is not expected to be impacted. If as a result of final design, the Cactus Avenue alignment does impact the site, it must undergo Phase 3 data collection prior to construction.

## 7.2 - Cultural Resource Mitigation Recommendations

Mitigation Measures CR-1 and CR-2 are recommendations made because not all parcels in the WLCSP could be surveyed, and not all known cultural resource sites were evaluated for significance. Because impacts to buried and heretofore unknown cultural resources are considered varied project-wide, Mitigation Measures CR-3 through CR-6 should be applied because the exact dates of construction in the WLCSP are not known. Here, a qualified archaeologist should develop a Cultural Resource Mitigation Monitoring Plan (CRMMP) based on the conditions at the time the proposed development is processed by the City. Mitigation Measures CR-7 and CR-8 are associated with historic markers for the proposed trail and for protection of the integrity of Alessandro Boulevard.

**Table 3: Recommended Cultural Resource Mitigation Measures**

Mitigation Measure No.	Mitigation Text
MM CR-1	<p>Prior to the approval of any grading or other discretionary permit for any of the “Light Logistics” parcels, the parcels shall be evaluated for significance by a qualified archaeologist. A Phase I Cultural Resources Assessment shall be conducted by the project archaeologist and an appropriate tribal representative(s) on each of the “Light Logistics” parcel prior to development to determine if it contains significant archaeological or historical resources. Appropriate tribal representatives shall be invited to participate in this assessment.</p> <p>A Phase 2 significance evaluation shall be completed for any of these sites in order to determine if they contain significant archaeological or historical resources. Cultural resources include but are not limited to stone artifacts, bone, wood, shell, or features, including hearths, structural remains, or historic dumpsites. All resources determined to be prehistoric or historic shall be adequately documented using DPR523 forms for archival research/storage in the Eastern Information Center (EIC). If the particular resource is determined to be not significant, no further documentation is required. If prehistoric resources are determined to be significant, they shall be considered for relocation or archival documentation. If any resource is determined to be significant, a Phase 3 recovery study shall be conducted to recover remaining significant cultural artifacts. If prehistoric archaeological/cultural resources are discovered during the Phase 1 survey and it is determined that they cannot be avoided through site design, they shall be subject to a Phase 2 testing program. The City, in consultation with the project archaeologist and appropriate tribal group(s), shall determine the significance of the resource(s) and determine the most appropriate disposition of the resource(s) in accordance with applicable laws, regulations and professional practices</p>
MM CR-2	<p>Prior to the issuance of any grading or ground-disturbing permit for construction of off-site improvements a qualified archaeologist shall be retained to prepare a Phase I cultural resource assessment (CRA) of the project site if an up to date CRA is not available for the site at the time of development. Appropriate tribal representatives as identified by the city shall be invited by the Project Archaeologist to participate in this assessment.</p> <p>If archaeological resources are discovered during construction activities, no further excavation or disturbance of the area where the resources were found shall occur until a qualified archaeologist evaluates the find. If the find is determined to be a unique archaeological resource, appropriate action shall be taken to: (a) plan construction to avoid the archeological sites; (the preferred alternative); (b) cap or cover archeological sites with a layer of soil before building on the affected project location; or (c) excavation to adequately recover the scientifically consequential information from and about the resource. At the discretion of the project archaeologist, work may continue on other parts of the project site while the unique archaeological resource mitigation takes place. This measure shall be implemented to the satisfaction of the City Planning Official.</p> <p>If the project archaeologist, in consultation with the qualified archaeologist and the monitoring Tribe(s), determines that the find is a unique archaeological resource, the resource site shall be evaluated and recorded in accordance with requirements of the State Office of Historic Preservation (OHP). If the resource is determined to be significant, data site shall be collected by the qualified archaeologist and the</p>

Mitigation Measure No.	Mitigation Text
	<p>findings of the report shall be submitted to the City. If the find is not determined to be not significant no mitigation is necessary.</p> <p>Should a future project-level analysis show that cultural resource site CA-RIV-3346 will be directly or partially impacted by project-level construction, an Addendum cultural resource report must be prepared and include an analysis of the alternatives associated with mitigation for impacts to this resource following CEQA Guidelines Section 15126.4(b)(3). This information must be included in any project-CEQA compliance documentation. It should be noted that Phase 3 data recovery is an acceptable mitigation action under CEQA Guidelines Section 15126.4(b)(3)(C).</p> <p>Should it be determined through a future project-level EIR analysis that prehistoric cultural resource sites CA-RIV-2993 and/or CA-RIV-3347 shall be directly impacted by future construction, these sites must be Phase 2 tested for significance.</p>
MM CR-3	<p>Prior to the issuance of any grading permits a qualified archaeologist shall be retained to monitor all grading activities and shall invite appropriate tribal groups to participate in the monitoring. Project-related archaeological monitoring shall include the following requirements:</p> <ol style="list-style-type: none"> <li>1. All earthmoving shall be monitored to a depth of ten (10) feet below grade by the Project Archaeologist or his/her designated representative; Once all areas of developmental project cut to 10 feet below existing grade have been inspected by the monitor, the Project Archaeologist may, at his or her discretion, terminate monitoring if and only if no buried cultural resources have been detected;</li> <li>2. If buried cultural resources are detected, monitoring shall continue until 100 percent of virgin earth within the specific project area has been disturbed and inspected by the Project Archaeologist or his/her designated representative.</li> <li>3. Grading shall cease in the area of a cultural artifact or potential cultural artifact as delineated by the Project Archaeologist or his/her designated representative. A buffer of at a minimum 25 feet around the cultural item shall be established to allow for assessment of the resource. Grading may continue in other areas of the site while the particular find is investigated; and</li> <li>4. If prehistoric cultural resources are uncovered during grading, they shall be Phase 2 tested by the Project Archaeologist, and evaluated for significance in accordance with §15064.5(f) of the CEQA Guidelines. Appropriate actions for significant resources as determined by the Phase 2 testing include but are not limited to avoidance or capping, incorporation of the site in green space, parks, or delineation into open space. If such measures are not feasible, Phase 3 data recovery of the significant resource will be required, and curation of recovered artifacts and/or reburial, shall be required. A report associated with Phase 2 testing or Phase 3 data recovery must be delivered to the City and, if necessary, the museum where any recovered artifacts have been curated.</li> <li>5. No further grading shall occur in the area of the discovery until the City approves specific actions to protect identified resources. Any archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific institution approved by the City where they would be afforded long-term preservation to allow future scientific study.</li> <li>6. The developer shall make reasonable efforts to avoid, minimize, or mitigate significant adverse impacts on cultural resources. The State Historic Preservation Office (SHPO) and local Native American tribes will be consulted and the Advisory Council on Historic Preservation will be notified within 48 hours of the find in compliance with 36 CFR 800.13(b)(3). This measure shall be implemented to the satisfaction of the Planning Official</li> </ol>
MM CR-4	<p>Prior to the issuance of any grading permit, the project archaeologist shall invite interested Tribal Group(s) representatives to monitor grading. Qualified representatives of the Tribal Group(s) shall be granted access to the project site as long as they provide 48-hour notice to the developer of their desire to monitor, so the developer can make appropriate safety arrangements on the site. This measure shall be implemented to the satisfaction of the Planning Official.</p>

Mitigation Measure No.	Mitigation Text
MM CR-5	<p>It is possible that ground-disturbing activities during construction may uncover previously unknown, buried cultural resources (archaeological or historical). In the event that buried cultural resources are discovered during grading and no Project Archaeologist or Historian is present, grading operations shall stop in the immediate vicinity of the find and a qualified archaeologist shall be retained to determine the most appropriate course of action regarding the resource. The Archeologist shall make recommendations to the City on the actions that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with §15064.5 of the <i>CEQA Guidelines</i>. Cultural resources could consist of, but are not limited to, stone artifacts, bone, wood, shell, or features, including hearths, structural remains, or historic dumpsites. Any previously undiscovered resources found during construction within the project area should be recorded on appropriate California Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of CEQA criteria. If the resources are determined to be unique historic resources as defined under §15064.5 of the <i>CEQA Guidelines</i>, appropriate protective actions for significant resources such as avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds shall be implemented by the project archaeologist and the City.</p> <p>No further grading shall occur in the area of the discovery until the City approves the measures to address these resources. Any archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific institution approved by the City where they would be afforded long-term preservation to allow future scientific study.</p>
MM CR-6	<p>If any historic resources are found during implementation of Mitigation Measure CR-1, the property owner shall offer any artifacts or resources to the Moreno Valley Historical Society (MVHS) or the Eastern Information Center/County Museum or the Western Science Center in Hemet as appropriate for archival storage. From the time any artifacts are turned over to the Moreno Valley Historical Society or other appropriate historical group, the developer shall have no further responsibility for their management or maintenance.</p>
MM CR-7	<p>As a part of construction of the trail segment connecting Redlands Boulevard to the California Department of Fish and Game property, the developer shall contribute \$5,000 to the City for the installation of a historical marker acknowledging the passing of Juan Bautista de Anza through this area during his exploration of California. This measure shall be incorporated into trail plans for this segment which will be subject to review and approval by the City Park and Recreation Department in consultation with the Moreno Valley Historical Society.</p>
MM CR-8	<p>Streets C and E shall follow the historical alignment of Alessandro Boulevard and shall be named Alessandro Boulevard.</p>

### 7.2.1 - Accidental Discovery of Human Remains

There is always the small possibility that ground-disturbing activities during construction may uncover previously unknown buried human remains. In the event of an accidental discovery or recognition of any human remains, California State Health and Safety Code § 7050.5 dictates that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to CEQA regulations and PRC § 5097.98.

### **7.2.2 - Accidental Discovery of Cultural Resources**

It is always possible that ground-disturbing activities during construction will uncover previously unknown, buried cultural resources. In the event that buried cultural resources are discovered during construction, operations shall stop in the immediate vicinity of the find and a qualified archaeologist shall be consulted to determine whether the resource requires further study. The qualified archeologist shall make recommendations to the Lead Agency on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with § 15064.5 of the CEQA Guidelines. Potentially significant cultural resources consist of, but are not limited to stone, bone, fossils, wood, or shell artifacts or features, including hearths, structural remains, or historic dumpsites. Any previously undiscovered resources found during construction within the study area should be recorded on appropriate DPR forms and evaluated for significance in terms of CEQA criteria.

If the resources are determined to be unique historic resources as defined under § 15064.5 of the CEQA Guidelines, mitigation measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds.

No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any archaeological artifacts recovered because of mitigation shall be donated to a qualified scientific institution approved by the Lead Agency where they would be afforded long-term preservation to allow future scientific study.

In addition, reasonable efforts to avoid, minimize, or mitigate adverse effects to the property will be taken and the State Historic Preservation Officer (SHPO) and Native American tribes with concerns about the property, as well as the Advisory Council on Historic Preservation (ACHP) will be notified within 48 hours in compliance with 36 CFR 800.13(b)(3).

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### **7.3 - Paleontological Mitigation Recommendations**

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A single paleontological resource was located in the study area, found during geotechnical trenching (LSA 2004). The results of the literature reviews showed that geologic units in the area should be assigned a “moderate” paleontologic sensitivity because the study area rests on older Pleistocene alluvium and San Timoteo Formation rock units that may occur at depth. These deposits have a high potential to contain paleontological resources, but the veneer of Holocene sediments do not. Therefore, the project’s potential impact on paleontological resources is considered significant.

**Table 4: Recommended Paleontological Resource Mitigation Measures**

Mitigation Measure No.	Mitigation Text
MM PR-1	<p>Prior to the issuance of a grading plan, a City-approved Project Paleontologist shall be retained to initiate and supervise paleontological mitigation-monitoring in all areas of the project, subject to certain constraints found below:</p> <ol style="list-style-type: none"> <li>1. Monitoring shall occur in areas where excavations are expected to exceed twenty (20) feet in depth, in areas where fossil-bearing formations are found during grading, and in all areas found to contain, or are suspected of containing, fossil-bearing formations.</li> <li>2. To avoid construction delays, paleontological monitors shall be equipped to salvage fossils and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates if they are unearthed.</li> <li>3. Monitors shall be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens, and,</li> <li>4. Monitoring may be reduced if the potentially fossiliferous units described herein are not present, or, if present, are determined upon exposure and examination by qualified paleontologic personnel to have low potential to contain fossil resources.</li> </ol> <p>This measure shall be implemented to the satisfaction of the City Planning Official. The Project Paleontologist and Project Archaeologist described may be the same person if he/she meets the qualifications of both positions.</p>
MM PR-2	<p>Prior to the issuance of any permits for the construction of off-site improvements, a qualified paleontologist shall conduct an assessment for paleontological resources on each off-site improvement location. If any site is determined to have a potential for exposing paleontological resources, the project paleontologist shall monitor off-site grading/excavation, subject to coordination with the City. Monitoring shall include the following mitigation measures:</p> <ol style="list-style-type: none"> <li>1. Monitoring shall occur in areas where excavations are expected to exceed twenty (20) feet in depth, in areas where fossil-bearing formations are found during grading, and in all areas found to contain, or are suspected of containing, fossil-bearing formations.</li> <li>2. To avoid construction delays, paleontological monitors shall be equipped to salvage fossils and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates if they are unearthed.</li> <li>3. Monitors shall be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens, and,</li> <li>4. Monitoring may be reduced if the potentially fossiliferous units described herein are not present, or, if present, are determined upon exposure and examination by qualified paleontologic personnel to have low potential to contain fossil resources.</li> </ol>

**SECTION 8: CERTIFICATION**

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

Date: September 30, 2014 Signed:



Michael Dice, M.A.  
Michael Brandman Associates  
San Bernardino, CA

Date: September 30, 2014 Signed:



Kenneth J. Lord, Ph.D.  
Michael Brandman Associates  
Irvine, CA

## SECTION 9: REFERENCES

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**Appendix A:  
List of Parcels in the World Logistics Center Specific Plan**

## LIST OF PARCELS IN THE WORLD LOGISTICS CENTER

Table A-1 below identifies the list of Assessor Parcel numbers in the World Logistics Center that were surveyed or considered for survey by MBA staff between 2005 and 2012. Abbreviations used in the table are:

- DNS: Could not survey due to access issues or incomplete survey due to dense vegetation.
- OS: Open space. Owned by SDGE or CDFG and therefore not surveyed

According to Table A-1 there are 145 available parcels in the WLCSP totaling 3266.39 acres. There are 14 “occupied” (not owned by the Proponent) in the WLCSP project area totaling 58.63 acres. These occupied properties were not surveyed. Finally, there are 13 Open Space parcels controlled either by SDGE or CDFG. All the CDFG parcels were surveyed (416.03 acres) and the two SDGE parcels (14.06 acres) could not be surveyed. There are 18 off-site parcels that were surveyed totaling 301.62 acres. Given these facts, the total area surveyed inside the WLCSP, in Open Space areas, and in the off-site properties was 3,984.04 acres.

**Table A-1: List of Parcels in the World Logistics Center**

APN #	Acreage	Date Surveyed	Comment
422020010	52.80	October 2006	Offsite survey, Anderson property
422030002	120.00	October 2006	Offsite survey, Anderson property
422040008	32.30	October 2006	Offsite survey, Anderson property
422070005	1.25	July 2011	
422070006	42.44	July 2011	
422070010	40.00	July 2011	
422070014	10.09	DNS (did not survey)	Occupied
422070017	53.03	July 2011	
422070018	26.36	August 2007	
422070019	13.03	July 2011	
422070020	26.36	August 2007	
422070021	43.67	July 2011	
422070022	19.30	August 2007	
422070029	2.64	DNS	Occupied
422070030	2.5951	DNS	Occupied

**Table A-1 (cont.): List of Parcels in the Highland Fairview Specific Plan**

APN #	Acreage	Date Surveyed	Cultural Resources Status
422070031	2.61	DNS	Occupied
422070032	2.61	DNS	Occupied
422070033	10.65	DNS	Occupied
422070034	2.24	DNS	Occupied
422070035	2.24	DNS	Occupied
422070036	2.45	DNS	Occupied
422070037	2.45	DNS	Occupied
422080001	3.70	July 2011	
422080002	45.86	July 2011	
422080003	260.04	July 2011	
422080004	6.7	July 2011	
422040009	132.5	August 2007	
422040010	17.6	August 2007	
422040014	22.88	April 2012	
422040015	3.42	April 2012	
422080003	260.04	July 2011	
422080004	6.70	July 2011	
422110001	19.44	Part, July 2007	Partly surveyed, was covered in dense weeds.
422130001	68.70	Part, July 2007	Partly surveyed, was covered in dense weeds.
422130002	68.45	August 2005	
422130003	11.20	August 2005	
423250001	0.01	September 2005	
423250002	15.04	September 2005	
423250007	41.83	September 2005	
423250008	51.53	September 2005	
423250009	47.94	September 2005	
423250010	2.38	September 2005	
423250011	41.28	September 2005	
423250012	43.39	September 2005	
423250013	40.73	September 2005	
423250018	69.75	September 2005	
423260001	0.92	September 2005	
423260002	46.10	September 2005	
423260003	48.56	September 2005	

**Table A-1 (cont.): List of Parcels in the Highland Fairview Specific Plan**

APN #	Acreage	Date Surveyed	Cultural Resources Status
423260004	48.53	September 2005	
423260005	55.72	September 2005	
423260006	39.21	September 2005	
423260007	40.31	September 2005	
423260008	40.06	September 2005	
423260009	50.13	September 2005	
423270003	41.22	June 2007	
423270004	38.02	June 2007	
423270006	38.76	June 2007	
423270007	11.25	DNS	SDGE Facility. OS.
423270008	5.22	June 2007	OS.
423270009	2.81	DNS	OS.
423270017	20.47	June 2007	
423270018	42.62	June 2007	
423280001	45.83	June 2007	
423280002	47.71	June 2007	
423280003	47.86	June 2007	
423280004	63.02	part, June 2007	The portion west of the large drainage could be surveyed or about 1/8 the total acreage
423280005	1.16	June 2007	State land. OS
423280006	37.77	June 2007	
423280007	39.28	June 2007	
423280008	39.41	June 2007	
423280009	51.00	Part, June 2007	The portion west of the large drainage was surveyed or about one-eighth the total acreage
423300002	39.03	June 2007	State. OS
423300004	42.36	June 2007	State. OS
423300009	41.05	June 2007	State. OS
423300010	42.80	June 2007	State. OS
423310001	42.88	June 2007	
423310002	41.31	June 2007	
423310003	38.82	June 2007	State. OS
423310004	58.03	June 2007	State. OS
423310005	63.66	June 2007	State. OS
423310006	43.90	June 2007	State. OS

**Table A-1 (cont.): List of Parcels in the Highland Fairview Specific Plan**

APN #	Acreage	Date Surveyed	Cultural Resources Status
423310008	40.00	June 2007	State. OS
478210054	8.91	August 2005	
478210055	9.81	August 2005	
478220001	27.76	August 2005	
478220002	9.39	August 2005	
478220003	8.98	August 2005	
478220004	8.98	August 2005	
478220005	9.39	August 2005	
478220006	9.39	August 2005	
478220007	8.98	August 2005	
478220009	9.39	DNS	Occupied
478220010	9.39	August 2005	
478220011	8.98	August 2005	
478220012	8.98	August 2005	
478220013	9.39	August 2005	
478220014	8.98	August 2005	
478220015	18.37	August 2005	
478220016	18.37	August 2005	
478220017	8.98	August 2005	
478220018	9.39	August 2005	
478220019	9.39	August 2005	
478220020	8.98	August 2005	
478220021	8.98	August 2005	
478220022	9.39	August 2005	
478220023	9.39	August 2005	
478220024	8.98	August 2005	
478220025	8.98	August 2005	
478220026	9.39	August 2005	
478220027	9.39	August 2005	
478220028	8.98	August 2005	
478220029	2.82	DNS	Occupied
478220030	2.82	DNS	Occupied
478220031	3.03	DNS	Occupied
478230001	8.14	August 2005	

**Table A-1 (cont.): List of Parcels in the Highland Fairview Specific Plan**

APN #	Acreage	Date Surveyed	Cultural Resources Status
478230002	8.95	August 2005	
478230003	9.38	August 2005	
478230004	9.39	August 2005	
478230005	8.98	August 2005	
478230006	8.98	August 2005	
478230007	73.48	August 2005	
478230008	36.38	July 2011	
478230009	9.39	August 2005	
478230010	8.98	August 2005	
478230011	9.39	August 2005	
478230014	8.69	August 2005	
478230015	8.69	July 2011	
478230016	9.10	July 2011	
478230017	0.01	July 2011	
478230019	9.63	August 2005	
478230020	8.90	August 2005	
478240002	8.98	August 2005	
478240003	8.98	August 2005	
478240005	9.10	August 2005	
478240006	9.10	August 2005	
478240007	8.69	August 2005	
478240008	9.39	August 2005	
478240011	8.98	Sept 2005	
478240012	9.0	2005	
478240013	9.0	April 2012	
478240014	4.7	April 2012	
478240015	4.7	April 2012	
478240016	9.0	April 2012	
478240017	9.11	July 2011	Very steep: reconnaissance survey only
478240019	9.11	July 2011	Very steep: reconnaissance survey only
478240021	8.68	August 2005	
478240022	8.84	August 2005	
478240023	8.84	August 2005	
478240024	9.39	August 2005	

**Table A-1 (cont.): List of Parcels in the Highland Fairview Specific Plan**

APN #	Acreage	Date Surveyed	Cultural Resources Status
478240025	8.97	August 2005	
478240026	9.55	July 2011	Very steep: reconnaissance survey only
478240027	9.55	July 2011	Very steep: reconnaissance survey only
478240028	8.97	Sept 2005	
478240029	9.39	Sept 2005	
478240030	9.39	Sept 2005	
478240031	2.04	August 2005	
478240032	2.04	August 2005	
478240033	1.76	August 2005	
478240034	1.76	August 2005	
488260012	8.08	August 2007	Offsite survey north of SR-60
488260014	8.34	August 2007	Offsite survey north of SR-60
488260017	1.87	August 2007	Offsite survey north of SR-60
488260018	1.88	August 2007	Offsite survey north of SR-60
488260021	2.14	August 2007	Offsite survey north of SR-60
488260022	2.13	August 2007	Offsite survey north of SR-60
488260031	16.60	July 2007	Offsite survey north of SR-60
488260032	9.39	July 2007	Offsite survey north of SR-60
488260033	8.01	July 2007	Offsite survey north of SR-60
488260034	9.40	July 2007	Offsite survey north of SR-60
488260035	7.80	July 2007	Offsite survey north of SR-60
488260036	8.97	July 2007	Offsite survey north of SR-60
488260037	7.39	July 2007	Offsite survey north of SR-60
488320008	3.66	August 2007	Offsite survey north of SR-60
488320009	0.87	August 2007	Offsite survey north of SR-60
488350003	8.55	August 2005	
488350004	9.40	August 2005	
488350005	9.40	August 2005	
488350006	8.97	August 2005	
488350007	8.97	August 2005	
488350008	9.40	August 2005	
488350009	9.40	August 2005	
488350010	8.97	August 2005	
488350012	8.97	August 2005	

**Table A-1 (cont.): List of Parcels in the Highland Fairview Specific Plan**

<b>APN #</b>	<b>Acreage</b>	<b>Date Surveyed</b>	<b>Cultural Resources Status</b>
488350013	8.97	August 2005	
488350014	8.97	August 2005	
488350015	33.65	August 2005	
488350019	8.75	August 2005	
488350021	9.17	August 2005	
488350023	9.17	August 2005	
488350025	8.75	August 2005	

## **Appendix B: Cultural Resources Correspondence**

## Sacred Lands File & Native American Contacts List Request

### NATIVE AMERICAN HERITAGE COMMISSION

915 Capitol Mall, RM 364  
Sacramento, CA 95814  
(916) 653-4082  
(916) 657-5390 – Fax  
nahc@pacbell.net

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

**Project:** The Highlands Specific Plan and EIR

**County:** Riverside County – City of Moreno Valley (Lead Agency).

**USGS Quadrangle Name:** Sunnymead, El Casco

**Township 2 North / Range 3 West. Section(s):** 1, 12, 13

**Township 3 South / Range 2 West. Section(s)** 6, 7, 8, 16, 17, 18, and 19

**Company/Firm/Agency:** Michael Brandman Associates

**Contact Person:** Michael H. Dice, M.A.

**Street Address:** 621 E. Carnegie Dr. Suite #100 San Bernardino CA. 92408

**Cell** 714.742.0468 (preferred number)

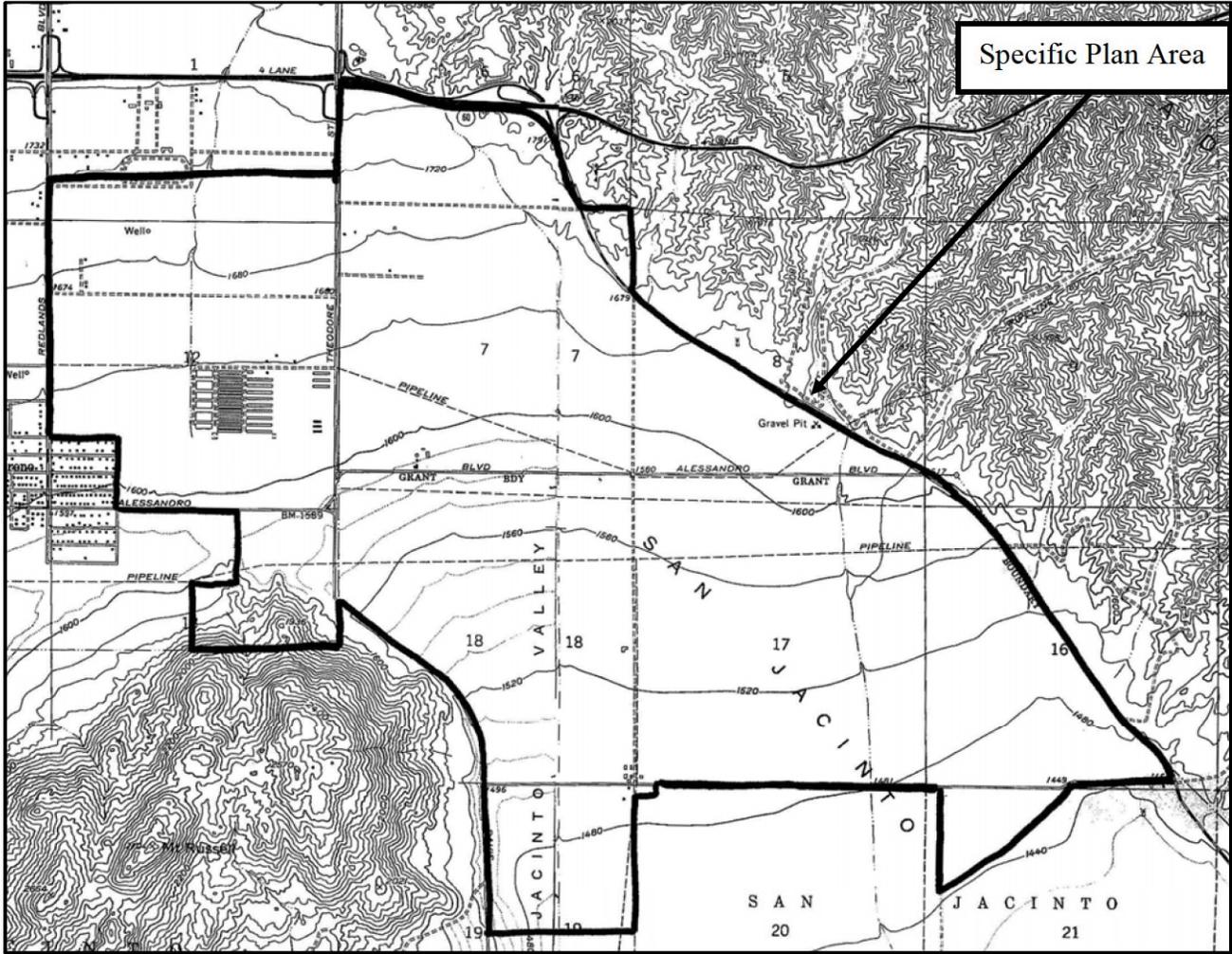
**Office Phone:** 909.884.2255

**Fax:** 909.884.2113 (preferred delivery method)

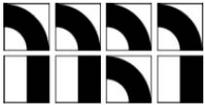
**Email:** [mdice@brandman.com](mailto:mdice@brandman.com)

SEE ATTACHED MAP (scale of topo reduced)

The proposed Specific Plan is located on approximately 3,200 acres of agricultural land in the City of Moreno Valley. Current cultural resource work is associated with a Programmatic EIR for future development of commercial and possibly residential tracts. Most of the property inside the Specific Plan boundary (see map) was surveyed by MBA staff for an earlier iteration of this project. Previous Native American compliance work took place in 2005-2007.



Source: Topo! @National Geographic Holdings.



Michael Brandman Associates

2610.0025.0 • 3/2011 | CR Exhibit 1

**Exhibit 1**  
**Topographic Map (Scale Reduced)**

The Highland Specific Plan • Cultural Resource Review

STATE OF CALIFORNIAEdmund G. Brown, Jr., Governor**NATIVE AMERICAN HERITAGE COMMISSION**

915 CAPITOL MALL, ROOM 364  
SACRAMENTO, CA 95814  
(916) 653-6251  
Fax (916) 657-5390  
Web Site [www.nahc.ca.gov](http://www.nahc.ca.gov)  
e-mail: [da\\_nahc@pacbell.net](mailto:da_nahc@pacbell.net)



March 25, 2011

Mr. Michael H. Dice, M.A., Archaeologist

**Michael Brandman Associates**

621 E. Carnegie Drive, Suite 100  
San Bernardino, CA 92408

Sent by FAX to: 909-884-2113

No. of Pages: 2

Re: Tribal Consultation Per Government Code §§ 65092, 65351, 65352.3, 65352.4, 65560 and 65562.5 (SB 18) for the The Highlands Specific Plan and CEQA Environmental Impact Report (EIR). Project: located in the City of Moreno Valley; Riverside County, California

Dear Mr. Dice:

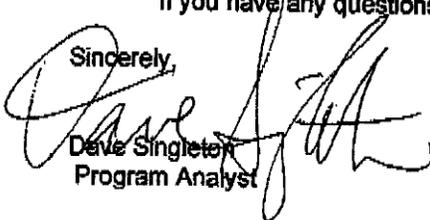
Government Code §65352.3 requires local governments to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose of protecting, and/or mitigating impacts to cultural places. The Native American Heritage Commission is the state "trustee agency" designated for the protection of Native American Cultural Resource pursuant to CA Public Resources Code §21070.. Attached is a consultation list of tribes with traditional lands or cultural places located within the Project Area of Potential Effect (APE). The tribal entities on the list are for your guidance for **government-to-government consultation** purposes.

The NAHC did perform a Sacred Lands File search of the project location and **Native American cultural resources were not identified** in the 'area of potential effect.' (APE). Please contact the Native Americans on the attached list to determine if the proposed changes might impact on Native American cultural resources..

The Native American Heritage Commission works with Native American tribal governments regarding its identification of 'Areas of Traditional Use.' The Commission may adjust the submitted data defining the 'Area of Traditional Use' in accordance with generally accepted ethnographic, anthropological, archeological research and oral history. Also, the Area of Traditional Use is an issue appropriate for the government-to-government consultation process.

If you have any questions, please contact me at (916) 653-6251.

Sincerely,



Dave Singleton  
Program Analyst

Attachment: Native American Tribal Consultation List

**Native American Tribal Consultation List  
Riverside County  
March 25, 2011**

**Pala Band of Mission Indians**  
Tribal Historic Preservation Office  
35008 PalaTemecula Rd, PMB 445  
Pala , CA 92059  
sgaughen@palatribe.com  
(760) 891-3500

Luiseno  
Cupeno

**Santa Rosa Band of Mission Indians**  
Mayme Estrada, Chairwoman  
P.O. Box 609  
Hemet , CA 92546  
srbcioffice@yahoo.com  
(951) 658-5311  
(951) 658-6733 Fax

Cahuilla

**Pauma & Yuima Reservation**  
Randall Majel, Chairperson  
P.O. Box 369  
Pauma Valley , CA 92061  
paumareservation@aol.com  
(760) 742-1289

Luiseno

**Morongo Band of Mission Indians**  
Robert Martin, Chairperson  
12700 Pumarra Road  
Banning , CA 92220  
(951) 849-8807  
(951) 755-5200

Cahuilla  
Serrano

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

Cahuilla

**Pechanga Band of Mission Indians**  
Mark Macarro, Chairperson  
P.O. Box 1477  
Temecula , CA 92593  
tbrown@pechanga-nsn.gov  
(951) 770-6100

Luiseno

**San Manuel Band of Mission Indians**  
James Ramos, Chairperson  
26569 Community Center Drive  
Highland , CA 92346  
(909) 864-8933  
(909) 864-3724 - FAX

Serrano

**Serrano Nation of Indians**  
Goldie Walker  
P.O. Box 343  
Patton , CA 92369  
(909) 862-9883

Serrano

**Soboba Band of Mission Indians**  
Scott Cozaet, Chairperson  
P.O. Box 487  
San Jacinto , CA 92581  
dhill@soboba-nsn.gov  
(951) 654-2765

Luiseno

**Cahuilla Band of Indians**  
Luther Salgado, Sr., , Chairperson  
PO Box 391760  
Anza , CA 92539  
tribalcouncil@cahuilla.net  
915-763-5549

Cahuilla

This list is current only as of the date of this document.

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

This list is applicable only for consultation with Native American tribes under Government Code Section 65352.3.



March 28, 2011

Cultural Resources Coordinator Diana L. Chihuahua  
Torres-Martinez Desert Cahuilla Indians  
P.O. Box 1160  
Thermal, CA 92274

Fresno  
559.497.0310

Irvine  
714.508.4100

Palm Springs  
760.322.8847

Sacramento  
916.447.1100

San Bernardino  
909.884.2255

San Ramon  
925.830.2733

Subject: **Native American Information Request Letter associated with a Cultural Resource Survey and Evaluation for The Highlands Specific Plan Project-Level EIR located in the City of Moreno Valley, California. (USGS Sunnymead and El Casco, CA. quads)**

Dear Cultural Resources Coordinator Chihuahua:

Michael Brandman Associates CRM staff is undertaking an analysis of a large Specific Plan located in the far eastern portion of the City of Moreno Valley. Approximately 3700 acres of land is located within the Specific Plan boundary of which roughly 2200 acres was surveyed by MBA CRM teams in 2005 and 2007 as part of an earlier analysis of this project. In addition, MBA staff tested a series of prehistoric cultural resource sites in 2007 located at the northern toe of Mt. Russell, a work effort that included Soboba Cultural staff serving as a monitor. We shall recommend that those prehistoric sites be avoided by at least 100 feet during construction.

An additional 1500 acres has yet to be surveyed within the SP boundary. MBA staff may not be able to directly survey some of this acreage due to lack of trespassing rights, but this may change in 2011. However, because our report shall be written in support of a Program EIR, we need not directly survey every parcel in the SP boundary. Parcels we could not visit can be surveyed once an Initial Study in preparation of a Project EIR, which would detail the exact construction requirements, has been developed.

It must be noted that almost all of the parcels in the Specific Plan have been farmed for many decades. Initially, much of the property was in citrus in the 1920's and early 1930's. With the onset of the Depression, most of the citrus was abandoned and the land was converted to dryland cropping. Irrigation began in the late 1950's and some of the property is used for alfalfa, hay and/or vegetables.

We are writing you as part of our historical information scoping requirement. This information request letter is **not associated with the SB18 process**, but is a document that shall be included in our cultural resource survey report. CEQA and Section 106 of the National Historic Preservation Act of 1966 (NHPA) must consider the effects a project may have on historic properties. The definition of "historic properties" can include properties of traditional religious and cultural significance to Native American groups. To determine whether the proposed project may impact any such historic properties, including traditional cultural properties, MBA has reviewed background information and consulted with entities such as the NAHC. The Native American Heritage Commission does not indicate that any Native American cultural resources are located within this project area.

Diana L.Chihuahua  
March 28, 2011  
Page 2

Because the NAHC listed you as a tribal contact, we wish to ask if you have any information or concerns about this project area, and/or if the proposed project may have an impact on cultural resources that are important to you. Please feel free to contact me at 909.884.2255 ext 1208 if you have any questions or information, or you may address and mail a response to my attention at the address below.

Sincerely,

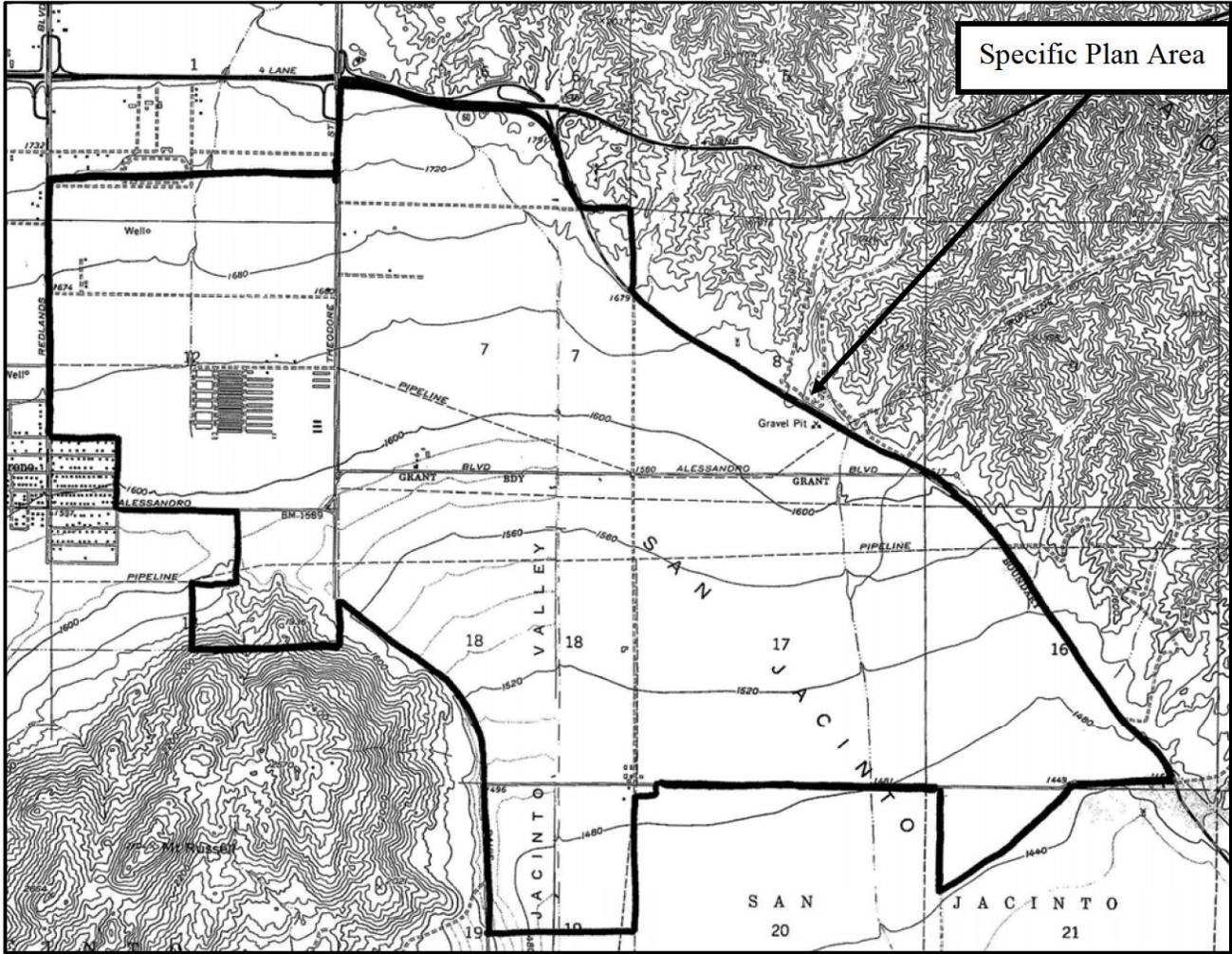


Michael H. Dice, M.A., Senior Archaeologist  
Michael Brandman Associates  
621 E Carnegie Drive, Suite 100  
San Bernardino, CA 92408

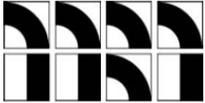
Enc: USGS *Sunnymead and El Casco, CA* topographic maps

Q:\Michael Dice\2011 projects\2610.0025.0 HF Specific Plan and CRM\2011 work for SP\new NAHC and NA work\2610.0025.0\_NA Tribal Letter.doc

SAMPLE



Source: Topo! @National Geographic Holdings.



Michael Brandman Associates

2610.0025.0 • 3/2011 | CR Exhibit 1

**Exhibit 1**  
**Topographic Map (Scale Reduced)**

The Highland Specific Plan • Cultural Resource Review

June 8, 2011

Attn: Michael Dice, M.A., R.P.A., Senior Archaeologist  
Michael Brandman Associates  
621 E. Carnegie Drive, Suite 100  
San Bernardino, CA 92408



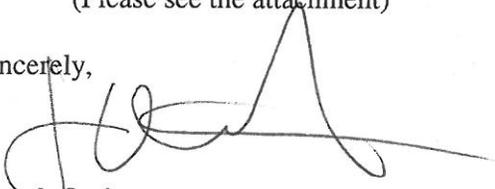
**Re: Native American Consultation Letter associated with Cultural Resource Survey and Evaluation for The Highlands Specific Plan Project, located in the City of Moreno Valley, Riverside County**

The Soboba Band of Luiseño Indians appreciates your observance of Tribal Cultural Resources and their preservation in your project. The information provided to us on said project has been assessed through our Cultural Resource Department, where it was concluded that although it is outside the existing reservation, the project area does fall within the bounds of our Tribal Traditional Use Areas. This project is located closer to Soboba Indian Reservation than others, and this project location is in close proximity to known village sites and is a shared use area that was used in ongoing trade between the Luiseno and Cahuilla tribes. This project it is regarded as highly sensitive to the people of Soboba.

Soboba Band of Luiseño Indians is requesting the following:

1. **Government to Government** consultation in accordance to SB18. Including the transfer of information to the Soboba Band of Luiseno Indians regarding the progress of this project should be done as soon as new developments occur.
2. Soboba Band of Luiseño Indians continue to be a lead consulting tribal entity for this project.
3. Working in and around traditional use areas intensifies the possibility of encountering cultural resources during the construction/excavation phase. For this reason the Soboba Band of Luiseño Indians requests that Native American Monitor(s) from the Soboba Band of Luiseño Indians Cultural Resource Department to be present during any ground disturbing proceedings. Including surveys and archaeological testing.
4. Request that proper procedures be taken and requests of the tribe be honored (Please see the attachment)

Sincerely,

  
Joseph Ontiveros  
Soboba Cultural Resource Department  
P.O. Box 487  
San Jacinto, CA 92581  
Phone (951) 654-5544 ext. 4137  
Cell (951) 663-5279  
[jontiveros@soboba-nsn.gov](mailto:jontiveros@soboba-nsn.gov)

RECEIVED  
6/15/11

**Cultural Items (Artifacts).** Ceremonial items and items of cultural patrimony reflect traditional religious beliefs and practices of the Soboba Band. The Developer should agree to return all Native American ceremonial items and items of cultural patrimony that may be found on the project site to the Soboba Band for appropriate treatment. In addition, the Soboba Band requests the return of all other cultural items (artifacts) that are recovered during the course of archaeological investigations. Where appropriate and agreed upon in advance, Developer's archeologist may conduct analyses of certain artifact classes if required by CEQA, Section 106 of NHPA, the mitigation measures or conditions of approval for the Project. This may include but is not limited or restricted to include shell, bone, ceramic, stone or other artifacts.

The Developer should waive any and all claims to ownership of Native American ceremonial and cultural artifacts that may be found on the Project site. Upon completion of authorized and mandatory archeological analysis, the Developer should return said artifacts to the Soboba Band within a reasonable time period agreed to by the Parties and not to exceed (30) days from the initial recovery of the items.

#### **Treatment and Disposition of Remains**

A. The Soboba Band shall be allowed, under California Public Resources Code § 5097.98 (a), to (1) inspect the site of the discovery and (2) make determinations as to how the human remains and grave goods shall be treated and disposed of with appropriate dignity.

B. The Soboba Band, as MLD, shall complete its inspection within twenty-four (24) hours of receiving notification from either the Developer or the NAHC, as required by California Public Resources Code § 5097.98 (a). The Parties agree to discuss in good faith what constitutes "appropriate dignity" as that term is used in the applicable statutes.

C. Reburial of human remains shall be accomplished in compliance with the California Public Resources Code § 5097.98 (a) and (b). The Soboba Band, as the MLD in consultation with the Developer, shall make the final discretionary determination regarding the appropriate disposition and treatment of human remains.

D. All parties are aware that the Soboba Band may wish to rebury the human remains and associated ceremonial and cultural items (artifacts) on or near, the site of their discovery, in an area that shall not be subject to future subsurface disturbances. The Developer should accommodate on-site reburial in a location mutually agreed upon by the Parties.

E. The term "human remains" encompasses more than human bones because the Soboba Band's traditions periodically necessitated the ceremonial burning of human remains. Grave goods are those artifacts associated with any human remains. These items, and other funerary remnants and their ashes are to be treated in the same manner as human bone fragments or bones that remain intact

**Coordination with County Coroner's Office.** The Lead Agencies and the Developer should immediately contact both the Coroner and the Soboba Band in the event that any human remains are discovered during implementation of the Project. If the Coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, the Coroner shall ensure that notification is provided to the NAHC within twenty-four (24) hours of the determination, as required by California Health and Safety Code § 7050.5 (c).

**Non-Disclosure of Location Reburials.** It is understood by all parties that unless otherwise required by law, the site of any reburial of Native American human remains or cultural artifacts shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner, parties, and Lead Agencies, will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code § 6254 (r).

Ceremonial items and items of cultural patrimony reflect traditional religious beliefs and practices of the Soboba Band. The Developer agrees to return all Native American ceremonial items and items of cultural patrimony that may be found on the project site to the Soboba Band for appropriate treatment. In addition, the Soboba Band requests the return of all other cultural items (artifacts) that are recovered during the course of archaeological investigations. Where appropriate and agreed upon in advance, Developer's archeologist may conduct analyses of certain artifact classes if required by CEQA, Section 106 of NHPA, the mitigation measures or conditions of approval for the Project. This may include but is not limited or restricted to include shell, bone, ceramic, stone or other artifacts.



## PALA BAND OF MISSION INDIANS

Tribal Historic Preservation Office  
35008 Pala Temecula Rd. PMB 445  
Pala, CA 92059

RECEIVED  
2/15/11

Ph: (760) 891-3591  
Fax: (760) 742-4543

April 5, 2011

Michael H. Dice  
Michael Brandman Associates  
621 E Carnegie Drive, Suite 100  
San Bernardino, Ca 92408

Re: The Highlands Specific Plan Project- Moreno Valley, Ca

Dear Mr. Dice:

The Pala Band of Mission Indians Tribal Historic Preservation Office has received your notification of the project referenced above. This letter constitutes our response on behalf of Robert Smith, Tribal Chairman.

We have consulted our maps and determined that the project as described is not within the boundaries of the recognized Pala Indian Reservation. The project is also beyond the boundaries of the territory that the tribe considers its Traditional Use Area (TUA). Therefore, we have no objection to the continuation of project activities as currently planned and we defer to the wishes of Tribes in closer proximity to the project area.

We appreciate involvement with your initiative and look forward to working with you on future efforts. If you have questions or need additional information, please do not hesitate to contact me by telephone at 760-891-3515 or by e-mail at [sgaughen@palatribe.com](mailto:sgaughen@palatribe.com).

Sincerely,

Shasta C. Gaughen, MA  
Tribal Historic Preservation Officer  
Pala Band of Mission Indians

ATTENTION: THE PALA TRIBAL HISTORIC PRESERVATION OFFICE IS RESPONSIBLE FOR ALL REQUESTS FOR CONSULTATION. PLEASE ADDRESS CORRESPONDENCE TO **SHASTA C. GAUGHEN** AT THE ABOVE ADDRESS. IT IS NOT NECESSARY TO ALSO SEND NOTICES TO PALA TRIBAL CHAIRMAN ROBERT SMITH.



**PECHANGA CULTURAL RESOURCES**  
*Temecula Band of Luiseño Mission Indians*

Post Office, Box 2183 • Temecula, CA 92593  
Telephone (951) 308-9295 • Fax (951) 506-9491

April 8, 2013

Chairperson:  
Germaine Arenas  
  
Vice Chairperson:  
Mary Bear Magee  
  
Committee Members:  
Evic Gerber  
Darlene Miranda  
Bridgett Barcello Maxwell  
Aurelia Marruffo  
Richard B. Searce, III  
  
Director:  
Gary DuBois  
  
Coordinator:  
Paul Macarro  
  
Cultural Analyst:  
Anna Hoover

**VIA E-MAIL and USPS**

Mr. Mark Gross, AICP  
Senior Planner  
City of Moreno Valley  
Community and Economic Development Dept  
14177 Frederick Street  
Moreno Valley, CA 92552

**Re: Pechanga Tribe Comments on the Draft Environmental Impact Report for the World Logistics Center Project (SCH#2012021045), General Plan Amendment PA12-0010, Development Agreement PA12-0011, Change of Zone PA12-0012, Specific Plan PA12-0013, Annexation PA12-0014, Tentative Parcel Map PA12-0015**

Dear Mr. Gross:

This comment letter is written on behalf of the Pechanga Band of Luiseño Indians (hereinafter, "the Tribe"), a federally recognized Indian tribe and sovereign government. The Tribe formally requests, pursuant to Public Resources Code §21092.2, to be notified and involved in the entire CEQA environmental review process for the duration of the above referenced project (the "Project"). The Tribe requests to be directly notified of all public hearings and scheduled approvals concerning this Project. Please also incorporate these comments into the record of approval for this Project.

1

The Tribe submits these comments concerning the Project's proposed impacts to cultural resources in conjunction with the environmental review of the Project and to assist the City in developing appropriate avoidance and preservation standards for the significant Luiseño Village Complex that the Project will be impacting. The Tribe is very concerned that the proposed mitigation measures do not adequately provide for protection of the cultural resources located within the Project boundaries and those that could be impacted during development and off-site improvements. The Draft Environmental Impact Report (DEIR) states that there will be no impacts to cultural resources/archaeological sites; however, it appears that a portion of P-33-15046/CA-RIV-8007 may be impacted by development and there is very little discussion of CA-RIV-2993 that could be directly impacted by the construction of a water tank.

2

The Tribe does not agree that the cultural sites located within the Project area are not significant per CEQA and have provided information to the City and the Project archaeologist in

3

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Pechanga Comment Letter to the City of Moreno Valley  
Re: Pechanga Tribe Comments on the World Logistics Project  
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our NOP/SB18 comments and in our SB18 consultation describing this significant Village Complex that extends much farther southward along Mt. Russell. The City, Developer and archaeologist seem to have disregarded the Tribe's input about this traditional cultural landscape and have not taken the information into account when analyzing the sites and the impacts to them. Additionally, the DEIR states that a public trail will pass through sensitive cultural locations. There must be mitigation provided in the DEIR to guide and protect any resources from impacts, including a long-term management plan to be developed between the Developer/Applicant and the Pechanga Tribe. Finally, the Tribe is concerned that the archaeological study has been included in the DEIR Technical Appendices. Archaeological studies are considered exempt from the Public Record and provided only on an as needed basis. Sensitive cultural information can be found in the document and the Tribe believes it is inappropriate to include it for public review. More information on this concern is provided below.

3

**THE CITY OF MORENO VALLEY MUST INCLUDE INVOLVEMENT OF AND CONSULTATION WITH THE PECHANGA TRIBE IN ITS ENVIRONMENTAL REVIEW PROCESS**

It has been the intent of the Federal Government<sup>1</sup> and the State of California<sup>2</sup> that Indian tribes be consulted with regard to issues which impact cultural and spiritual resources, as well as other governmental concerns. The responsibility to consult with Indian tribes stems from the unique government-to-government relationship between the United States and Indian tribes. This arises when tribal interests are affected by the actions of governmental agencies and departments. In this case, it is undisputed that the project lies within the Pechanga Tribe's traditional territory. Therefore, in order to comply with CEQA and other applicable Federal and California law, it is imperative that the City of Moreno Valley consult with the Tribe in order to guarantee an adequate knowledge base for an appropriate evaluation of the Project effects, as well as generating adequate mitigation measures.

4

As the City is processing a General Plan Amendment and a Specific Plan for this Project, the City is required to consult with the Pechanga Tribe pursuant to a State law entitled Traditional Tribal Cultural Places (also known as SB 18; Cal. Govt. C. § 65352.3). The purpose of consultation is to identify any Native American sacred places and any geographical areas which could potentially yield sacred places, identify proper means of treatment and management of such places, and to ensure the protection and preservation of such places through agreed upon mitigation (Cal. Govt. C. 65352.3; SB18, Chapter 905, Section 1(4)(b)(3)). Consultation must be government-to-government, meaning directly between the Tribe and the Lead Agency, seeking agreement where feasible (Cal. Govt. C. § 65352.4; SB18, Chapter 905, Section 1(4)(b)(3)).

5

<sup>1</sup> See e.g., Executive Memorandum of April 29, 1994 on Government-to-Government Relations with Native American Tribal Governments, Executive Order of November 6, 2000 on Consultation and Coordination with Indian Tribal Governments, Executive Memorandum of September 23, 2004 on Government-to-Government Relationships with Tribal Governments, and Executive Memorandum of November 5, 2009 on Tribal Consultation.  
<sup>2</sup> See California Public Resource Code §5097.9 et seq.; California Government Code §§65351, 65352.3 and 65352.4

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Lastly, any information conveyed to the Lead Agency concerning Native American sacred places shall be confidential in terms of the specific identity, location, character and use of those places and associated features and objects. This information is not subject to public disclosure pursuant the California Public Records Act (Cal. Govt. C. 6254(r)).

5

The Tribe met with the City and subsequently the Applicant on May 30, 2012 with the City pursuant to SB18. At that time, we requested to be sent copies of the Specific Plan, Parcel Map, development plans, archaeological study and geotechnical reports and received all documents by October 8, 2012. We were further provided the opportunity to visit the cultural sites on the Property August 22, 2012. The City has consistently maintained contact with the Tribe throughout the process. Therefore, we are concerned that the City did not include our March 16, 2012 comment letter submitted for the Notice of Preparation (NOP) and SB18 in the DEIR. We hope this was just an oversight and request that the Final EIR be updated to include our letter and requested comments.

6

**CONFIDENTIALITY OF ARCHAEOLOGICAL STUDIES AND CULTURAL INFORMATION**

Protection of archaeological and cultural sites and resources is of critical importance because they are non-renewable resources and easily damaged. Multitudes of amateur archaeologists and explorers roam undeveloped areas in search of "buried treasures." Anything that provides any information regarding the probable location of a site or the contents of a site is thus more fodder for those who would destroy or pilfer our Tribe's and the State's cultural heritage. When SB18, the law designed to protect California Native American cultural heritage, was enacted it clearly indicated that "each city and county [shall] protect the confidentiality of information concerning" cultural resources. (SB 18 §1(b)(3); Govt. Code §§ 65040.2(g)(3), 65352.3, 65352.4, and 65352.5.)

The State of California and its municipalities recognize the importance of protecting archaeological resources through confidentiality of information regarding the resource in other laws and regulations as well. According to the California Office of Historic Preservation, "Archaeological and Traditional Cultural Property (TCP) locations are generally considered confidential and public access to such information is restricted by laws, including: Section 304 of the National Historic Preservation Act, Section 9(e) of the Archaeological Resources Protection Act, Executive Order 13007 and Sections 6254(r) and 6254.10 of the California State Government Code." Other State agencies and local governments provide assurances within their practices, rules and ordinances for the protection of archaeological, historical and cultural sites and resources through confidentiality of information. (See, e.g. California's Forest Practice Rules for the Protection of Archaeological, Historical and Cultural Sites, Title 14 CCR; City of Morro Bay Coastal Land Use Plan; County of Riverside Planning Department Cultural Resources Investigations Standard Scopes of Work; and County of San Diego Report Formant and Content Requirements, Cultural Resources.)

7

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More importantly, however, the California Historical Resources Information System (“CHRIS”) allows certain individuals, organizations and governmental entities access to archaeological records, but only after signing a confidentiality agreement. By signing the agreement, an individual, organization or governmental entity agrees to keep archaeological site content and location information confidential by not disclosing archaeological information to unauthorized individuals or including it in publicly distributed documents. A failure to comply with the agreement could mean denial of access to CHRIS information.

7

As such, multiple jurisdictions make a practice of limiting archaeological information provided in public documents, acknowledging that publication of, or even general public access to, such things as site maps, site records, archaeological reports, and cultural surveys are both prohibited by law and potentially harmful to the resources. Thus, for the protection of the cultural resources located within the Project area, we request that the City remove immediately the archaeological study that was mistakenly published with the other portions of the DEIR.

**PECHANGA CULTURAL AFFILIATION TO PROJECT AREA**

The Pechanga Tribe has a specific legal and cultural interest in this Project as the Tribe is culturally affiliated with the geographic area that comprises the Project property. The Tribe has been the named the consulting tribe on projects in the vicinity of the proposed Project, and, contrary to statements in the archaeological study that the Tribe did not provide information, has specific knowledge of cultural resources and sacred places within/near the proposed Project that we shared with the City, Applicant and archaeologist. The Tribe asserts that this culturally sensitive area is affiliated specifically with the Pechanga Band of Luiseño Indians because of the Tribe’s specific cultural ties to this area. Pechanga considers any resources located on this Project property to be Pechanga cultural resources and we look forward to working directly with the City to continue preserving and avoiding these sensitive tribal cultural resources. Although the Tribe provided the following in our NOP/SB18 comments, we have included it again for the DEIR.

8

D. L. True, C. W. Meighan, and Harvey Crew<sup>3</sup> stated that the California archaeologist is blessed “with the fact that the nineteenth-century Indians of the state were direct descendents of many of the Indians recovered archaeologically, living lives not unlike those of their ancestors.” Similarly, the Tribe knows that their ancestors lived in this land and that the Luiseño peoples still live in their traditional lands. The Pechanga Tribe’s knowledge of our ancestral boundaries is based on reliable information passed down to us from our elders; published academic works in the areas of anthropology, history and ethno-history; and through recorded ethnographic and linguistic accounts. Many anthropologists and historians who have presented boundaries of the Luiseño traditional territory have included the Moreno Valley area in their descriptions (Drucker 1937; Heizer and Whipple 1957; Kroeber 1925; Smith and Freers 1994), and such territory

9

<sup>3</sup> D. L. True, C. W. Meighan, and Harvey Crew. Archaeological Investigations at Molpa, San Diego County, California, *University of California Press* 1974 Vol. 11, 1-176

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descriptions correspond almost identically with what was communicated to the Pechanga people by our elders. While historic accounts and anthropological and linguistic theories are important in determining traditional Luiseño territory, the most critical sources of information used to define our traditional territories are our songs, creation accounts, and oral traditions.

9

Luiseño history originates with the creation of all things at *'éxva Teméeku*, in the present day City of Temecula, and dispersing out to all corners of creation (what is today known as Luiseño territory). It was at Temecula that the Luiseño deity *Wuyóot* lived and taught the people, and here that he became sick, finally expiring at Lake Elsinore. Many of our songs relate the tale of the people taking the dying *Wuyóot* to the many hot springs at Elsinore, where he died (DuBois 1908). He was cremated at *'éxva Teméeku*. A traditional song recounts the travels of eagle, as he searches for a place where there was no death. His travels begin at Temecula, flying north to San Bernardino and then to the east, south, and west through Julian, Cuyamaca, and Palomar, and returning to Temecula.<sup>4</sup> It is the Luiseño creation account that connects Elsinore to Temecula, and thus to the Temecula people who were evicted and moved to the Pechanga Reservation, and now known as the Pechanga Band of Luiseño Mission Indians (the Pechanga Tribe). From Elsinore, the people spread out, establishing villages and marking their territories. The first people also became the mountains, plants, animals and heavenly bodies.

Many traditions and stories are passed from generation to generation by songs. One of the Luiseño songs recounts the travels of the people to Elsinore after a great flood (DuBois 1908). From here, they again spread out to the north, south, east and west. Three songs, called *Montivol*, are songs of the places and landmarks that were destinations of the Luiseño ancestors, several of which are located near the Project area. They describe the exact route of the Temecula (Pechanga) people and the landmarks made by each to claim title to places in their migrations (DuBois 1908:110). The Native American Heritage Commission (NAHC) Most Likely Descendent (MLD) files substantiate this habitation and migration record from oral tradition. These examples illustrate a direct correlation between the oral tradition and the physical place; proving the importance of songs and stories as a valid source of information outside of the published anthropological data.

10

*Tóota yixélval* (rock art) is also an important element in the determination of Luiseño territorial boundaries. *Tóota yixélval* can consist of petroglyphs (incised) elements, or pictographs (painted) elements. The science of archaeology tells us that places can be described through these elements. Riverside and Northern San Diego Counties are home to red-pigmented pictograph panels. Archaeologists have adopted the name for these pictograph-versions, as defined by Ken Hedges of the Museum of Man, as the San Luis Rey style. This is the predominant style of rock art within the Project area and incorporates elements which include chevrons, zig-zags, dot patterns, sunbursts, handprints, net/chain, anthropomorphic (human-like) and zoomorphic (animal-like) designs. Tribal historians and photographs inform us that some design elements are reminiscent of Luiseño ground paintings. A few of these design elements,

<sup>4</sup> Ibid.

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particularly the flower motifs, the net/chain and zig-zags, were sometimes depicted in Luiseño basket designs and can be observed in remaining baskets and textiles today.

Further evidencing the connection between the San Luis Rey rock art style and Luiseno people are these descriptions of how the diamond chain pattern, which is uniquely San Luis style rock art, was incorporated into the Luiseño girls' ceremony. In 1892, Bureau of Ethnology anthropologist H.W. Henshaw compiled information on what was called the "Girls Ceremony." He wrote: 'that during the fourth new moon of the young girl's puberty rite, diamond shaped marks were painted vertically on the cheeks of the girls faces' (Smith & Freers, pg. 19). For Pechanga, the connection to the rock art images held a known meaning. J.P. Harrington would later cross-reference this same "face painting" information in his 1933 work entitled *The Luiseno Girls Ceremony*.

Additionally, according to historian Constance DuBois:

When the people scattered from Ekvo Temeko, Temecula, they were very powerful. When they got to a place, they would sing a song to make water come there, and would call that place theirs; or they would scoop out a hollow in a rock with their hands to have that for their mark as a claim upon the land. The different parties of people had their own marks. For instance, Albañas's ancestors had theirs, and Lucario's people had theirs, and their own songs of Munival to tell how they traveled from Temecula, of the spots where they stopped and about the different places they claimed (1908:158).

An additional type of *tóota yixélval*, identified by archaeologists also as rock art or petroglyphs, are cupules. Throughout Luiseño territory, there are certain types of large boulders, taking the shape of mushrooms or waves, which contain numerous small pecked and ground indentations, or cupules. Many of these cupule boulders have been identified within a few hundred feet of the Project. In fact, the *tóota yixélval* identified close-by are but a small part of the overall Luiseño Village Complex that includes Mt. Russell and other sites to the northwest, south and southeast. The City has identified the area to the north as the Wolfskill Ranch North Complex. The archaeological study also acknowledges the importance of this area and states: "We believed that the nine prehistoric sites should be considered part of the unofficial Wolfskill Ranch North Complex. This Complex is discussed in the City General Plan but is not an officially recognized prehistoric district (p.53)." The Tribe agrees that this area should be included in the City's inventory of significant places and designated as permanent Open Space within the General Plan.

Thus, our songs and stories, our indigenous place names, as well as academic works, demonstrate that the Luiseño people who occupied what we know today as Moreno Valley and the Lakeview area are ancestors of the present-day Luiseño/Pechanga people, and as such, Pechanga is culturally affiliated to this geographic area. The Tribe welcomes the opportunity to

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meet with the City to further explain and provide documentation concerning our specific cultural affiliation to lands within your jurisdiction, if so desired.

10

**PROJECT IMPACTS TO CULTURAL RESOURCES**

As we have continually informed the City, the proposed Project and its Off-Site Impacts are located in a highly sensitive region of Luiseño territory and the Tribe believes that the possibility for recovering subsurface resources during ground-disturbing activities is high. The Tribe has over thirty-five (35) years of experience in working with various types of construction projects throughout its territory. The combination of this knowledge and experience, along with the knowledge of the culturally-sensitive areas and oral tradition, is what the Tribe relies on to make fairly accurate predictions regarding the likelihood of subsurface resources in a particular location. The Pechanga Band is not opposed to this Project; however, we are opposed to any direct, indirect and cumulative impacts this Project may have to tribal cultural resources. The Tribe's primary concerns stem from the Project's proposed impacts on Native American cultural resources. The Tribe is concerned about both the protection of unique and irreplaceable cultural resources, such as Luiseño village sites, sacred sites and archaeological items which would be displaced by ground disturbing work on the Project, and on the proper and lawful treatment of cultural items, Native American human remains and sacred items likely to be discovered in the course of the work.

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The Tribe has multiple concerns with the DEIR as posed. As indicated above, the Tribe submitted a NOP/SB18 comment letter in March 2012 that was not included in the DEIR or its appendices. The Tribe requests that the Final EIR be updated to include our comment letter and any appropriate Response to Comments.

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The Tribe has reviewed the Archaeological studies and Appendix F of the DEIR. We are concerned that the Project archaeologist has not included any of the Tribe's information in the reports which would have assisted with site analysis. The Tribe applauds the archaeological consultant for combining a cultural area into one site. They describe this as, "With the addition of new feature elements discovered during the survey and GPS rendering of the original site locations, it became clear that the three original sites, which were all within an 80-meter radius of each other, should be combined into a single site with the newly discovered site elements added." However, they then proceed to say that the 29 milling features are not significant because there were no artifacts found in the area. By ignoring that this site is part of a larger Complex and ignoring the association between the physical remains and the bare spots between them, they are disregarding the importance of this area and overlooking important information that can contribute to the overall body of archaeological and tribal knowledge. The high number of utilized resources in this area and the identification of resources on the adjacent Highlands Fairview Project prove that Luiseño ancestors were extremely active within the region and that this area was a large habitat area, or village complex, for Indian people. Negatively impacting

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and/or destroying the cultural sites within this area are a great irreparable loss to tribal culture and scientific knowledge.

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A major problem that the Tribe has been observing over the last few decades is the shift in archaeological practices which look at cultural resources on an individual scale, on a project-by-project basis. This piecemeal type of assessment belies the fact that many of these sites are components of much larger complexes, and thus results in evaluations of the sites as not being significant. Further, this kind of piecemeal approach seems to be contrary to the tenets of archaeology which supposedly strives for a holistic approach. Because of this approach, very little regional or settlement pattern research is conducted within the Riverside County area to connect the dots. This has resulted in the systematic destruction of villages and habitation areas.

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The Tribe believes that individual recordation of sites is an attempt to piecemeal obvious complexes/large cultural areas into smaller portions in order to make a “not significant” determination. While we understand that recordation of sites in this manner may assist with the management of such sites and features, it undermines the ability to offer a complete and thorough analysis of the Project impacts to cultural resources. The Tribe believes that division of sites and features into separate sites necessarily takes away from the significance of the sites themselves because they are analyzed by only looking at the particulars of that site/feature while missing the relationship to the other sites/features in the vicinity as well as the topography, geography, plant resources and waterways. A particular feature may be part of a significant village or habitation area, but one would never know that if only the feature was analyzed by itself as is the case on this Project. In addition, the Tribe believes this regional analysis would necessarily suggest that there is a high potential for subsurface resources to be found during grading or ground-disturbing activities for this Project.

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Almost 25 years ago, Glassow (1985)<sup>5</sup> addressed the issue of how site complexes and regional complexes (i.e. villages and habitation areas) were being divided into smaller sites for analysis. This procedure misses the full interpretation of the sites, resulting in a “write-off” or dismissal of sites based only on a partial analysis. Small sites are described as those sites which “typically have surface areas on the order of 1,000 m<sup>2</sup> or less, deposits of less than 50 cm depth, only two or three major classes of cultural remains and very few, most often fragmentary finished artifacts” (59). He states, “...(S)ites on the smaller end of the size range are being systematically neglected by many archaeologists in favor of sites on the larger end of the size range. Not only are small sites seldom investigated, but they are frequently assessed as having no appreciable significance to research and are therefore being destroyed...”(ibid: 58). He further provides an example of an archaeological document that determined a site to be not eligible for the National Register. The assessment stated that although the small site, which contained a lithic scatter and two bifacial tools, contained high integrity, the potential to answer research questions was limited and thus the site was not eligible. This limited data was based

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<sup>5</sup> Glassow, Michael A. The Significance of Small Sites to California Archaeology. Journal of California and Great Basin Anthropology Vol. 7, No.1. PP 58-66 (1985).

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solely upon a survey and one posthole test unit. Archaeologists make the mistake of treating each site as an individual “temporary camp site or isolated feature” as opposed to looking at them as elements or components of larger village complexes.

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With regard to this Project, the Tribe asserts that the same methodology and resulting dismissal of sites is occurring. The destruction of milling resources is a common practice in western Riverside County, justified because they are so ‘ubiquitous.’ Scientific potential is measured by the amount of artifacts found around the milling feature, not the feature itself. The Tribe views these important cultural features as part of the larger village complex that can aide in the analysis of that complex as well as the fact that they are the remains of the ancestors.<sup>6</sup> These types of complexes are rare and endangered by continuing development. Within the last seven (7) years, the Tribe has seen at least five (5) Luiseño village complexes negatively impacted and/or destroyed in western Riverside County. The City contains multiple significant village complexes, with other habitation areas spread throughout. The Tribe asserts that a traditional Luiseño village complex is a special element to not only the Tribe but to the City as well as the State. The citizens of Moreno Valley should be proud of such a special resource and should strive to preserve it in perpetuity.

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Kroeber<sup>7</sup> and Heizer<sup>8</sup> used ethnographic data to describe the Luiseño Indians’ settlement pattern as consisting of permanent villages of 75 to 200 people located in proximity to reliable sources of water and within range of a variety of floral and faunal food resources, which were exploited from temporary camp locations surrounding the main village. It has also been suggested that, frequently, a number of communities would combine to celebrate important festivals, harvest cycles, and other ceremonial events, occasionally inviting distant, linguistically unrelated groups. Expanding on Kroeber and Heizer’s general description, True and Waugh<sup>9</sup> described Luiseño settlement patterns as;

*The bipolar settlement pattern of the San Luis Rey was represented by relatively permanent and stable villages (both winter and summer), inhabited by several groups exploiting well-established territories and resources that were defended against trespass (we follow Flannery [1976:164] in using “village as a generic*

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<sup>6</sup> The Tribe would like to challenge archaeologists to begin researching why artifacts aren’t commonly found around milling features. It is time to look at why resources may not be present instead of anticipating or assuming that resources should be present. We should ask ourselves why would a person stand next to a food processing place and make a utility tool where the waste materials could get into the food or cut feet. Do we, today, stand next to a stove that contains open pots with cooking food and sharpen our knives so that metal debris could come into contact with the food? Thinking about these questions while assessing the significance of sites as they relate to the landscape will provide additional research questions and answers. These resources can provide valuable information for future archaeologists in terms of settlement patterns, patterns of domestic life as well as enhancing our understanding of how prehistoric tribal peoples lived with one another and upon the landscape.

<sup>7</sup> Alfred. L. Kroeber 1925. *Handbook of the Indians of California*. Bulletin 78, Bureau of American Ethnology, Government Printing Office, Washington D.C.

<sup>8</sup> Robert F. Heizer and M.A. Whipple 1951. *The California Indians*. University of California Press, Berkeley.

<sup>9</sup> True and Waugh 1982, p. 35

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*term for any small permanent community”), they saw this as a result of a reasonably long process of adaptation during which several strategic changes take place in settlement location patterns and in procedures for collecting resources. These strategic changes included a “trend toward the congregation of people along the major tributaries, with each tributary and its immediate environs occupied and exploited by a family-based kin group of some kind.*

Of great importance to the Luiseño people is how this would look on the landscape. For example, during his visit to Luiseño settlements in the La Jolla region in 1901, Merriam noted that “in many cases the Indians have great masses of tuna, 10-20 feet high, about or near their adobe houses” which “are not near together but scattered about, usually 1/8 or 1/4 of a mile apart and on a cleared place surrounded by chaparral.”<sup>10</sup> Luiseño settlement patterns have also been described ethnographically by Sparkman<sup>11</sup> and Strong<sup>12</sup> as sedentary and territorial, with the extended families residing in villages with individual living areas separated anywhere from ¼ of a mile to ½ a mile apart. The proposal that a village foot print covers an expansive area, with each family having its own milling feature is supported by Bean when he argues that “homes were located some distance apart to provide privacy for families, if terrain permitted.”<sup>13</sup> Bean and Smith also suggest that “a village might occupy three to five square miles.”<sup>14</sup> While Oxendine’s<sup>15</sup> dissertation is often cited when discussing late prehistoric village attributes and locations, little has been done to expand on her definition of a village foot print. The idea that villages could cover an expansive area is supported by True et al. Here, True et al<sup>16</sup> suggest that the larger outcrops containing multiple milling features are community milling areas and that each group or family within the community had its own specific milling boulder. In other words “each group then had its milling area and each family woman had her mortar or group of milling elements.” To support this claim, True et al. gives the following example: The milling stones located at Silver Crest (Palomar Mountain State Park) belonging to the adjacent Pauma Village were identified by Max Peters as the property of a specific family. Each family had its own “place” and each mortar hole belonged to a particular “lady.” “If the pattern at Molpa in protohistoric times followed that of the adjacent Pauma Village, it is likely that these “holes” were passed down from mother to daughter and were used until they became too deep to be

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<sup>10</sup> Merriam, C. Hart. *Studies of California Indians*. The Staff of the Department of Anthropology of the University of California, eds. Berkeley: University of California Press. 1955

<sup>11</sup> Sparkman, Philip Stedman, *The Culture of the Luiseño Indians*. University of California Publications in American Archaeology and Ethnology 1908, 8(4).

<sup>12</sup> Strong, William D. *Aboriginal Society in Southern California*. University of California Publications in American Archaeology and Ethnology 26, 1929

<sup>13</sup> Bean, Lowell J. *Mukat's People: The Cahuilla Indians of Southern California*. University of California Press, Berkeley, 1972, p. 71

<sup>14</sup> Bean, Lowell J. and Charles R. Smith. Serrano: In *Handbook of North American Indians, Volume, 8, California*, edited by Robert Heizer, Smithsonian Institution, Washington D.C., p. 43.

<sup>15</sup> Oxendine, Joan. *The Luiseño Village During the Late Prehistoric Era*. Ph.D. Dissertation, University of California, Riverside, 1983

<sup>16</sup> True et al 1974 p. 43

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functional.”<sup>17</sup> Thus there is support for the Tribe’s assertion that each milling feature signifies an integral portion of the much larger village present at the site.

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Glassow argues, “(A) small site and its contents gain importance as a document of a set of activities that occurred at a specific place within a particular setting. While the same set of activities might have occurred at a number of other places, it is often important to know the number of such places and variations in their settings.”<sup>18</sup> Even smaller projects, like the currently proposed Project, is the appropriate time for Settlement Pattern research and comparisons of artifact collections to occur and to start piecing the bigger picture together. Trade and travel patterns can be assessed; site formation, ceremonial comparisons, and site type comparisons can continue to be made. Habitation/village sites are often identified, but the necessary scientific and archival research needed to produce a thorough report is not taken. The practice of recording isolated features and artifacts which results in a “negative finding” is slowly destroying larger cultural sites that could have been identified as a significant complex. This lack of context results in destruction of the individual sites, and not only of our cultural heritage, but that of the greater community and the overall history of California.

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In addition, by piecemealing projects, archeologists are not necessarily saving the correct portions of the complexes and villages, but only the portions they deem to have scientific value. By archaeologists using this methodology, we as a society are likely missing the most essential pieces of the puzzle and, most importantly, ignoring the cultural value. True and Waugh<sup>19</sup> pointed out that the Luiseño Mission Indians were resourceful with almost an innate ability to adapt to changing circumstances. They argue that either pre-contact or post-contact San Luis Rey Luiseño people had demonstrated a high degree of adaptable behavior as they consolidated to form more complex systems, placing their villages in locations that are situated near the most reliable regional water supplies. True and Waugh proposed that this could only occur within a social matrix capable of sustaining the mosaic of productive, ritual, and social relationships inherent to “village” organizations. In other words, the Luiseño people had developed a very complex sense of community and permanent Settlement Pattern: it was embedded in their Social History. On this Project, the combination of physical archaeological remains, knowledge of resources being identified from adjacent properties and important tribal named places, traditional landscape analysis and oral traditions, a much broader, complex patter can be identified for this area.

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At this time, the Tribe thanks the Project Applicant/Developer for placing the majority of the cultural sites within Open Space for preservation. The Tribe is concerned that potentially a portion of P-33-15046 may be impacted by development. We request additional clarification from the City and Developer/Applicant regarding this site. Additionally, the site identified as P-

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<sup>17</sup> Ibid 1974 p. 43

<sup>18</sup> Glassow 1985: 60

<sup>19</sup> True, D. L. and George Waugh. Proposed Settlement Shifts during San Luis Rey Times: Northern San Diego County, California. *Journal of California and Great Basin Anthropology* 1982, 4(2):34-54.

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33-2993, located in the southwest portion appears that it could be impacted by a proposed water tank. This site is briefly addressed in the archaeological study as not having been tested or evaluated for impacts in any way. As it seems that water tank location has not been finalized, the Tribe urges the Developer/Applicant and the City to design the tank to avoid this site and any potential impacts to the possible midden in the area.

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Additionally, the DEIR states that a public trail will pass through sensitive cultural locations. There must be mitigation provided in the DEIR to guide and protect any resources from impacts. The Tribe would like to assist the City and Developer/Applicant with planning the trail through this area and with landscaping options that will discourage these sites from becoming an attractive nuisance. This will include developing a long-term management plan, to be developed between the Developer/Applicant and the Pechanga Tribe, to ensure that the protection planned during this DEIR process is maintained and that the sites do not become a burden to preserve.

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**REQUESTED TRIBAL INVOLVEMENT AND RECOMMENDED PROJECT MITIGATION MEASURES**

The Tribe believes that the proposed mitigation measures as posed are not sufficient, given the sensitivity of the area, to protect and ensure that development activities will not impact buried cultural resources. Neither are they sufficient to provide for long-term protection and care once development activities have been completed. The lack of specificity of the mitigation measures and the lack of a requirement for tribal monitors does not bring the Project into compliance with CEQA nor reduce the impacts to a level below significant. While the Tribe understands that the Property has been subjected to previous disturbances such as the existing residences and agricultural usage, as the Project site lies within such a culturally-sensitive area, the Tribe believes that the possibility exists for the recovery of subsurface resources during earthmoving activities. Furthermore, as the DEIR acknowledges, cultural resources were identified during monitoring on the adjacent Highland Fairview property. These resources, some of which were deeply buried, as well as the known resources in this area that are also deep, are good indicators that additional resources could be found within the Project at a greater distance than the recommended 3,750 feet from the southwest corner. This distance is not realistic and could hinder the archaeologist and the Tribe from identifying significant resources. Therefore, the Tribe submits the revised mitigation measures for inclusion into the final EIR. Please contact the Tribe to discuss these mitigation measures and to review any proposed language changes prior to finalizing the Final EIR (strikeouts are deletions; underlines are additions.)

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4.5.6.1A Prior to the approval of any grading or other discretionary permit for any of the "Light Logistics" parcels, the parcels shall be evaluated for significance by a qualified archaeologist since they were not available for survey during preparation of the EIR. A Phase I Cultural Resources Assessment shall be conducted by the project archaeologist

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and an appropriate tribal<sup>20</sup> representative on each of the “Light Logistics” parcels prior to development to determine if it contains significant archaeological or historical resources. A Phase II evaluation shall be completed for any of these sites in order to determine if they that are determined to contain significant archaeological or historical resources based on the results of the Phase I assessment. Cultural resources include but are not limited to stone artifacts, bone, wood, shell, or features, including hearths, structural remains, or historic dumpsites. If a particular resource is determined to be significant, it All resources determined to be prehistoric or historic shall be adequately documented using DPR523 forms for archival research/storage in the Eastern Information Center (EIC). If the particular resource is determined to be not significant, no further documentedation is required. Any artifacts If historic resources are determined to be significant, they shall be considered for relocation or archival documentation, as appropriate, depending on whether the building or buildings are determined to be significant under CEQA. If any building is determined to be significant, a Phase III recovery study shall be conducted to recover remaining significant cultural artifacts. If necessary, a feasibility study shall be conducted to determine if a significant structure can be relocated effectively to off-site parcels. The study shall also identify if there are appropriate parcels available within or close to the Moreno area of the City. If the structure cannot be feasibly relocated, or there is not an appropriate parcel to relocate the structure to, the structure shall be demolished after complete archival recordation in a manner determined by the project archaeologist. If prehistoric archaeological/cultural resources are discovered during the Phase I survey and it is determined that they cannot be avoided through site design, they shall be subject to a Phase II testing program. The project archaeologist, in consultation with the appropriate Tribe, shall determine the significance of the resource(s) and determine the appropriate mitigation for the resources.

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**4.5.6.1B** Prior to the approval of any grading or ground-disturbing permit by the City for construction of off-site improvements for the WLCSP, the developer requesting the permit shall retain a qualified archaeologist to prepare a Phase I cultural resource assessment (CRA) of the project site if an up to date CRA (within 5 years of the current year for which the permit above is sought) is not available for the site at the time of development. If archaeological resources are uncovered or discovered during construction activities, no further excavation or disturbance of the area where the resources were found shall occur until a qualified archaeologist, in consultation with the appropriate Tribe, evaluates the find. Pursuant to Calif. Pub. Res. Code § 21083.2(b) avoidance is the preferred method of preservation for archaeological resources. If the find is determined to be a unique or significant archaeological resource, appropriate action shall be taken to include but not be limited to: (a) planning

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<sup>20 20</sup> It is anticipated that the Pechanga Tribe will be the “appropriate” Tribe due to their prior and extensive participation in the Highlands Fairview project and the current Project and their coordination with the City and project applicant in determining potentially significant impacts and appropriate mitigation measures.

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construction to avoid archeological sites; (b) capping or covering archeological sites with a layer of soil before building on the affected site; or (c) excavation to adequately recover the scientifically consequential information from and about the resource. Appropriate mitigation shall take into account the religious beliefs, customs, and practices of the appropriate Tribe. Work may continue on other parts of the project site while the unique archaeological resource mitigation takes place. This measure shall be implemented to the satisfaction of the City Planning Division. If the qualified archaeologist, in consultation with the appropriate Tribe, determines that the find is a unique archaeological resource, the resource site shall be evaluated and recorded in accordance with requirements of the State Office of Historic Preservation (OHP) and as described in 4.5.61A. If the site is determined to be significant and cannot be avoided through site design, an adequate amount of data at the specific site shall be collected by the qualified archaeologist and the findings of the report shall be submitted to the City. If the site is not determined to be not significant, the site need not be mitigated for as described above.

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**4.5.6.1C** Prior to any discretionary approvals for development ~~within 3,750 feet of the southwest corner of the site,~~ the project developer shall retain a qualified archaeologist to monitor grading as this area has been identified as having moderate to high sensitivity for cultural resources. Project-related archaeological monitoring shall include the following requirements:

1. All construction-related earthmoving shall be monitored to a depth of ten (10) feet below grade by the Project Archaeologist or his/her designated representative and the appropriate Tribe;
2. Once 50 percent of the earth to be moved has been examined, the Project Archaeologist may, at his or her discretion and in consultation with the appropriate Tribe, terminate monitoring if and only if no buried cultural resources have been detected;
3. If buried cultural resources are detected, monitoring shall continue until 100 percent of virgin earth within the permit area has been disturbed and inspected by the Project Archaeologist or his/her designated representative and the appropriate Tribe.
4. Grading shall cease in the area of a cultural artifact or potential cultural artifact as delineated by the Project Archaeologist or his/her designated representative and the appropriate Tribe. Grading should continue in other areas of the site while particular find are investigated; and
5. If cultural artifacts are uncovered during grading, they shall be Phase II tested by the Project Archaeologist and the appropriate Tribe, evaluated for significance in accordance with §15064.5 the *CEQA Guidelines*, and curated in a museum<sup>21</sup> chosen

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<sup>21</sup> The Pechanga Tribe would like the City to know that we own and maintain a curation facility that meets or exceeds 36 CFR Part 79 standards. Currently we do not charge to store Luiseño cultural items. The only exception

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by the City if the resource(s) are determined to be significant. Appropriate actions for significant resources include but are not limited to avoidance or capping (except of human remains), incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds (Phase III recovery). A mitigation-monitoring report must accompany any archived artifacts.

6. No further grading shall occur in the area of the discovery until the City approves specific actions to protect identified resources. Any archaeological artifacts recovered as a result of mitigation shall be handled as outlined in 5 above, donated to a qualified scientific institution approved by the City where they would be afforded long term preservation to allow future scientific study.

7. The developer shall make reasonable efforts to avoid, minimize, or mitigate significant adverse impacts on cultural resources on the WLCSP property, and the SHPO and local Native American tribes will be consulted and the Advisory Council on Historic Preservation (should there be Federal involvement on this Project) will be notified within 48 hours in compliance with 36 CFR 800.13(b)(3). This measure shall be implemented to the satisfaction of the City Planning Division.

8. The landowner shall relinquish ownership of all cultural resources, including sacred items, burial goods and all archaeological artifacts that are found on the project area to the appropriate Tribe for proper treatment and disposition. All sacred sites, should they be encountered within the project area, shall be avoided and preserved as the preferred mitigation, if feasible.

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**4.5.6.1D** ~~Prior to the issuance of any grading permit within 3,750 feet of the southwest corner of the site, the City and the applicant shall invite interested Tribal Group(s) representatives to help monitor grading if they so desire. Qualified representatives of the Tribal Group(s) shall be granted access to the permit site to monitor grading as long as they provide 48 hour notice to the developer of their desire to monitor, so the developer can make appropriate safety arrangements on the site. the project developer shall retain a qualified tribal monitor from the appropriate tribe and develop a Cultural Resources Treatment Agreement to monitor grading as this area has been identified as having moderate to high sensitivity for cultural resources, in which they have a direct ancestral connection. The Agreement shall address the treatment of known cultural resources, the designation, responsibilities, and participation of professional Native American Tribal monitors during grading, excavation and ground disturbing activities; project grading and development scheduling; terms of compensation by the developer for the monitors; and treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on the site. This measure shall be implemented to the satisfaction of the City Planning Division.~~

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is for human remains, sacred/ceremonial items or grave goods in which the Tribe requests that these items be reburied in an appropriate location of the Project property.

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**4.5.6.1E** It is possible that ground-disturbing activities during construction may uncover previously unknown, buried cultural resources (archaeological or historical). In the event that buried cultural resources are discovered during grading and no Project Archaeologist or Historian or tribal representative is present, grading operations shall stop in the immediate vicinity of the find and a qualified archaeologist and the appropriate tribe shall be retained to determine the most appropriate course of action regarding the resource. The Archeologist, in consultation with the appropriate tribe shall make recommendations to the City on the actions that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with §15064.5 of the *CEQA Guidelines* as a matter of last resort. Cultural resources could consist of, but are not limited to, stone artifacts, bone, wood, shell, or features, including hearths, structural remains, or historic dumpsites. Any previously undiscovered resources found during construction within the project area should be recorded on appropriate DPR forms and evaluated for significance in terms of CEQA criteria. If the resources are determined to be unique historic resources as defined under §15064.5 of the *CEQA Guidelines*, mitigation measures shall be identified by the Archaeologist and the appropriate tribe and recommended to the City. Appropriate protective actions for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the City approves the measures to protect these resources. Any archaeological artifacts recovered as a result of mitigation shall be returned to the appropriate tribe as provided for in 4.5.6.1C(5), above. In addition, reasonable efforts to avoid, minimize, or mitigate adverse effects to the property will be taken and the SHPO and Native American tribes with concerns about the property, as well as the ~~Advisory Council on Historic Preservation~~ native American Heritage Commission will be notified within 48 hours in compliance with 36 CFR 800.13(b)(3). If the project archaeologist and the Tribe cannot agree on the significance or the mitigation for such resources, not including human remains or grave goods, these issues will be presented to the Planning Director or appropriate City representative for decision. The Planning Director or appropriate City representative shall make the determination based on the provisions of the California Environmental Quality Act with respect to archaeological resources and Notwithstanding any other rights available under the law, the decision of the Planning Director shall be appealable to the Planning Commission and/or City Council.

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**4.5.6.1F** If human remains are encountered, California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission must be contacted within 24 hours. The

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Native American Heritage Commission must then immediately identify the “most likely descendant(s)” of receiving notification of the discovery. The most likely descendant(s) shall then make recommendations within 48 hours, and engage in consultations concerning the treatment of the remains as provided in Public Resources Code 5097.98 and the Treatment Agreement described in 4.5.6.1D.

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4.5.7 For cultural resources that are known or discovered during earth-moving activities and which will be preserved either in open space or in areas of no development, a long-term preservation plan must be completed between the Developer and the Pechanga Tribe. The preservation plan must include, but is not limited to, how the resources will be protected (i.e., fencing, native plants, etc.), who has responsibility for the long-term care, who shall pay for the long-term care, the role of the Tribe in maintaining and preserving the resources, approved uses and prohibited uses of the property, access rights and any other relevant provisions related to preservation and protection of cultural resources.

29

4.5.8 For the trails anticipated to be required for this Project, the Developer must consult with the appropriate tribe regarding the location of such trails. Sensitive cultural resources exist on the property and the alignment of the trail could impact subsurface cultural materials. In addition, a long-term maintenance and preservation plan for said trails must be completed between the developer and the Pechanga Tribe to ensure that at a minimum, cultural resources are not damaged through misuse by trail users, vandalism, maintenance needs for the trail and/or improvements or expansion of the trails.

30

The Tribe reserves the right to fully participate in the environmental review process, as well as to provide further comment on the Project's impacts to cultural resources and potential mitigation for such impacts. The Pechanga Tribe looks forward to working together with the City of Moreno Valley in protecting the invaluable Pechanga cultural resources found in the Project area. Please contact me at 951-770-8104 or at ahoover@pechanga-nsn.gov once you have had a chance to review these comments so that we may discuss the proposed mitigation measure language. Thank you.

31

Sincerely,



Anna Hoover  
Cultural Analyst

Cc Pechanga Office of the General Counsel

*Pechanga Cultural Resources • Temecula Band of Luiseño Mission Indians  
Post Office Box 2183 • Temecula, CA 92592*

*Sacred Is The Duty Trusted Unto Our Care And With Honor We Rise To The Need*

RECEIVED

APR 24 2013

CITY OF MORENO VALLEY  
Planning Division



Letter A-5

EST. JUNE 19, 1883

April 8, 2013

Attn: Mark Gross, AICP Senior Planner  
City of Moreno Valley Planning Division  
14177 Frederick Street  
Moreno Valley, CA 92553

**Re: World Logistics Center Project, Draft EIR (SCH#2012021045)**

The Soboba Band of Luiseño Indians appreciates your observance of Tribal Cultural Resources and their preservation in your project. The information provided to us on said project has been assessed through our Cultural Resource Department, where it was concluded that although it is outside the existing reservation, the project area does fall within the bounds of our Tribal Traditional Use Areas. This project location is in close proximity to known village sites and is a shared use area that was used in ongoing trade between the Luiseno and Cahuilla tribes. Therefore it is regarded as highly sensitive to the people of Soboba.

1

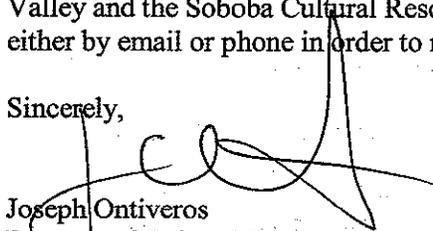
Soboba Band of Luiseño Indians is requesting the following:

1. **Government to Government** consultation in accordance to Section 106. Including the transfer of information to the Soboba Band of Luiseno Indians regarding the progress of this project should be done as soon as new developments occur.
2. The transfer of information to the Soboba Band of Luiseno Indians regarding the progress of this project should be done as soon as new developments occur.
3. Soboba Band of Luiseño Indians continues to act as a consulting tribal entity for this project.
4. Working in and around traditional use areas intensifies the possibility of encountering cultural resources during the construction/excavation phase. For this reason the Soboba Band of Luiseño Indians requests that a Native American monitoring component be included as a mitigation measure for the environmental impact report. The Tribe is requesting that a Treatment and Dispositions Agreement between the developer and The Soboba Band be provided to the City of Moreno Valley prior to the issuance of a grading permit and before conducting any additional archaeological fieldwork.
5. Request that proper procedures be taken and requests of the tribe be honored (Please see the attachment)

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6

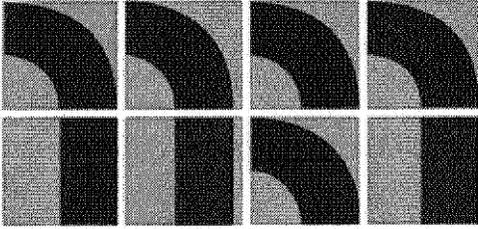
The Soboba Band of Luiseno Indians is requesting a face-to-face meeting between the City of Moreno Valley and the Soboba Cultural Resource Department. Please contact me at your earliest convenience either by email or phone in order to make arrangements.

Sincerely,

  
Joseph Ontiveros  
Director of Cultural Resources  
Soboba Band of Luiseño Indians  
P.O. Box 487  
San Jacinto, CA 92581  
Phone (951) 654-5544 ext. 4137  
Cell (951) 663-5279  
[jontiveros@soboba-nsn.gov](mailto:jontiveros@soboba-nsn.gov)

**Coordination with County Coroner's Office.** The Lead Agencies and the Developer should immediately contact both the Coroner and the Soboba Band in the event that any human remains are discovered during implementation of the Project. If the Coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, the Coroner shall ensure that notification is provided to the NAHC within twenty-four (24) hours of the determination, as required by California Health and Safety Code § 7050.5 (c).

**Non-Disclosure of Location Reburials.** It is understood by all parties that unless otherwise required by law, the site of any reburial of Native American human remains or cultural artifacts shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner, parties, and Lead Agencies, will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code § 6254 (r). Ceremonial items and items of cultural patrimony reflect traditional religious beliefs and practices of the Soboba Band. The Developer agrees to return all Native American ceremonial items and items of cultural patrimony that may be found on the project site to the Soboba Band for appropriate treatment. In addition, the Soboba Band requests the return of all other cultural items (artifacts) that are recovered during the course of archaeological investigations. Where appropriate and agreed upon in advance, Developer's archeologist may conduct analyses of certain artifact classes if required by CEQA, Section 106 of NHPA, the mitigation measures or conditions of approval for the Project. This may include but is not limited or restricted to include shell, bone, ceramic, stone or other artifacts.



Michael Brandman Associates

ENVIRONMENTAL SERVICES • PLANNING • NATURAL RESOURCES MANAGEMENT

May 4, 2005

Via Fax: 909-307-0539

Eric Scott  
San Bernardino County Museum  
Paleontologic Resource Assessment Program  
2024 Orange Tree Lane  
Redlands, CA 92374  
909-307-2669 (office)

**Subject: Request for a Paleontological Resources Records Search for the 1500 Acre Bel Lago Project. (USGS *Sunnymead and El Casco*, CA. topographic maps)**

Dear Ms. Springer or Mr. Scott:

I am in need of a records search on a block project area is located in Sections 1, 2, 11, 12, 13 and 5, 6, 7, 8, 9, 16, 17, 18, 19, 20, 21, T.3S R.2W and R.3W, as found on the USGS *Sunnymead and El Casco*, CA. 7.5' topographic quadrangles.

We have attached a topographic map showing the project location for your convenience. Please let me know if there shall be any depth restrictions with regard to monitoring. Monitor below 7 feet...5 feet????

Once the results have been determined, please fax the results to our office 714.508.4110 and mail MBA a hard copy. If you have any more questions or need to speak with me, please feel free to call me at 714.508.4100 ext 111. Thank you for your time and effort.

Sincerely,

Michael Dice M.A., Senior Archaeologist  
**Michael Brandman Associates**  
220 Commerce, Suite 200  
Irvine, CA. 92602

MD:ji

S:\MDice\Projects after Jan 2004\26100003 Bel Lago SPA\Paleo Search Letter 26100003.doc

Bakersfield 661.334.2755 \* Irvine 714.508.4100 \* Sacramento 916.296.4857 \* San Bernardino 909.884.2255 \* San Ramon 925.830.2733 \* Santa Cruz 831.262.1731 \* San Diego 619.823.4937 \* Visalia 559.739.0400

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# SAN BERNARDINO COUNTY MUSEUM



COUNTY OF SAN BERNARDINO  
ECONOMIC DEVELOPMENT/  
PUBLIC SERVICES GROUP

2024 Orange Tree Lane • Redlands, California USA 92374-4560  
(909) 307-2669 • Fax (909) 307-0539 • www.sbcountymuseum.org

ROBERT L. MCKERNAN  
Director

1 June 2005

Michael Brandman Associates  
attn: Michael Dice, M. A.  
220 Commerce, Suite #200  
Irvine, CA 92602

---

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re: **PALEONTOLOGY RECORDS REVIEW, BEL LAGO PROJECT, SUNNYMEAD  
AREA, RIVERSIDE COUNTY, CALIFORNIA**

---

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Dear Mr. Dice,

The Division of Geological Sciences of the San Bernardino County Museum (SBCM) has completed a records search for the above-named area in Riverside County. The proposed property is specifically located within portions of sections 1, 2, 11, 12, 13, 14 and 24, Township 3 South, Range 3 West, San Bernardino Base and Meridian, as well as sections 5 - 9, inclusive, and sections 15 - 22, inclusive, T 3S, R 2W, SBB&M, as shown on the El Casco, California and Sunnymead, California 7.5' United States Geological Survey topographic quadrangle maps (1979 and 1980 photorevised editions, respectively).

Previous geologic mapping of the proposed project property (Rogers, 1965) indicates that the majority of the property is situated upon Quaternary recent alluvium. These sediments have low potential to contain significant nonrenewable paleontologic resources, and are therefore determined to have low paleontologic sensitivity. However, these recent sediments likely overlie older Pleistocene alluvium having high paleontologic sensitivity. Older Pleistocene alluvial sediments elsewhere throughout the Inland Empire have been reported to yield significant fossils of plants and extinct animals from the Ice Age (Jefferson, 1991; Reynolds and Reynolds, 1991; Woodburne, 1991; Springer and Scott, 1994; Scott, 1997; Springer and others, 1998, 1999; Anderson and others, 2002). Fossils recovered from these Pleistocene sediments represent extinct taxa including mammoths, mastodons, ground sloths, dire wolves, short-faced bears, sabre-toothed cats, large and small horses, large and small camels, and bison (Jefferson, 1991; Reynolds and Reynolds, 1991; Woodburne, 1991; Springer and Scott, 1994; Scott, 1997; Springer and others, 1998, 1999). Should excavation expose these older Pleistocene sediments at depth, such excavation would have high potential to impact significant nonrenewable paleontologic resources.

The northeastern portion of the property is situated upon sediments mapped (Rogers, 1965) as surface exposures of the highly fossiliferous San Timoteo Formation. Previous geologic and paleontologic investigations of this formation, including those by Frick (1921, 1933), May and Reppenning (1982), Axelrod (1937, 1950, 1966) Reynolds and Reeder (1986, 1991), Morton and

MARK H. UFFER  
County Administrative Officer  
  
NORMAN A. KANOLD  
Assistant County Administrator  
Economic Development/  
Public Services Group

Board of Supervisors  
BILL POSTMUS ..... First District      DENNIS HANSBERGER ..... Third District  
PAUL BIANE ..... Second District      GARY C. OVIIT ..... Fourth District  
JOSIE GONZALES ..... Fifth District

Matti (1993) Albright and Woodburne (1993) and Albright (1997, 2000), indicate that the San Timoteo Formation is extremely fossiliferous and has a high potential to contain significant nonrenewable paleontologic resources subject to adverse impacts by excavation during development.

The southwest portion of the proposed project property is mapped (Rogers, 1965) as nonfossiliferous Mesozoic granitic rock. This exposure has no potential to contain paleontologic resources, and so is assigned low paleontologic sensitivity.

A review of the Regional Paleontologic Locality Inventory (RPLI) was conducted by Craig R. Manker of the Division of Geological Sciences, SBCM. The results of this review indicate that several paleontologic resource localities (SBCM 5.3.012, 5.3.014, 5.3.026, 5.3.027, 5.3.029, 5.3.031, 5.3.056, 5.3.060, 5.3.107 and 5.3.157) are recorded from within the boundaries of the proposed project property, from exposures of the San Timoteo Formation. These localities have yielded fossil remains of horses, tapirs, sloths, camels, rabbits and rodents dating to the later Pliocene and earliest Pleistocene Epochs. Additionally, numerous localities (SBCM 5.3.004, 5.3.010 - 5.3.011, 5.3.013, 5.3.014, 5.3.028, 5.3.043, 5.3.046 - 5.3.048, 5.3.054, 5.3.055, 5.3.057, 5.3.058, 5.3.059, 5.3.106, 5.3.108, 5.3.150, 5.3.54, 5.3.55, 5.3.58, 5.3.59, 5.3.208 - 5.3.213, 5.3.227, 5.3.246 - 5.3.249, and 5.3.251 - 5.3.255) are recorded from within one mile of the perimeter of the northeastern portion of the Bel Lago property, again from exposures of the San Timoteo Formation; these localities have yielded abundant fossil remains of extinct Plio-Pleistocene vertebrates

## **Recommendations**

The results of the review of the RPLI at the SBCM demonstrate that excavation in conjunction with development has high potential to adversely impact significant nonrenewable paleontologic resources present within the boundaries of the proposed project property. Exposures of the San Timoteo Formation, and possibly Pleistocene older alluvium at depth, have high paleontologic sensitivity. For this reason, A qualified vertebrate paleontologist must develop a program to mitigate these impacts. This mitigation program would need to be consistent with the provisions of the California Environmental Quality Act (Scott and Springer, 2003), as well as with regulations implemented by the County of San Bernardino and with the proposed guidelines of the Society of Vertebrate Paleontology. This program should include, but not be limited to:

1. Monitoring of excavation in areas identified as likely to contain paleontologic resources by a qualified paleontologic monitor. Based upon the results of this review, areas of concern within the proposed study area include any and all previously undisturbed exposures of the San Timoteo Formation, as well as any subsurface Pleistocene older alluvium. Paleontologic monitors should be equipped to salvage fossils as they are unearthed to avoid construction delays, and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. Monitors must be empowered to temporarily halt or

divert equipment to allow removal of abundant or large specimens. Monitoring may be reduced if the potentially-fossiliferous units described herein are not present in the subsurface, or if present are determined upon exposure and examination by qualified paleontologic personnel to have low potential to contain fossil resources.

2. Preparation of recovered specimens to a point of identification and permanent preservation, including washing of sediments to recover small invertebrates and vertebrates. Preparation and stabilization of all recovered fossils is essential in order to fully mitigate adverse impacts to the resources (Scott and others, 2004).
3. Identification and curation of specimens into an established, accredited museum repository with permanent retrievable paleontologic storage (e.g., SBCM). These procedures are also essential steps in effective paleontologic mitigation (Scott and others, 2004) and CEQA compliance (Scott and Springer, 2003). The paleontologist must have a written repository agreement in hand prior to the initiation of mitigation activities. Mitigation of adverse impacts to significant paleontologic resources is not complete until such curation into an established, accredited museum repository has been fully completed and documented.
4. Preparation of a report of findings with an appended itemized inventory of specimens. The report and inventory, when submitted to the appropriate Lead Agency along with confirmation of the curation of recovered specimens into an established, accredited museum repository, would signify completion of the program to mitigate impacts to paleontologic resources.

## References

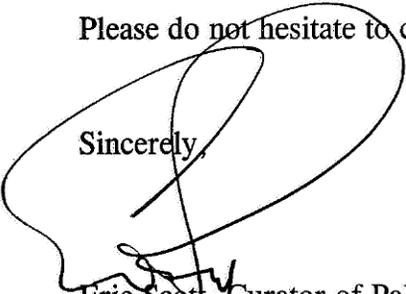
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Please do not hesitate to contact us with any further questions you may have.

Sincerely,



Eric Scott, Curator of Paleontology  
Division of Geological Sciences  
San Bernardino County Museum

PALEONTOLOGICAL RESOURCE  
ASSESSMENT

MORENO HIGHLANDS FAULT INVESTIGATION

CITY OF MORENO VALLEY

RIVERSIDE COUNTY, CALIFORNIA

LSA

July 16, 2004

**PALEONTOLOGICAL RESOURCE  
ASSESSMENT**

**MORENO HIGHLANDS FAULT INVESTIGATION**

**CITY OF MORENO VALLEY**

**RIVERSIDE COUNTY, CALIFORNIA**

Prepared for:

Leighton and Associates  
41715 Enterprise Circle North, Suite 103  
Temecula, California 92590-5626

Prepared by:

LSA Associates, Inc.  
1650 Spruce Street, Suite 500  
Riverside, California 92507  
(909) 781-9310

LSA Project No. LAA430

**LSA**

July 16, 2004

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## MANAGEMENT SUMMARY

LSA Associates, Inc. (LSA) was retained by Leighton and Associates to review paleontological discoveries from the Moreno Highlands parcel under consideration for development in Moreno Valley, Riverside County, California. Paleontological resources had been located during geotechnical investigations by Leighton and Associates. The purpose of the investigation was to place the fossils into a paleontological context that would shed light on the time of their deposition and the age of the strata in which they were found.

A literature review for the property was followed by a field inspection of geotechnical exploration trenches on the parcel. The literature review determined that Pleistocene sediments to the south and southeast contain fossil localities at shallow depth. These localities contain latest Pleistocene Rancholabrean Land Mammal Age vertebrate fossils. Dated charcoal and volcanic ash indicate the sediments between five and ten feet below the surface on the eastern Perris block are between 10,000 and 40,000 years old.

The fossil rib found 17 feet deep in the Moreno Highlands geotechnical trenches is larger than domestic *Bos* sp. and compares favorably with the rib of *Bison* sp. Tests suggest that it is not Holocene in age. *Bison* sp. is the indicator species for the Rancholabrean Land Mammal Age of North America (150,000–10,000 years before present). The depth of the fossil, the potential for it to be *Bison* sp., and the overlying ten feet of silts with modest soil development, together suggest that this fossil fits in the framework of Pleistocene age sediments below depths of five feet on the eastern half of the Perris block.

## INTRODUCTION

LSA Associates, Inc. (LSA) was retained by Leighton and Associates to evaluate the significance of a paleontological resource find on the Highlands parcel in Moreno Valley, Riverside County, California. The geotechnical investigation on the project involved excavation of trenches up to 24 feet deep to obtain subsurface data. The paleontological resource, a fossil rib of a large mammal, was found during trench excavation.

## PROJECT DESCRIPTION

The Highlands parcel in Moreno Valley is located on the south side State Route 60, east of Redlands Boulevard and west of Gilman Springs Road, in eastern Moreno Valley, Riverside County, California. The project location is illustrated in Figure 1. The parcel is shown on the *Sunnymead and El Casco, California 7.5-minute USGS quadrangle map (USGS 1967)*. Access to geotechnical trenches is from the intersection of Cottonwood Avenue and Redlands Boulevard.

## PURPOSE OF INVESTIGATION

Paleontological resources consisting of a fossil rib, burrows, and charcoal were located during excavation of geotechnical trenches on the Highlands parcel. Mr. Matthew Clarke of Leighton and Associates requested basic tests and a report that would relate these specimens to the regional Pleistocene stratigraphy of the eastern Perris block.

## SETTING

### Geological Setting

The Highlands parcel is located in the Peninsular Range geologic province of California that encompasses western Riverside County. It sits near the eastern margin of the Perris block (Kenney 1999). Crystalline rocks in Moreno Valley include late Jurassic and Cretaceous granitic rocks of the southern California batholith. These resistant rocks weather to form gray- or tan-colored, boulder-covered conical buttes and hills. The crystalline rocks in Moreno Valley are covered by Pleistocene sediments that in turn are covered by a thin horizon of Holocene soils and recent stream sediments in shallow channels (Rogers 1965).

Pedogenic carbonate (caliche or hardpan), a depositional product associated with the Holocene soils, invades the underlying Pleistocene sediments. The late Pleistocene age of the lacustrine and fluvial sediments on the eastern Perris block has been determined by the presence of large Ice Age mammal fossils such as horse, bison, mastodon and mammoth, and giant ground sloth. The presence of bison from the Diamond Valley Reservoir excavation indicates that the period of deposition was during the last 150,000 years (the Rancholabrean Land Mammal Age; Springer and others 1998). Similar fossils have been recovered from excavations at Lake Skinner, French Valley and Menifee Valley (Reynolds and Reynolds 1991; Reynolds 2001, 2002a,b, 2003, 2004a).

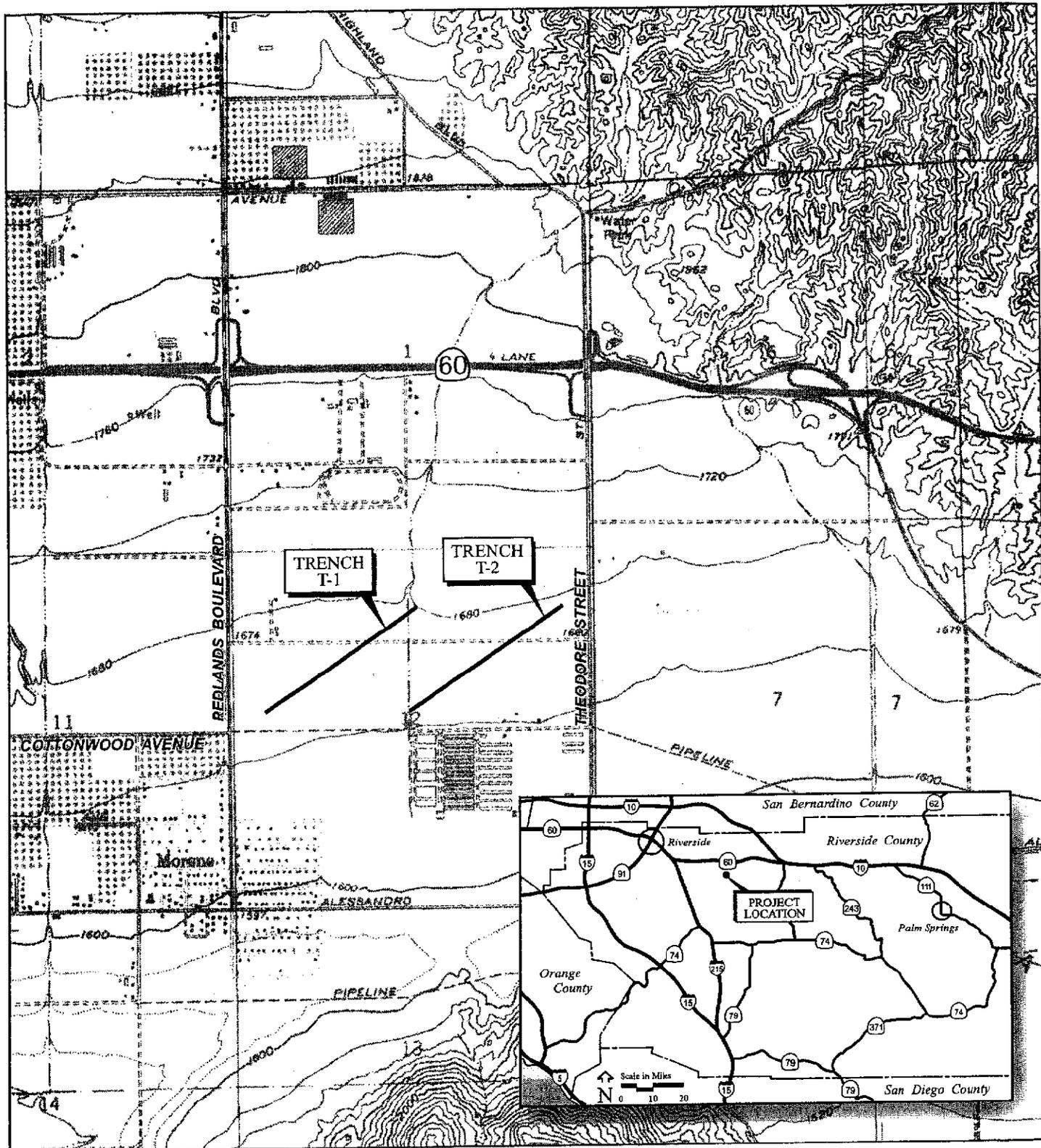
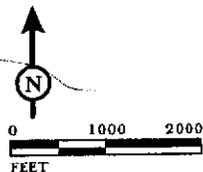


FIGURE 1

LSA



SOURCE: USGS 7.5' QUAD - EL CASCO, 1979 AND SUNNYMEAD, 1980

Moreno Highlands  
Paleontological Resource Assessment  
Regional and Project Location

## Paleontological Setting

An Ice Age horse skull is known from Lake Skinner and more than 1,700 discrete paleontological resource localities are known from excavation of the Diamond Valley Reservoir 7 miles to the northeast (Springer and others 1999). These localities have produced over 70 late Pleistocene plant and animal taxa. The high potential for near-surface Pleistocene fossils from Moreno Valley, north across the Perris Plain, has been noted (Reynolds and Reynolds 1991) and Ice Age horse, camel, and deer have been recovered from the nearby projects (Reynolds 2001 2002a,b) in French Valley and Menifee Valley. The discovery of the Rancholabrean indicator fossil *Bison* sp. from southern Menifee Valley (Reynolds 2004a) supports synchronous deposition of late Pleistocene sediments throughout the eastern Perris block.

Vertebrate fossils from the Elsinore trough to the south have been used to determine the Pliocene age of the Temecula Arkose and the unnamed sandstone, and the Pleistocene age of the Pauba Formation (Mann 1955; Kennedy 1977; Reynolds and others 1991; Reynolds and Reynolds 1993). Large fossil mammals known from the area include horse, camel, sloth, and mammoth. A list of 67 taxa including large and small fossil species has been presented in several summaries (Golz and others 1977; Reynolds and others 1991; Reynolds and Reynolds 1991, 1993).

## PERSONNEL

The initial field inspection, basic lab tests, literature review, and report writing were provided by Robert Reynolds. Mr. Reynolds is the paleontological program manager at LSA's Riverside office, a research associate of the Los Angeles County Museum, and former Curator of Earth Sciences at the San Bernardino County Museum. He has 23 years of experience with paleontologic salvage programs and 37 years of research experience in collecting biostratigraphic specimens from sediments in southern California and Nevada.

## METHODS

The initial field inspection and examination of the specimens was conducted in March 2004. The literature review was conducted in April 2004, using available references to identify sedimentary formations with paleontological resource sensitivity and fossil localities within the vicinity of the Highlands parcel in Moreno Valley.

## RESULTS

### Literature Review

The Perris block extends northwest to the southern foot of the San Gabriel Mountains and southeast to the vicinity of Bachelor Mountain and Poly Butte. It is bounded on the southwest by the Elsinore fault zone, and on the northeast by the San Jacinto fault (Morton 1977). Southwest of and paralleling the San Jacinto fault is the Casa Loma fault, and the Highlands parcel under study by Leighton and Associates may straddle the northward projected trace of that fault (Rogers 1965). A "pre-Miocene" erosional surface referred to as the "Perris Erosion Surface" (Rogers 1965) was developed on the Perris block and appears to dip eastward until buried by Quaternary alluvium east of Interstate 15 (I-15). The surficial

alluvium has been mapped as Qal, and referred to as "Recent" (Rogers 1965). However, the sediments underlying this recent surface veneer of alluvium appear to be much older. The depth of this sedimentary sequence to crystalline basement rock in the eastern Moreno Valley area is reportedly 6,500 to 8,200 feet (Morton 1972). Sedimentary exposures in the Elsinore fault zone at the south end of the Perris block show an excellent sequence of sedimentary deposition and provide a time-stratigraphic framework that can be applied to the sediments at depth on the eastern Perris block.

In the Elsinore fault zone, the Temecula Arkose and the unnamed sandstone (Mann 1955; Kennedy 1977) contain vertebrate fossils that are as old as 4 Ma (Golz and others 1977; Reynolds and others 1990, 1991; Reynolds and Reynolds 1993). The Bishop Ash (0.758 Ma, Kennedy 1977) occurs at Chaney Hill stratigraphically high in the unnamed sandstone, suggesting that the sediments range in age from less than 1 to more than 4 Ma. More than 350 fossil localities recorded from the Pauba Formation contain late Pleistocene vertebrate fossils (Reynolds and Reynolds 1990a, 1990b; Reynolds and others 1991), but do not contain *Bison* sp., the Rancholabrean Land Mammal Age (LMA) indicator taxon. This suggests that the Pauba Formation ranges in age from at least 0.5 Ma to 0.2 Ma.

In the southern Perris block, northeast of Murrieta and including French, Paloma and Menifee Valleys, Kennedy (1977) describes "older alluvium" that sits on granitic and sedimentary rocks above approximately 1,300 feet of elevation. These sediments contain a diverse fauna of vertebrate animals of latest Pleistocene Rancholabrean LMA, including *Bison* sp. (Reynolds 2004a), the late Pleistocene indicator species. Additionally, the fauna contains amphibians found in the greenish-gray silty sands that are interpreted to have been deposited in ponds or marshlands (Reynolds 2001, 2002a). Gopher, woodrats, and cottontail rabbit would have inhabited the brush and grass-covered soils that surrounded the marshlands.

The review of literature indicated that an Ice Age horse skull was recovered from excavations at Lake Skinner and fossil horse, camel, mammoth, and deer were recovered in French Valley and in Menifee Valley (Reynolds 2002a,b, 2003). The fossils in French Valley, Menifee Valley (Reynolds 2003, 2004a), and Paloma Valley (Reynolds 2003, 2004a) were all recovered between two and five feet below the surface.

In the central portion of the Perris block, the Lakeview Hot Springs site has produced a complex fauna including the saber cat, *Smilodon*, in association with mammoth and other large and small mammals, reptiles, and gastropods, as well as wood and seeds. This fauna from the Perris block indicates that terminal Pleistocene time (10,000 ybp) occurs as close to the surface as 15 feet (Reynolds and Reynolds 1991). Slow rates of deposition and shallow depths to Pleistocene and Pliocene sediments and fossils is also indicated by the presence of the Nomlaki Ash at a depth of 20 feet in excavations at Romoland (Morton, p. c. 2004). This early Pliocene Ash has been dated at 4.5 million years. Near the Highlands parcel in eastern Moreno Valley, charcoal from geotechnical trenches at a depth of eight feet has been dated by the accelerator mass spectrometer (AMS) method at  $8,340 \pm 110$  years (Butelo and Meeker 1993).

More than 1,700 paleontological resource localities are known from excavation of the Diamond Valley Reservoir (Springer and Scott 1994). The late Pleistocene vertebrate fossils from this site include bison, a very large mastodon, mammoth, giant ground sloth, horse, deer, and coyote, along with small mammals such as cottontail rabbit, gopher, deer mice, meadow mice, and kangaroo rats. Like the French Valley sites, the presence of pond turtle, freshwater snails, and lakeshore plants suggest a lake shore or

marshland environment of deposition (Springer and others 1999). Associated plant remains include ponderosa pine and several species of manzanita, suggesting that a forest-chaparral mosaic covered the nearby slopes. This very complete Pleistocene fauna from the Perris block also indicates that latest Pleistocene sediments occur less than 15 feet below the present surface.

The potential for near-surface late Pleistocene fossils from the eastern Perris block west to the Chino Hills has been noted (Reynolds and Reynolds 1991), and this five- to ten-foot depth of occurrence of Pleistocene fossils is consistent with those elsewhere in the northern Peninsular Range Province near Riverside, Fontana, Rancho Cucamonga, and in the Pomona Valley near Chino.

A saber cat, *Smilodon* was reported by Ritner Sayles near Declezville, west of San Bernardino on the north side of the Jurupa Hills (SBCM 5-1.11). The specimen was recovered from a pipeline trench approximately 5 feet below surface elevation 1,000 feet. In the eastern Pomona Valley, along I-15, Pleistocene vertebrates occur at the site of Champagne (SBCM 5.1.8), where a mammoth (*Mammuthus*) was found in a borrow pit 5 feet below surface elevation 875 feet. Several miles to the northeast, a mastodon was located in South Fontana. Excavations at Base Line Road and Etiwanda Avenue in Rancho Cucamonga have recently produced fossil rodents from yellow loam at a depth of three feet (Reynolds 2004b).

In Chino, east of State Route 71, the Carbon Canyon Wastewater Facility, SBCM 5.1.9 and 5.1.10, produced *Glossotherium* and *Camelops* between depths of 11 to 15 feet below a surface elevation of 590 feet. At the Los Serranos Creek site in the eastern Chino Hills (Puente Hills) (SBCM 1.116.1) is a Pleistocene terrace deposit filling a canyon. These deposits produced *Bison* sp. cf. *B. antiquus*, *Equus* sp., and *Odocoileus* sp. at a depth of 6 feet below surface elevation 760 feet.

### Stratigraphic Summary

The occurrence of late Pleistocene fossil vertebrates on the Perris block is within 2 through 15 feet below the surface. Dates on charcoal and volcanic ash suggest that sediments from 10 to 20 feet below the surface may range in age from 10,000 years to as great as four million years. The near-surface occurrence of Pleistocene age sediments on the Perris block is consistent with similar occurrences of Pleistocene faunas between 3 and 10 feet below surface in Riverside, Fontana, Rancho Cucamonga, and Chino areas within the northern margin of the Peninsular Range Province. The fossil rib from seventeen feet of depth at the Highlands parcel in eastern Moreno Valley is consistent with a regional framework where late Pleistocene deposits and fossils occur at depth greater than five feet.

### Field Inspection

Geotechnical Trench T-1 was located west of Trench T-2, and both were excavated to a depth of approximately 25 feet. The parallel trenches trended northeast, and the surface elevation from T-1 to T-2 on the east dropped almost 10 feet. Field inspection of the geotechnical trenches on the Highlands parcel identified a three-foot veneer of brown Holocene silts (Unit A, Clarke, p. c., 2004) overlying a sequence of tan Pleistocene silts and soils greater than 20 feet thick. Despite the change in surface elevation, lamellar sands (Unit Qal02, Clarke, p. c., 2004) were encountered at 18 to 19 feet in T-1 and at 17 to 20 feet in T-2, suggesting that many of the mappable units could be traced laterally with only minor, basinward, drops in elevation. Both trenches contained three silty paleosols that appeared massive

and unbedded due to bioturbation. The lower two paleosols (B and C) were at depths of approximately 15 and 20 feet, respectively, and bracketed the lamellar sands and coarse sand channels. These paleosols are cemented by diffuse calcium carbonate, and carbonate filled root casts are common. Rodent burrows are rare, but burrows for pupa of ground-dwelling insects (solitary bees and yellowjackets; Mangin 2004; Ramel 2004; Batra 1984) were common. These factors—bioturbation, burrows, and root casts—suggest stable surfaces and slow accumulation of aeolian silt to form soils. The diffuse calcium carbonate cement suggests individual antiquity of each horizon, and the superposition of three carbonate cemented soils suggests greater antiquity. The fossil bone was recovered from a gravel channel between paleosols B and C in Trench T-1.

### Laboratory Tests

The fossil rib recovered from 17 feet deep in Trench T-1 was identified by the process of comparative analysis. It was compared with comparable ribs of domestic cow, fossil horse, fossil bison, and camel. As in the other artiodactyls, the fossil rib was lenticular in cross-section, and pinched at both anterior and posterior margins. The specimen was distinct from the distal portion of fossil horses, which, in cross-section, are shaped like slightly asymmetrical tear drops, and from camels, whose cross-section looks like a flattened rectangle. The Moreno specimen is larger than domestic cow, and size, curvature, and cross-section morphology compare well to that of fossil *Bison* sp. from northeastern Murrieta (Reynolds 2004a).

A basic test was conducted to determine if collagen was present in the bone. A fragment was burned with the oxidizing portion of a flame. If the act of burning caused the smoke to smell offensive, like burning hair or organic material, organic collagen was still present, and the specimen was relatively recent. Smoke from burning the specimen from the Highlands parcel did not yield such an odor, showing that enough time had passed for organic material to be leached from the bone by groundwater.

### SUMMARY

The specimen of rib recovered by geotechnical trenching on the Highlands parcel in eastern Moreno Valley came from a depth of 17 feet below the surface, a depth that is consistent with many other late Pleistocene occurrences of fossil and extinct vertebrates on the Perris block. The stratigraphic occurrence of the specimen below two calcium carbonate cemented paleosols suggests antiquity, as does the lack of collagen, which requires lengthy periods of leaching to be removed from bone. Additionally, the specimen of rib compares well morphologically with that of fossil *Bison* sp. from elsewhere on the Perris block in late Pleistocene alluvium. LSA concludes that strata 17 feet below surface at this site were deposited in late Pleistocene times.

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## **Appendix C: Personnel Qualifications**



## **Michael H. Dice, MA, RPA**

### **Senior Cultural Resource Specialist/Project Manager**

#### **Overview**

- 30+ years experience in Cultural Resource Management
- Master's degree, Anthropology – Arizona State University, Tempe. 1993
- Bachelor's degree, Anthropology – Washington State University, Pullman. 1986
- Registered Professional Archaeologist (RPA 2000)
- Certified Archaeologist in Riverside County (#101), County of Orange and the County of San Diego.

**Michael H. Dice, MA, RPA**, Senior Cultural Resource Specialist and Project Manager, has more than 30 years experience performing record searches, archaeological surveys, archaeological site testing projects, and data collection projects on private and public lands in the Southwestern United States. He has authored or co-authored more than 200 Cultural Resources Inventory Reports required for CEQA and/or NEPA level documents. His management experience within CRM involves producing proposals, hiring and managing field and office cultural resource personnel, writing draft and final reports to various Clients and Lead Agencies, and managing costs effectively. Michael has extensive experience with California Native American Tribes, having provided direct consultation and coordination with the Agua Caliente Band, Gabrielino tribal officials, Juaneño tribal officials, the Morongo Band, the Serrano Band, and the Temecula Band of Luiseno Indians (Pechanga).

Michael's statement of experience is divided into three categories: Prehistoric and Historic Archaeological projects, Historic-era Assessment projects and Environmental Compliance project management. Key projects are listed.

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#### **Experience, Prehistoric and Historic Archaeology**

##### **Cultural Resource Assessment of The Las Montanas Marketplace Project, City of Indio, CA. M-To Management, Inc., Los Alamitos, CA. (2010-2011)**

Mr. Dice performed an archaeological survey of 95 acres in the northern section of the City of Indio in support of an EIR for a new private developmental project. The project area was believed, through museum research, to contain three prehistoric archaeological sites. MBA cultural resource staff provided the proponent with an exploratory testing study that will effectively clear the project of specific mitigation measures for the sites in question. Because one of the sites was determined significant within an adjacent project area, that sites had to be cleared from the project. Work was undertaken before the City accepted the Initial Study. Consultations with local Tribal Authorities took place.

##### **Cultural Resource Assessment of The Salton Sea Solar Project, Riverside County, CA. Reese-Chambers Systems Consultants Inc., Somis, CA. (2009-2010)**

Mr. Dice performed an archaeological survey and protohistoric ceramic scatter assessment on approximately 480 acres just north of the Salton Sea in the County of Riverside. The purpose of the study was to evaluate seemingly vacant property as part of an analysis for potential impacts during construction of a new solar panel complex. Two sites were identified and will have to be Phase III collected prior to construction. Consultations with local Tribal Authorities took place.

##### **Phase 1 Cultural Resource Assessment of the Badlands Landfill and Lamb Canyon Landfill Expansion Projects, Riverside County, California. Riverside County Waste Management Department (2010)**

Mr. Dice performed an archaeological survey on a total of 1600 acres adjacent to the existing Badlands Landfill and the Lamb Canyon Landfill in the County of Riverside. The purpose of the study was to evaluate adjacent property as part of an analysis for potential impacts during expansion of the Landfills.

Several new resources were detected and recorded during the study. While RCWMD will not construct for several decades, the sites will be avoided when land development takes place in the site areas. Consultations with local Tribal Authorities took place.

**Cultural Resource Assessment of the Van Norman Dam and Chatsworth Dam Complexes. Los Angeles Department of Water and Power (2008-9)**

Mr. Dice performed an archaeological survey and historic landscape assessment of the Van Norman Dam complex plus the Chatsworth Dam in western Los Angeles County for the Los Angeles Department of Water and Power. For the first time, the history of the complex was detailed and Program-level recommendations for historic evaluations of these significant engineering complexes were made. LADWP plans to remove the upper Van Norman Dam and replace it with a newly designed covered Dam in order to reduce water supply pollutants. Soils on the floor of the Chatsworth Dam will be used for fill. The project was written under CEQA Guidelines because LADWP will not be using federal monies. Future work will involve Section 106 because certain permits will be required when the project reaches a Project-level analysis.

**Cultural Resource Assessment, Phase II Historical evaluation and Phase IV Monitoring for the Sketchers Industrial Park Project, City of Moreno Valley, California. Highland-Fairview Operating Partners (2004-2011)**

Mr. Dice undertook a Phase 1 survey of the Sketchers property in addition to other properties controlled by the Client, headed a team of cultural professionals performing historic building evaluations, then headed up a field crew of monitors during the earth-moving phase of complex construction in 2010. Wholly seen through by Mr. Dice, several historic era buildings were examined. Consultations with local Tribal Authorities took place.

**Phase 2 Testing Evaluation of Historic Site CA-SBR-11567H, the Empire-Fontana Project (ACOE #200301127), City of Fontana, California (2005)**

Mr. Dice undertook an evaluation of a historic archaeological site for the City of Fontana in order to gain permits for developmental impact from the Army Corps of Engineers. Several abandoned historic foundations, trash dumps, remnant buildings and a possible prehistoric isolated within the historic property were examined and quantified. The report was submitted and accepted by Mr. Steve Dibble of the Army Corps LA District.

**Phase 2 Testing and Phase 3 Excavation of the Loring Ranch Project, Rubidoux-Jurupa Area, County of Riverside, California. Mastercraft Homes, Inc. (2004)**

Mr. Dice undertook an evaluation of two historic archaeological sites on vacant land located west of the Santa Ana River and southeast of the Flabob Airport. Cultural Resource Staff determined that two mid-1800's trash deposits were located on the property and tested the sites for significance. Because the sites were felt to reflect a period in history when Chinese immigrants were forced into limited economic means, the sites were determined to represent "truck farms" developed between 1870 and 1900.

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**Experience, Historic Building and Landscape Assessments**

**Section 106 Cultural Resource Assessment and Technical Evaluation of the McCoy and Garibaldi Laterals, Merced Irrigation District. Fremming, Parson & Pecchenino, Consulting Civil Engineers, Merced, CA. (2010)**

Mr. Dice performed an archaeological survey and historic landscape assessment of two Laterals within the Merced Irrigation District in support of the District's plans to use federal funding (Bureau of Reclamation) to repair segments of the Laterals. Mr. Dice determined that the MID should be considered a potential Historic District for listing on the National Register. Modifications to the Laterals as a result of the undertaking will have No Adverse Effect to the potential Historic District that is the MID. Consultations with local Tribal Authorities took place.

**Three Historic Assessments of the Southside Park, the Del Paso Regional Park and the Chorley Park. City of Sacramento, California (2010)**

Under contract with the City of Sacramento Parks and Recreation Department, Mr. Dice produced three technical studies in order to fulfill Section 106 requirements. The Department requested these studies because the Department requires Recreation Trails and Land and Water Conservation funding programs. Each park exhibited a landscape more than 50 years old, and certain older internal structures, that allowed each Park to be considered potentially eligible for the National Register at the local level of analysis. We determined that the Southside Park and the Del Paso Park are potentially eligible for the NR but that the specific projects would have no impact on their eligibility qualities. The Chorley Park was determined not significant. Consultations with local Tribal Authorities took place.

**Historic Building Evaluation of the San Geronio Inn, City of Banning, CA. (2010)**

Mr. Dice evaluated a historic-era structure originally built in 1884 and rebuilt in 1930 for significance at the State (CEQA) level of analysis. The City proposed to demolish the structure and the report supported an EIR written by Ernest Perea of Romo Planning Group Inc., Covina. Mr. Dice performed a historic background assessment and developed a thematic context with which the structure could be evaluated against. The results of this research showed that the building did not qualify for listed on the National or State Register, but that the location of the Inn was considered locally significant. This was not a popular decision, especially with Steve Lech, but the research showed that the results were justified. After reading the report, the City chose to attempt to preserve Google-styled signage off-site.

**Historic Building Evaluation of the F&M Artesia Branch Bank, City of Long Beach, CA. (2009)**

Mr. Dice evaluated a structure built in 1961 for significance at the State (CEQA) and City of Long Beach Historic Property level of analysis. The City had proposed to demolish the structure complex and the technical report supports an IS/MND written in City Format for the proponent, Jeffrey Tartaglino of Palm Desert Development. Mr. Dice performed a historic background assessment and developed a thematic context with which the structure could be evaluated against. Because the structure was found significant at the local level of analysis, the City required a photographic assay of the building; this was incorporated into the finished document.

**Historic Building Evaluation of the Premiere Lanes Bowling Alley, City of Santa Fe Springs, CA. (2009)**

Mr. Dice evaluated a structure built in 1960-61 for significance at the State (CEQA) level of analysis. The City had proposed to demolish the structure complex and our technical report supported an EIR written by Sandra Bauer of Bauer Consulting Inc., Irvine. Mr. Dice performed a historic background assessment and developed a thematic context with which the structure could be evaluated against. The City will allow the removal of the building through demolition but save Google-styled signage associated with the structure.

**Historic Building Survey, Washington Boulevard and Consolidated Redevelopment Projects, City of Santa Fe Springs, CA.**

Mr. Dice conducted a historic building survey for two redevelopment project areas located in the City of Santa Fe Springs, County of Los Angeles. The Washington Boulevard Redevelopment project area is located in the City of Santa Fe Springs' side of Washington Boulevard, and is bisected by Sorensen Avenue. The purpose of the study was to identify those properties more than 45 years old that may be demolished during planned Redevelopment in the next 25 years. The Consolidated Redevelopment Project Area is located near Gateway Plaza at the intersection of Telegraph Road and Painter Avenue west of Carmenita Road. A program-level historic context was developed and existing properties preliminarily assessed against that historic context. The results showed that more 140 individual properties more than 45 years old were located in and near the Redevelopment project area. The evaluation of the historic context and existing properties will allow

the City, for the first time, to recommend that the significance of old buildings be considered when undertaking redevelopment in the City limits.

**Historic Resource Assessment and Phase II Recommendation, The Alfa Leisure Property, City of Chino, CA.**

This study was a CEQA and NEPA-compliant assessment of the old Chino Sugar Mill, including an historic building survey and photographic assay. The Mill building housed one of the first commercial ventures in the City, opening in the 1880's. The results of the study showed that the structure was a locally significant structure but could not be saved within a reasonable monetary expenditure as the structure was completely unstable from an earthquake standpoint. Mr. Dice recommended that a photographic assay and additional historic analysis be undertaken before the structure would be allowed to be demolished.

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**Experience, Environmental Compliance Management**

**Compliance work for the Bakersfield State Vehicular Recreation Area (SVRA), County of Kern, California. City of Bakersfield and County of Kern, California. (2005-2006)**

Mr. Dice led a cultural resource survey of a 10,000+ acre proposed park project on private ranch land in the County of Kern north of the City of Bakersfield. Work was done in support of an EIR/EA written to convince the State of California to purchase the property for use as an off-road vehicle park. Mr. Dice wrote the budget for the survey, hired and managed a field crew of 12+ persons, developed protocols for survey, managed the development of final DPR523 form sets for the document, then developed the cultural resource section of the Draft EIR in support of the project. Mr. Dice directed consultations with local Tribal Authorities.

**Compliance work for the East Orange and Santiago Hills II Developmental Plan and Phase 3 Excavation of CA-ORA-556, City of Orange, California. The Irvine Company, Newport Beach, CA. (2003-6)**

Mr. Dice led a cultural resource survey of a 1,500-acre project area in the East Orange Annexation and Sphere of Influence zone in the Santiago Hills. He led a team that evaluated a series of historic and prehistoric sites for the project, recommending that one site be Phase 3 excavated. The excavation was led by Mr. Dice, with a field crew of 6-8 people. The site was found potentially not significant. A Phase 3 excavation report was written. In addition, Mr. Dice wrote a cultural resource section of an EIR in support of the project. Mr. Dice directed consultations with local Tribal Authorities.

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**Professional Affiliations**

- Member, California Historical Society
- Member, National Trust for Historic Preservation
- Member, Registry of Professional Archaeologists



**Kenneth J. Lord, Ph.D., RPA**  
**Director, Natural/Cultural Resources**

**Overview**

**Dr. Lord** is Director of MBA's Natural and Cultural Resources Departments. Dr. Lord has over 30 years of professional experience in environmental consulting and cultural resources management including:

- Management of more than 100 professionals
- Management of large multidisciplinary environmental studies
- Management of large multistate/multidisciplinary environmental compliance monitoring projects
- Assignments in 13 states in the western U.S. and Puerto Rico
- Senior Scientist/Principal Investigator in the area of cultural resources in five states
- Completed over 10 EA/EIS projects and over 50 cultural resources projects

Dr. Lord's project experience includes oil and gas exploration and transmission; gravel, uranium and gypsum mining; fiber optic communication systems; forestry development and timber sales; water development and dam construction; housing and golf course development; port development; and military/government agency expansions.

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**Professional Experience**

**TIMBER**

**Bureau of Indian Affairs, Navajo Area Office, Navajo Forest Archaeological Investigations.** Principal investigator/ project manager for timber sale archaeological surveys on the Navajo Indian Reservation in Arizona and New Mexico. Approximately 20,000 acres were examined during the project. Work entailed supervising both the aspects of the fieldwork and preparing the draft report. 1983

**BIA Navajo Area Office, Summit and Twin Butte Areas Timber Sales.** Field director for an archaeological survey of a 20,000-acre timber sale on the Navajo Indian Reservation in New Mexico and Arizona. 1983

**BIA Navajo Area Office, Piney Hill Timber Sale Area.** Project director for an archaeological survey of a 7,000-acre timber sale on the Navajo Indian Reservation in Arizona. 1983

**BIA Navajo Area Office, Canyon Rim Timber Sale Area.** Project director for an archaeological survey of a 5,000-acre timber sale on the Navajo Indian Reservation in Arizona. 1984

**BIA Navajo Area Office, Cultural Resources Overview of the Navajo Forest.** Project director for the preparation of a cultural resources overview for all lands within the Navajo Forest. This encompassed both a sample archeological survey and use of previous survey data collected from various sources. 1984

**Santa Fe National Forest, Multiple Timber Sale Surveys.** Principal investigator for two timber sale surveys. Duties included assuring compliance with all Forest Service cultural resources guidelines and quality assurance of the reports. 1986

## OIL AND GAS

**Paiute Pipeline Company.** Project Manager for Environmental Report in support of a FERC application for **the 10-mile upgrade of Carson Lateral In the Carson City, Nevada area.** Project tasks included development of project description as well as managing all phases of the environmental report. This included the use of three subcontractors for portions of the report, including cultural resources documentation, NRHP eligibility determinations and Native American consultations. 1999-2000

**L.W. Reed Consultants, Inc/Pacific Pipeline System, Inc.** Project manager for preparation of cultural resources and paleontological documents for the construction of the Pacific Pipeline Project in southern California. Chief environmental inspector for the Pacific Pipeline Systems, Inc's 130-mile long oil pipeline through the Los Angeles and Kern County areas of California. In his capacity as chief environmental inspector he provided direct liaison between the construction/engineering aspects of the project as well as environmental issues. He managed a staff of up to 13 environmental inspectors and 10 Native American Monitors and was responsible for all reporting activities and for the development of any variances to state-mandated mitigation measures. Also prepared and taught environmental training programs for both staff and all project workers. 1996-1999

**California State Lands Commission/FERC, Whitney-Painter Canyon Lateral Project.** Project manager for an EA for construction of the Whitney-Painter Canyon Lateral to the Kern River Natural Gas Pipeline Project in southwest Wyoming. 1989

**California State Lands Commission/FERC, Mojave/Kern River/El Dorado/Transwestern/El Paso/WyCal Natural Gas Pipeline Projects.** Project manager for an EIR/EIS that encompassed over 3,000 miles of potential pipeline routing through portions of California and seven other western states. Managed all major efforts, including the biological, air quality, and cultural resource field survey programs. 1985-1991

## MITIGATION MONITORING

**Pacific Pipeline Systems, Inc.** Project manager and chief environmental inspector for mitigation compliance for construction of the 132-mile-long Pacific Pipeline in Kern and Los Angeles Counties, California. Project tasks included development of mitigation compliance procedures and manuals, development and implementation of environmental training program, selection, training and supervision of environmental inspectors (up to 10), preparation of all mitigation variances for submittal to lead agencies (California Public Utilities Commission and U.S. Forest Service. Also assisted in the development of the Cultural Resources Management Plan, Paleontological Management Plan and the Erosion Control, Revegetation, and Landscaping Plan. Main duties involved coordination between environmental, engineering, and construction staffs, as well as coordination with various state and federal agencies. 1996-1999

**California Public Utilities Commission/FERC, Pacific Gas Transmission Pipeline Expansion Mitigation Compliance Project.** Project manager for mitigation compliance for construction of the 1,100-mile-long PGT/PG&E Pipeline Expansion Project in Idaho, Washington, Oregon, and California. The project, conducted over two construction seasons, involved coordination between environmental, engineering, and construction staffs, as well as coordination with various state and federal agencies. 1991-1993

**California State Lands Commission/FERC, Mojave/Kern River Pipeline Project Mitigation Compliance Project.** Project manager for mitigation compliance of construction of the Mojave and Kern River Pipelines through Arizona and California, and Wyoming, Utah, Nevada, and California, respectively. 1990-1991

## COMMUNICATIONS

**AT&T Communications, Fiber Communications Optic Route from Albuquerque to the Arizona/New Mexico State Line.** Principal investigator for a large cultural resources program associated with the installation of over 300 miles of fiber optic cable. Project started with survey and extended through monitoring and testing. 1989

**AT&T Communications, EA for a Fiber Optics Communications Route for the Texas/New Mexico State Line to Tucumcari, New Mexico.** Project manager for an EA for a short fiber optic segment. The primary areas of study included cultural resources concerns along Old Route 66 and sensitive wildlife species. 1989

**AT&T Communications, Microwave Tower Site.** Project manager and archeologist for a series of microwave towers on Forest Service, BLM, and private lands. 1989

## WATER PROJECTS

**U.S. Corps of Engineers, Albuquerque District, Abiquiu Reservoir Archaeological Project.** Principal investigator for a large, multi-site archaeological investigation associated with expansion of a reservoir in New Mexico. Project entailed completing analyses of all project aspects, which entailed archaeological investigations at 34 sites. 1985-1987

**Bureau of Reclamation/Middle Rio Grande Conservancy District, Water Line Crossings in Bosque Farms, Valencia County, New Mexico.** Project manager/archeologist for a series of water crossings along the canal/drainage systems in the Albuquerque area. 1990

**Bureau of Reclamation, Salt Lake City Office, Ridges Basin Project.** Archeological crew chief for a 6,000-acre survey for a water development project in southwestern Colorado. 1980

## MINING

**Centex American Gypsum Company, EA for Zia Pueblo Lands.** Project manager/archeologist for a 800-acre acquisition into trust for gypsum mining near San Ysidro, New Mexico. 1988

**Anaconda Copper Company, Cibola National Forest.** Project archeologist for development of uranium exploration access in McKinley County, New Mexico..1979

### Other Mining

**Project manager/archeologist** for various highway department gravel quarry operations throughout New Mexico for J.W. Jones Construction, Universal Constructors, Twin Mountain Construction, and Longley Excavating. 1984-1990

## GOVERNMENT PROJECTS

**San Diego County Department of Parks and Recreation** – Cultural Resources Inventory for the Mt. Olympus Preserve Project near Pala, San Diego County California. Project Manager and Principal Investigator for 707 acre cultural resources inventory and recordation of 1 prehistoric rock art site and recordation of two mid-20th century historic sites. 2009

**San Diego County Department of Parks and Recreation** – Cultural Resources Inventory for Wilderness Gardens Preserve Project near Pala, San Diego County California. Project Manager and Principal Investigator

for 737 acre cultural resources inventory and recordation of 2 prehistoric sites and recordation of the Long-Boddy Ranch. 2009

**Rockwell International/Kirtland Air Force Base, Starfire Optical Range.** Project manager for the EA for the Air Force Weapons Lab. The project entailed completion of both the environmental documentation and the preparation of a cultural resources data recovery program. 1989-1990

**U.S. Corps of Engineers, Albuquerque District, Waste Isolation Pilot Project.** Project director of archaeological investigations necessary prior to construction of the WIIP, a low-level nuclear waste repository. Work consisted of excavating three archaeological sites, analyzing materials recovered, and completing the report. 1983-1984

**Bureau of Land Management, Roswell District, Abo Cultural Resources Survey Project.** Co-project director for archaeological investigations within natural gas fields in eastern New Mexico. The project objective was to determine areas of high and low densities of cultural resources to allow development of natural gas wells and gathering systems. 1981

**National Park Service, Vandenberg Air Force Base. Open-ended cultural resources services.** Project director responsible for all contractual aspects of a multi-year cultural resources project. 1991-1992

**Sandia National Laboratories at Kirtland Air Force Base.** Project manager for open ended cultural resources and biological studies services on KAFB. Cultural resources and biological studies were incorporated into EAs prepared by Sandia National Laboratories 1989-1991

**Lee Wilson Associates/Bureau of Land Management, Las Cruces District, McGregor Range Grazing Units EIS.** Project archeologist on a sample survey of the 250,000-acre Army/BLM joint use area and prepared cultural resources sections for the EIS. 1979

## LAND DEVELOPMENT

**Kona Road III Project Cultural Resources Survey, French Valley Area.** Project Manager for a Phase I cultural resources survey and paleontological review of a 4.65-acre property project located in the French Valley Area of unincorporated Riverside County, California, for John Laing Homes. 2006

**Newport Road Project Cultural Resources Assessment, Meniffee Area.** Project Manager for a Phase I cultural resources assessment and paleontological records review for a project in the Meniffee Area of the County of Riverside, California, for Granite Equities, LLC. 2006

**Taylor-Woodrow Ivy House Project Cultural Resources Assessment, Murrieta.** Project Manager for a Phase I cultural resources assessment and paleontological records review for a project located in Murrieta, Riverside County, California, for Taylor Woodrow Homes. 2006

**Lake Elsinore Property Cultural Resources Report, City of Lake Elsinore.** Project Manager for a Phase I cultural resources report and paleontological records review of 8 parcels totaling 49.57-acres for a project in the City of Lake Elsinore, Riverside County, California, for Dakota Development, LLC. 2006

**Cultural Resources Survey Report, San Jacinto.** Project Manager for a Phase I cultural resources survey report and paleontological records review for tentative tract 33862, a project located in San Jacinto, County of Riverside, California, for JD Pierce Company. 2006

**Pigeon Pass Property Cultural Resources Assessment, Moreno Valley.** Project Manager for a Phase I cultural resources assessment and paleontological records review of 37.8-acres for a project located in Moreno Valley, Riverside County, California, for Pacific Land Company. 2006

**Cultural Resources Assessment, French Valley. Project Manager for a Phase I cultural resources assessment and paleontological records review of Tract 34150, a project located in French Valley, County of Riverside, California, for Granite Equities, LLC. 2005**

**Cultural Resources Survey, Corona.** Project Manager for a Phase I cultural resources survey and paleontological records review for a project located in Corona, California, for Knowlton Communities. 2004

**Menifee Farms Project Cultural Resources Assessment, Menifee Valley.** Project Manager for a Phase I cultural resources assessment, Phase II archaeological test and paleontological records review of a 26.14-acre property for a project located in Menifee Valley, Riverside County, California for Granite Equities, LLC. 2004

**Temecula Lane 2 Property Cultural Resources Assessment, City of Temecula.** Project Manager for a Phase I cultural resources survey for a project located in the City of Temecula, Riverside County, California for DR Horton. 2007

**Ramona Expressway and Alessandro Avenue Project Cultural Resources Assessment, San Jacinto.** Project Manager for a Phase I cultural resources survey and paleontological records review for a project located in San Jacinto, Riverside County, California, for Mr. Cornell Kasbergen. 2006

**Palmdale Business Center Project Cultural Resources Assessment, City of Palmdale.** Project Manager for a Phase I cultural resources survey and paleontological records review for tentative tract 47193, a project located in the City of Palmdale, Los Angeles County, California for Palmdale Business Center, LP. 2006

**Victoria 316 Project Cultural Resources Assessment, Victorville.** Project Manager for a Phase I cultural resources survey and paleontological records review for tentative tract numbers 17341 and 17356, a project located in Victorville, San Bernardino County, California for Pulte Homes. 2005

**Van Daele Homes Victorville Acres Project Cultural Resources Survey, City of Victorville.** Project Manager for a Phase I cultural resources survey and paleontological records review for tentative tract 16847, a project located in the City of Victorville, San Bernardino County, California for Victorville Acres, LLC. 2004

**Van Daele Victorville Acres II Project Cultural Resources Assessment, City of Victorville.** Project Manager for a Phase I cultural resources assessment and paleontological records review for tentative tract 17063, a project located in Victorville, San Bernardino County, California for Victorville Acres II, LLC. 2004

**Van Daele Homes Foxfire Ranch Cultural Resource Survey, City of Victorville.** Project Manager for a Phase I cultural resources survey and paleontological records review, including sensitivity statements regarding the paleontology of the 65-acre property at tentative tract 16574 (including parcel 3094-131-02) for a project located in the City of Victorville, San Bernardino County, California for Victorville Acres, LLC. 2005

**Merrill Avenue Project Cultural Resources Assessment, City of Chino.** Project Manager for a Phase I cultural resources assessment and paleontological records review for the Albers and Van Vliet Dairy Farms, a project located in Chino, San Bernardino County, California for Watson Land Company. 2007

**Valle Grande Golf, Inc., Golf Course and Development on the Santa Ana Indian Reservation.** Project manager/archeologist for the completion of a new 27-hole golf course on Indian tribal lands in New Mexico. 1989

**Reese-Chambers Systems Consultants, Inc./Cabezon Indian Tribe, Master Planned Development EA.** Project archeologist for a tribal development project consisting of a variety of industrial park facilities, in Riverside County, California. 1995

**Reese-Chambers Systems Consultants, Inc./Mechoopda Indian Tribe, Tribal Trust Land Acquisition EA.** Project archeologist for a tribal development project consisting of a golf course, class II gaming facility, and other developments in Sutter County, California. 1996

**Reese-Chambers Systems Consultants, Inc./United Auburn Indian Tribe, Tribal Trust Land Acquisition EA.** Project archeologist for a tribal development project consisting of a class II gaming facility and housing development in Placer County, California. 1996

### **Education**

- Ph.D., Archaeology, University of Texas, Austin 1984
- B.A., Anthropology, University of Pittsburgh 1973

### **Special Training**

- Erosion and Sedimentation Control Seminar, University of California, Davis
- Management Training, Section 106 Compliance Seminar, New Mexico
- FERC - Natural Gas Pipeline Environmental Compliance Training Program
- Places That Count: Identifying and Managing Traditional Cultural Properties. San Diego

### **Professional Affiliations**

- Association of Environmental Professionals
- Riverside County Certified Archaeologist #100
- Registered Professional Archaeologist #11821

## **Appendix D: Project Area Photographs**



View of the WLCSP from the southwest corner toward the North.



View of the WLCSP from the southwest corner toward the east showing the lowermost foothills of Mount Russell.



Typical view of the flats in the WLCSP from the corner of Theodore and Alessandro, view east.



Typical view of the flats in the WLCSP from the corner of Theodore and Alessandro, view north.



Typical view of the WLCSP from the eastern end of Eucalyptus Street near Gilman Springs Road.



View of the WLCSP from the northeast corner toward the south.



Overview to the northeast of the eastern half of the WLCSP from the high slope of Mount Russell.

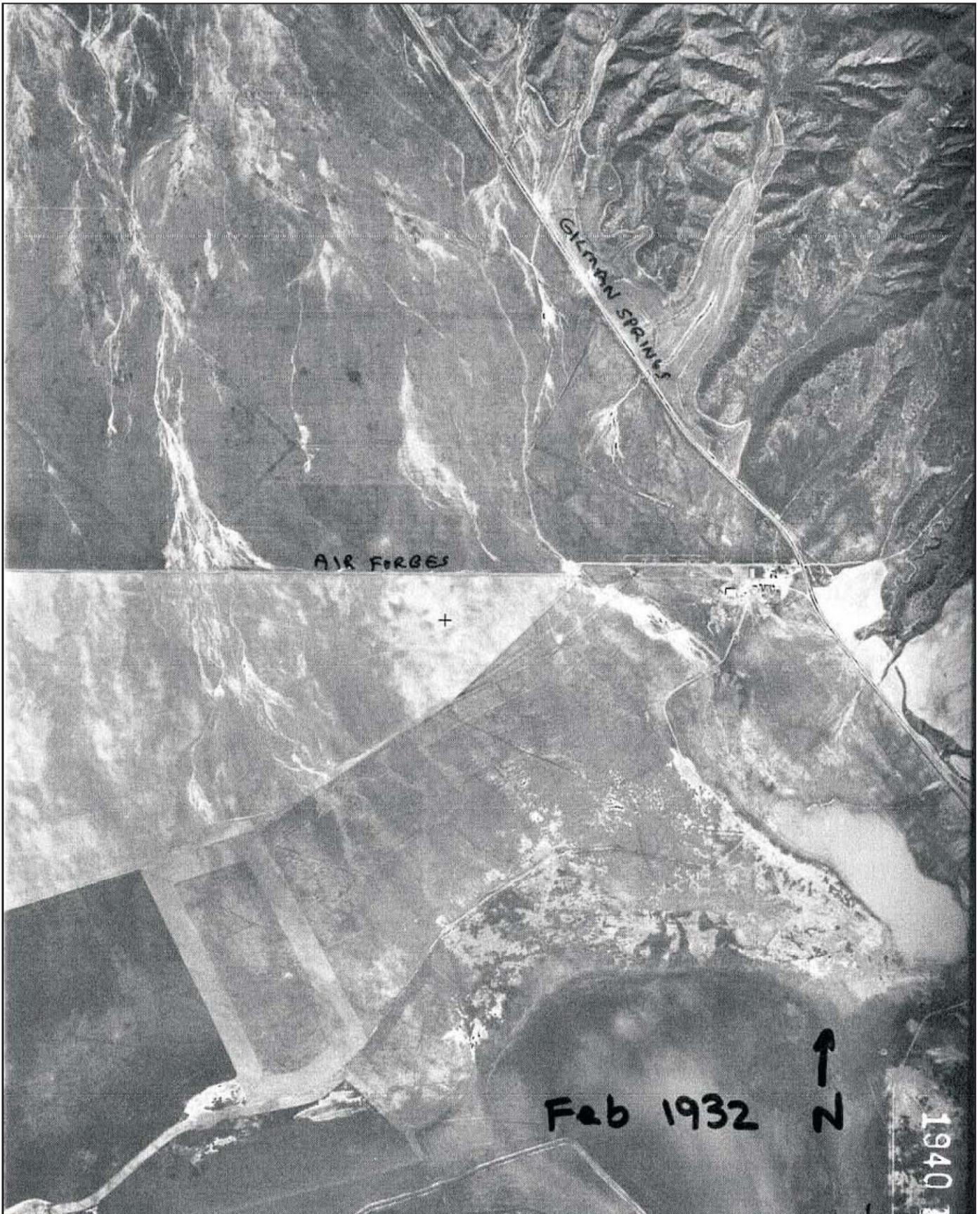


Overview to the northwest of the western half of the WLCSP from the high slope of Mount Russell.

**Appendix E:  
Confidential  
Department of Parks and Recreation (DPR) 523 Forms  
Not For Public Review**

**Appendix F:  
Confidential Site Locations  
Not For Public Review**

## **Appendix G: Historic Aerials**



Source: Whittier-Fairchild Historic Aerial Database.



Michael Brandman Associates

26100025 • 11/2011 | historic\_aerial\_1.cdr

## Appendix G Historic Aerial 1



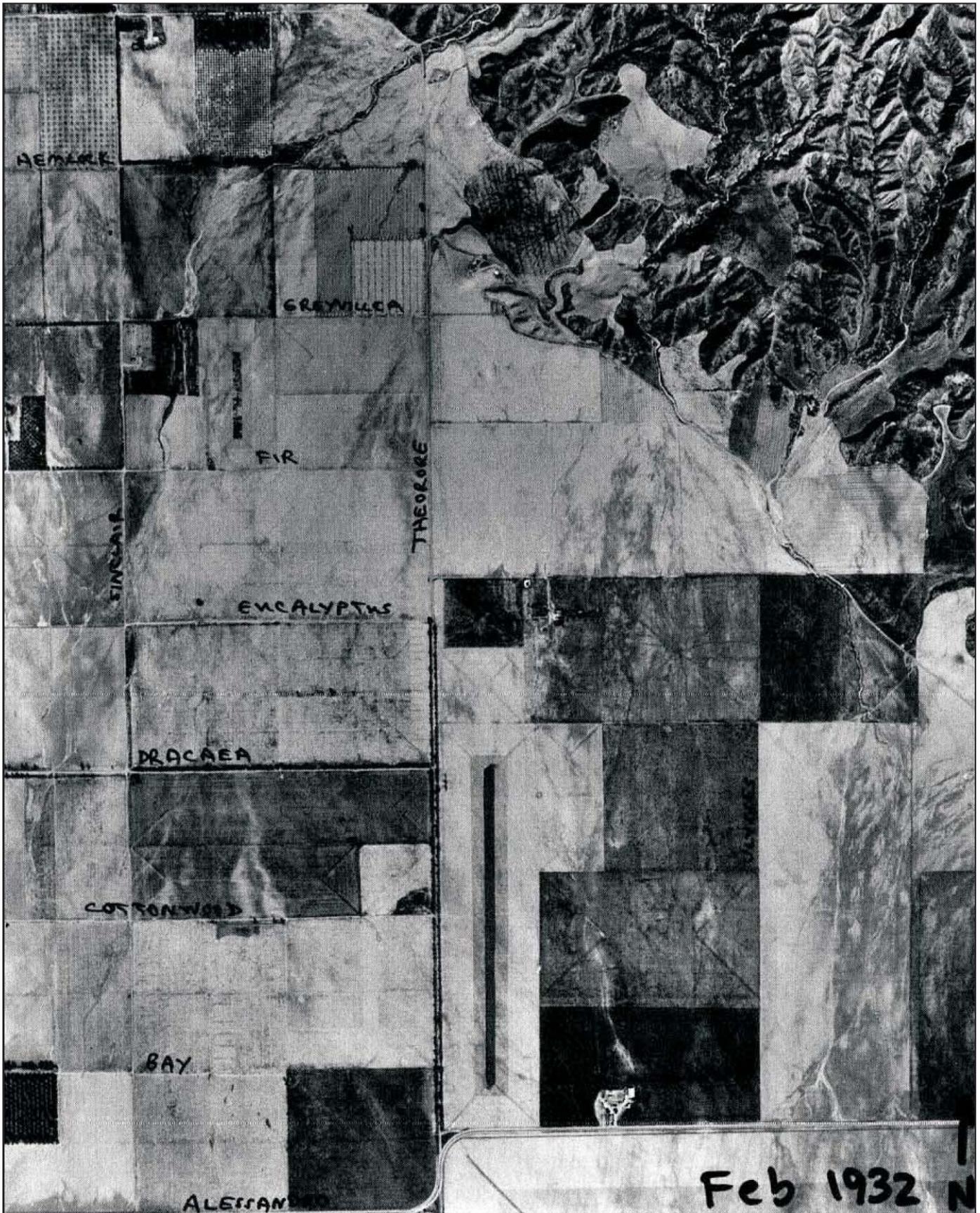
Source: Whittier-Fairchild Historic Aerial Database.



Michael Brandman Associates

26100025 • 11/2011 | historic\_aerial\_2.cdr

## Appendix G Historic Aerial 2



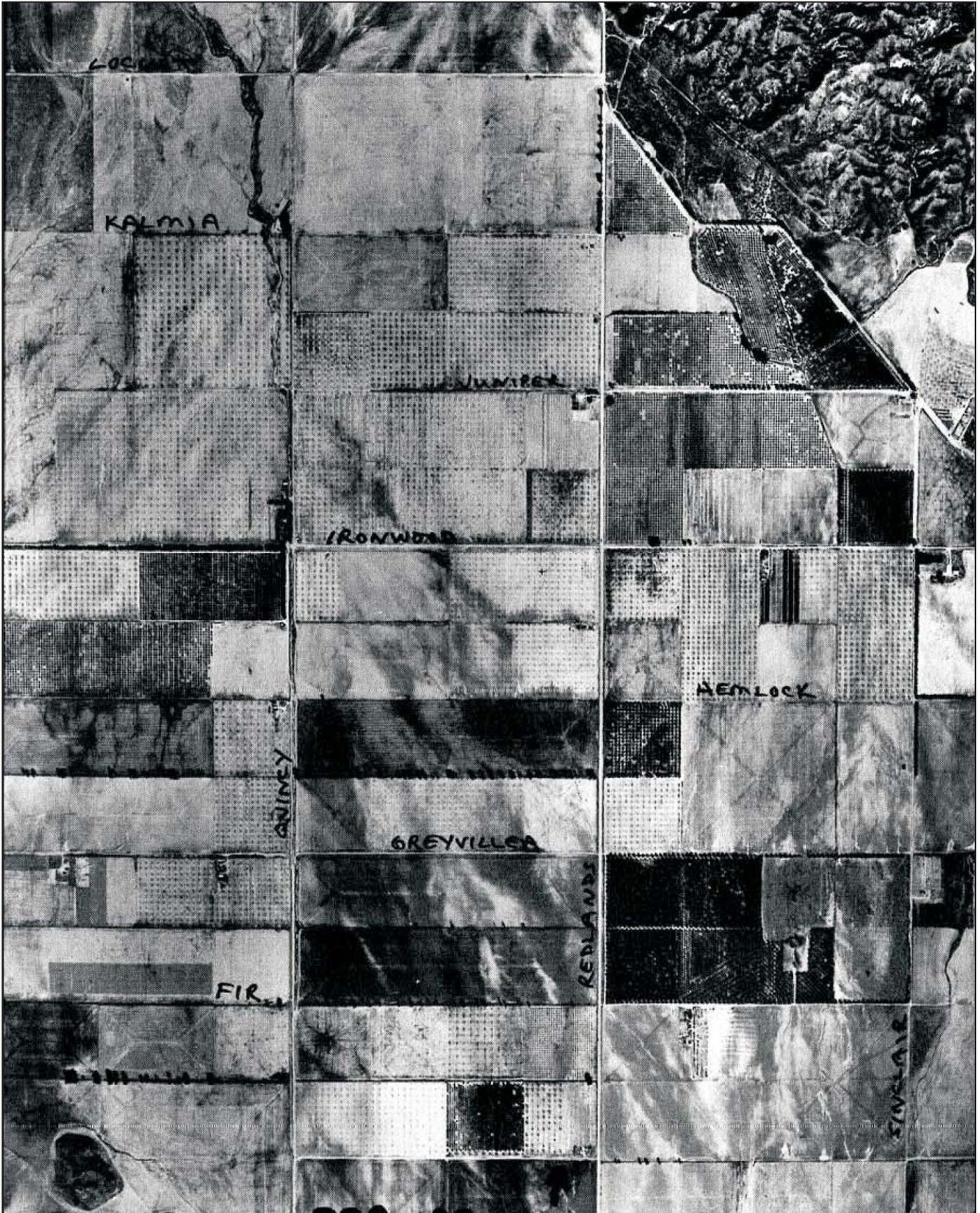
Source: Whittier-Fairchild Historic Aerial Database.



Michael Brandman Associates

26100025 • 11/2011 | historic\_aerial\_3.cdr

## Appendix G Historic Aerial 3



Source: Whittier-Fairchild Historic Aerial Database.



Michael Brandman Associates

26100025 • 11/2011 | historic\_aerial\_4.cdr

## Appendix G Historic Aerial 4

HIGHLAND FAIRVIEW OPERATING COMPANY • HIGHLAND FAIRVIEW SPECIFIC PLAN  
PHASE I AND AND PHASE II CULTURAL RESOURCES ASSESSMENT

6-8-36



Source: Whittier-Fairchild Historic Aerial Database.



Michael Brandman Associates

26100025 • 11/2011 | historic\_aerial\_5.cdr

## Appendix G Historic Aerial 5

HIGHLAND FAIRVIEW OPERATING COMPANY • HIGHLAND FAIRVIEW SPECIFIC PLAN  
PHASE I AND AND PHASE II CULTURAL RESOURCES ASSESSMENT

6-8-36



Source: Whittier-Fairchild Historic Aerial Database.



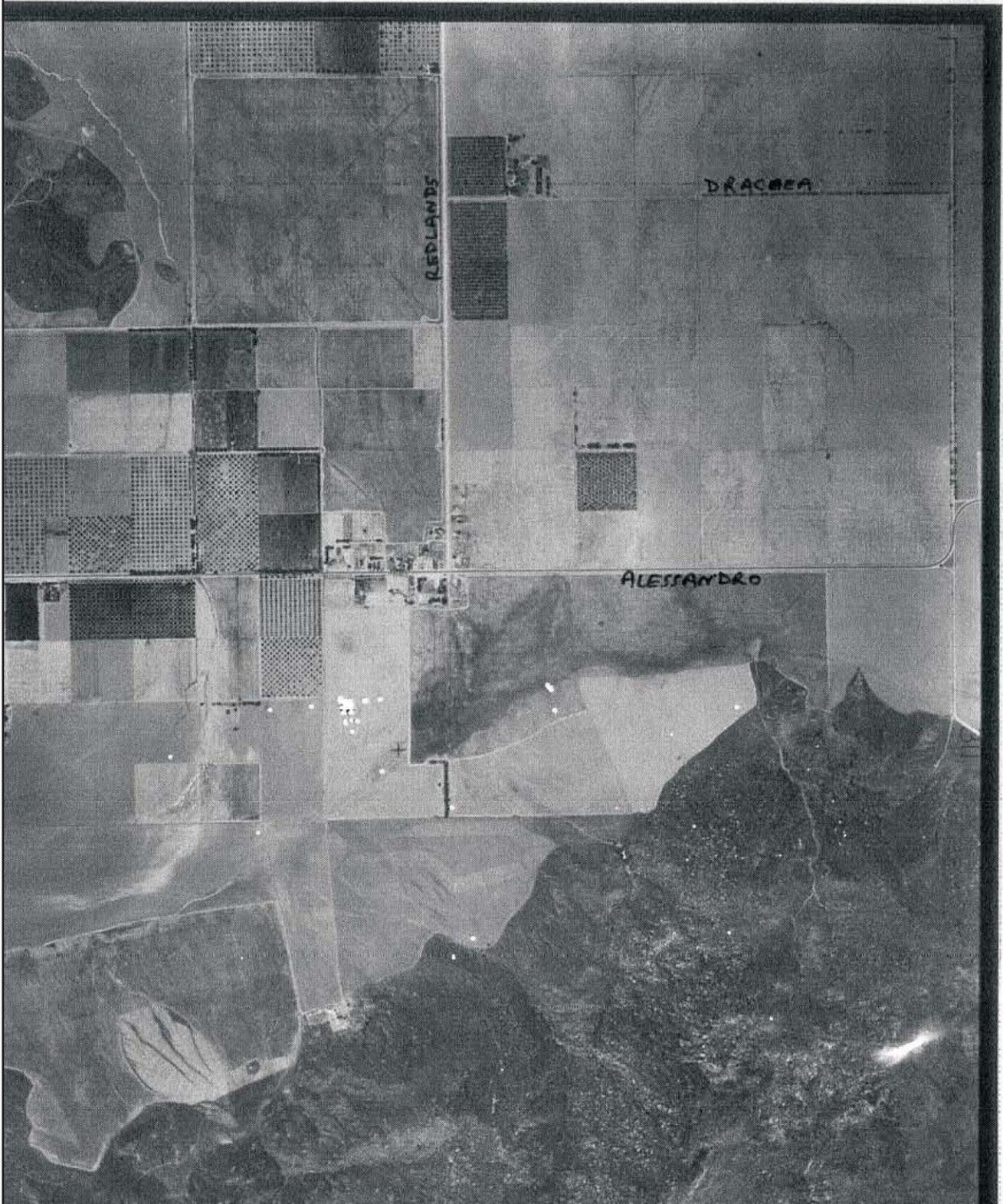
Michael Brandman Associates

26100025 • 11/2011 | historic\_aerial\_6.cdr

## Appendix G Historic Aerial 6

6-8-36

↑  
N



Source: Whittier-Fairchild Historic Aerial Database.

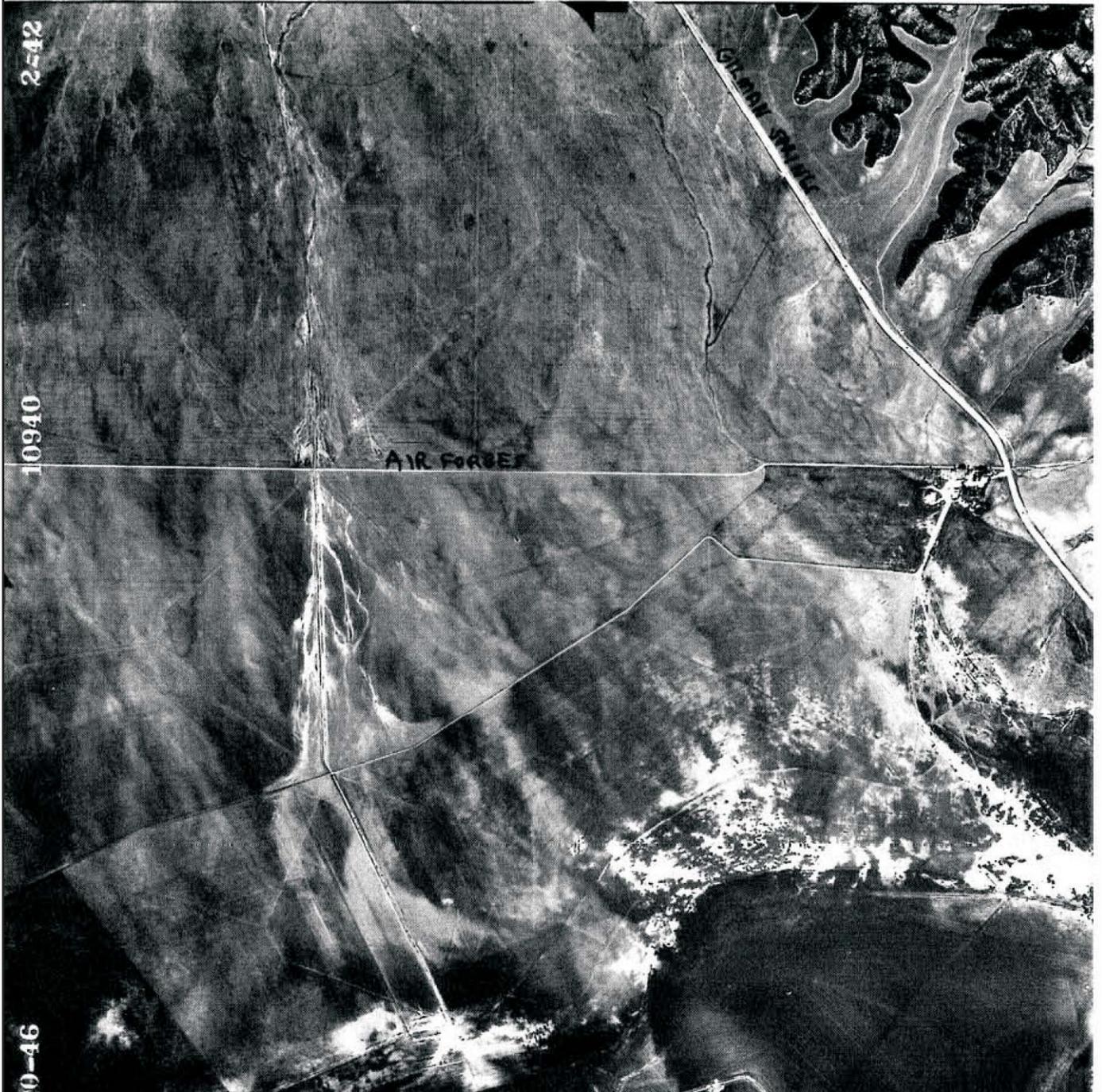


Michael Brandman Associates

26100025 • 11/2011 | historic\_aerial\_7.cdr

## Appendix G Historic Aerial 7

12-30-46



Source: Whittier-Fairchild Historic Aerial Database.



Michael Brandman Associates

26100025 • 11/2011 | historic\_aerial\_8.cdr

## Appendix G Historic Aerial 8

12-30-46 ↑  
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Source: Whittier-Fairchild Historic Aerial Database.



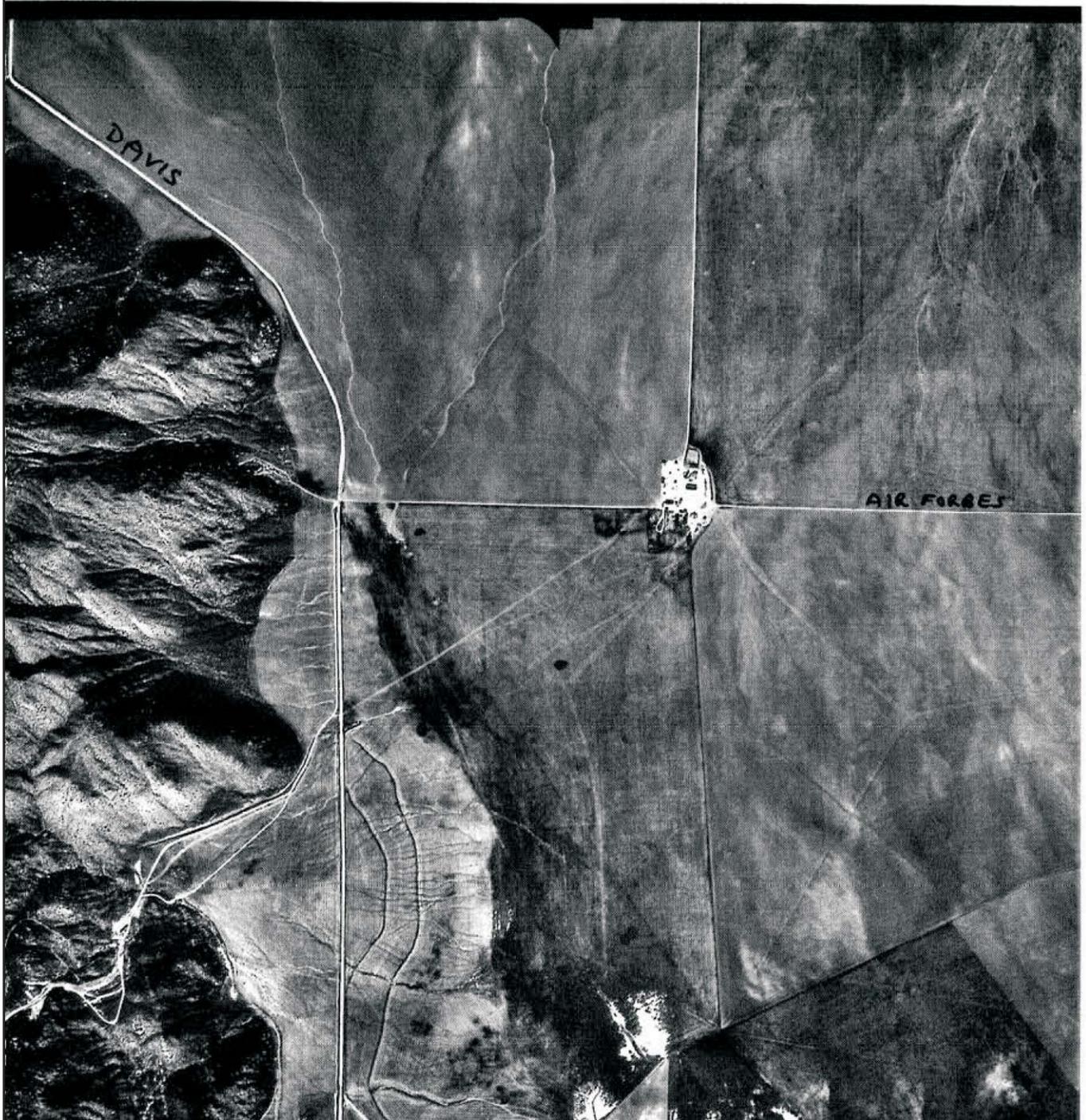
Michael Brandman Associates

26100025 • 11/2011 | historic\_aerial\_9.cdr

## Appendix G Historic Aerial 9

HIGHLAND FAIRVIEW OPERATING COMPANY • HIGHLAND FAIRVIEW SPECIFIC PLAN  
PHASE I AND AND PHASE II CULTURAL RESOURCES ASSESSMENT

12/30/46



Source: Whittier-Fairchild Historic Aerial Database.



Michael Brandman Associates

26100025 • 11/2011 | historic\_aerial\_10.cdr

## Appendix G Historic Aerial 10

1-18-47 ↑  
N



Source: Whittier-Fairchild Historic Aerial Database.



Michael Brandman Associates

26100025 • 11/2011 | historic\_aerial\_11.cdr

## Appendix G Historic Aerial 11

HIGHLAND FAIRVIEW OPERATING COMPANY • HIGHLAND FAIRVIEW SPECIFIC PLAN  
PHASE I AND AND PHASE II CULTURAL RESOURCES ASSESSMENT

1-18-47  
↑  
N



Source: Whittier-Fairchild Historic Aerial Database.



Michael Brandman Associates

26100025 • 11/2011 | historic\_aerial\_12.cdr

## Appendix G Historic Aerial 12

HIGHLAND FAIRVIEW OPERATING COMPANY • HIGHLAND FAIRVIEW SPECIFIC PLAN  
PHASE I AND AND PHASE II CULTURAL RESOURCES ASSESSMENT

1-18-47 ↑  
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Source: Whittier-Fairchild Historic Aerial Database.

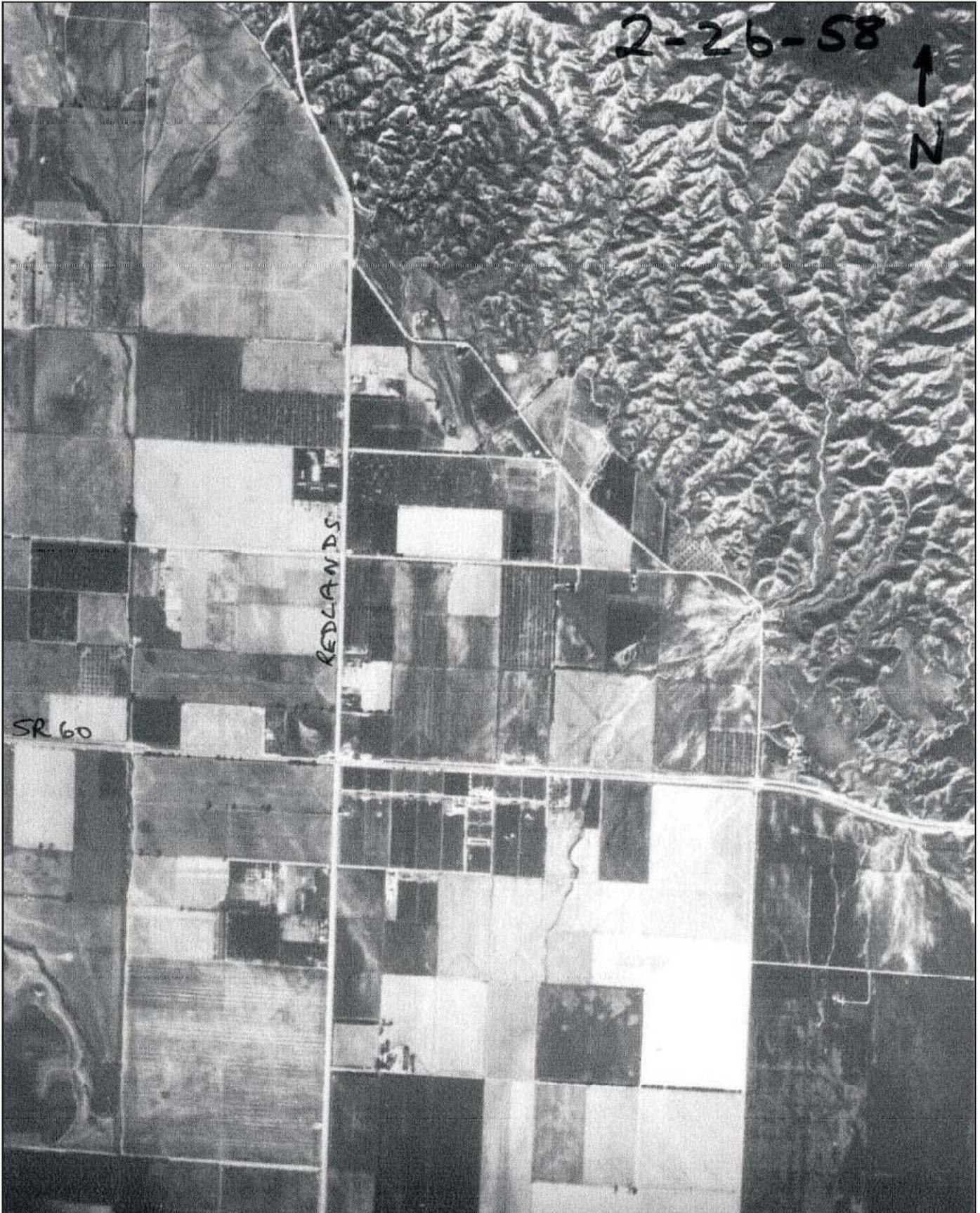


Michael Brandman Associates

26100025 • 11/2011 | historic\_aerial\_13.cdr

## Appendix G Historic Aerial 13

HIGHLAND FAIRVIEW OPERATING COMPANY • HIGHLAND FAIRVIEW SPECIFIC PLAN  
PHASE I AND AND PHASE II CULTURAL RESOURCES ASSESSMENT



Source: Whittier-Fairchild Historic Aerial Database.

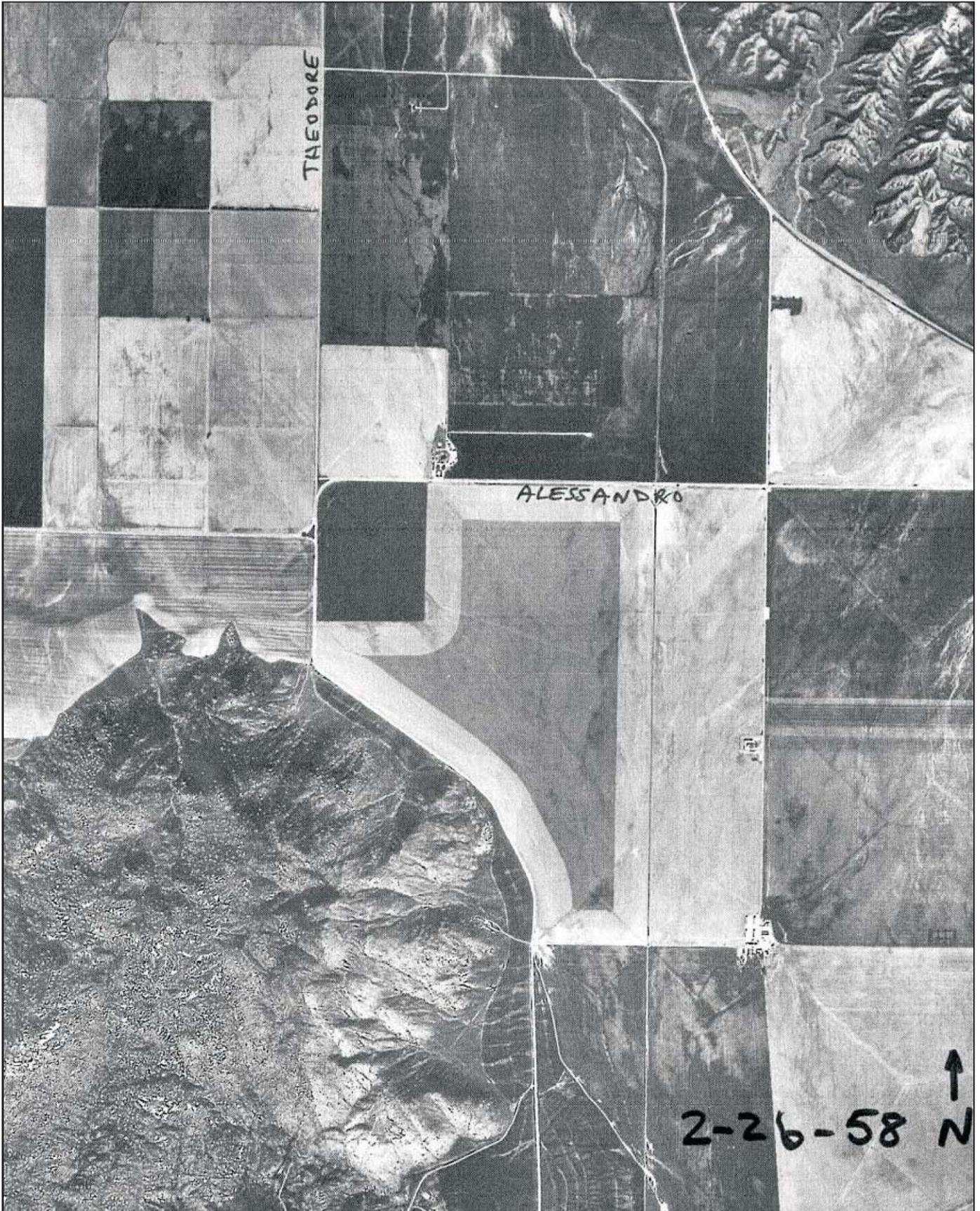


Michael Brandman Associates

26100025 • 11/2011 | historic\_aerial\_14.cdr

## Appendix G Historic Aerial 14

HIGHLAND FAIRVIEW OPERATING COMPANY • HIGHLAND FAIRVIEW SPECIFIC PLAN  
PHASE I AND AND PHASE II CULTURAL RESOURCES ASSESSMENT



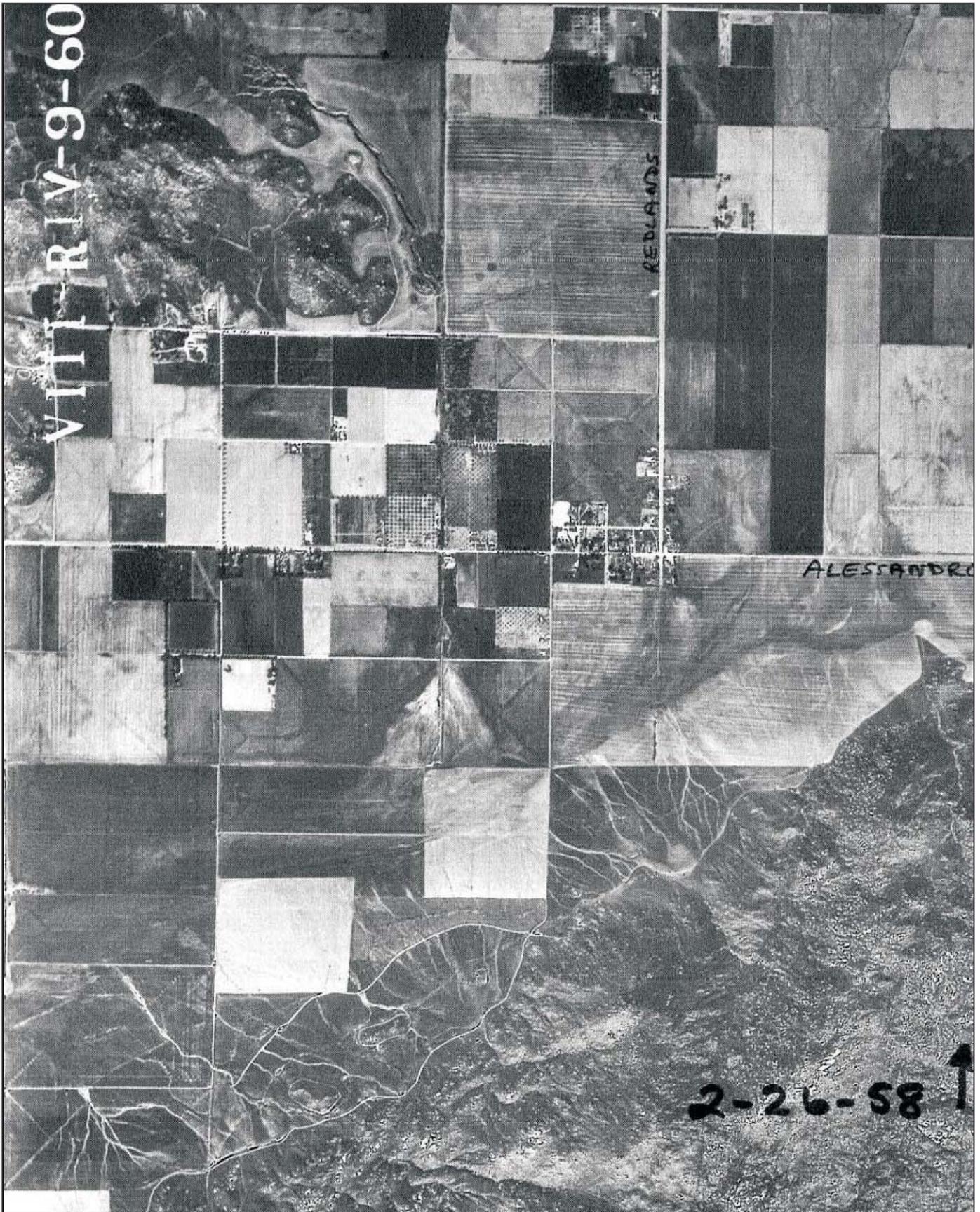
Source: Whittier-Fairchild Historic Aerial Database.



Michael Brandman Associates

26100025 • 11/2011 | historic\_aerial\_15.cdr

## Appendix G Historic Aerial 15



Source: Whittier-Fairchild Historic Aerial Database.



Michael Brandman Associates

26100025 • 11/2011 | historic\_aerial\_16.cdr

# Appendix G Historic Aerial 16



Source: Whittier-Fairchild Historic Aerial Database.



Michael Brandman Associates

26100025 • 11/2011 | historic\_aerial\_17.cdr

## Appendix G Historic Aerial 17

HIGHLAND FAIRVIEW OPERATING COMPANY • HIGHLAND FAIRVIEW SPECIFIC PLAN  
PHASE I AND AND PHASE II CULTURAL RESOURCES ASSESSMENT

**Appendix H:  
WLC Land Plan**

Legend:

- Logistics Development
- Light Logistics
- Open Space
- Fire Station Site

