CULTURAL RESOURCES ASSESSMENT

69.5 Acre Project (APNs 3133-271-01, -02, -04, -05, -10, -11, -12, -13, -15; 3133-281-01, -03, -07, -08)

City of Victorville, San Bernardino County, California

Prepared for:

Andrew Pham ACTK Capital Partners LLC

Prepared by:

David Brunzell, M.A., RPA BCR Consulting LLC 1420 Guadalajara Place Claremont, California 91711 Project No. ACT1701A

Data Base Information:

Type of Study: Reconnaissance Survey
Resources Recorded: None
USGS Quadrangle: 7.5-minute Baldy Mesa (1996), California



MANAGEMENT SUMMARY

BCR Consulting LLC (BCR Consulting) is under contract to ACTK Capital Partners LLC to complete a Cultural Resources Assessment of the proposed 69.5-Acre Project (project) in the City of Victorville, San Bernardino County, California. The project is located southeast of the intersection of Olivine Road and Monte Vista Road. A cultural resources records search, reconnaissance-level pedestrian field survey, Native American Heritage Commission (NAHC) Sacred Lands File Search (Appendix B), and paleontological overview (Appendix C) were completed for the project in partial fulfillment of the California Environmental Quality Act (CEQA). The records search revealed that four cultural resource studies have taken place resulting in the recording of four cultural resources (all historic period) within one mile of the project site. Of the previous studies, one has assessed a portion of the project site, and no cultural resources have been previously recorded within its boundaries.

During the field survey, BCR Consulting archaeologists did not discover any historic-period or prehistoric cultural resources of any kind within the project site boundaries. Therefore, no significant impacts related to archaeological or historical resources is anticipated and no further investigations are recommended for the proposed project unless:

- the proposed project is changed to include areas not subject to this study;
- the proposed project is changed to include the construction of additional facilities;
- cultural materials are encountered during project activities.

Although the current study has not indicated sensitivity for cultural resources within the project boundaries, ground disturbing activities always have the potential to reveal buried deposits not observed on the surface during previous surveys. Prior to the initiation of ground-disturbing activities, field personnel should be alerted to the possibility of buried prehistoric or historic cultural deposits. In the event that field personnel encounter buried cultural materials, work in the immediate vicinity of the find should cease and a qualified archaeologist should be retained to assess the significance of the find. The qualified archaeologist shall have the authority to stop or divert construction excavation as necessary. If the qualified archaeologist finds that any cultural resources present meet eligibility requirements for listing on the California Register or the National Register, plans for the treatment, evaluation, and mitigation of impacts to the find will need to be developed. Prehistoric or historic cultural materials that may be encountered during ground-disturbing activities include:

- historic artifacts such as glass bottles and fragments, cans, nails, ceramic and pottery fragments, and other metal objects;
- historic structural or building foundations, walkways, cisterns, pipes, privies, and other structural elements;
- prehistoric flaked-stone artifacts and debitage (waste material), consisting of obsidian, basalt, and or cryptocrystalline silicates;
- groundstone artifacts, including mortars, pestles, and grinding slabs;
- dark, greasy soil that may be associated with charcoal, ash, bone, shell, flaked stone, groundstone, and fire affected rocks.

If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the NAHC, which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC.

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INTRODUCTION

BCR Consulting LLC (BCR Consulting) is under contract to ACTK Capital Partners LLC to complete a Cultural Resources Assessment of the proposed 69.5-Acre Project (project) in the City of Victorville, San Bernardino County, California. The project is located southeast of the intersection of Olivine Road and Monte Vista Road. A cultural resources records search, reconnaissance-level pedestrian field survey, Native American Heritage Commission (NAHC) Sacred Lands File Search (Appendix B), and paleontological overview (Appendix C) were conducted for the project in partial fulfillment of the California Environmental Quality Act (CEQA). The project is located in the southwest quarter of Section 32, Township 5 North, Range 5 West, San Bernardino Baseline and Meridian. It is depicted on the United States Geological Survey (USGS) Baldy Mesa (1996) California 7.5-minute topographic quadrangle (Figure 1).

NATURAL SETTING

Geology

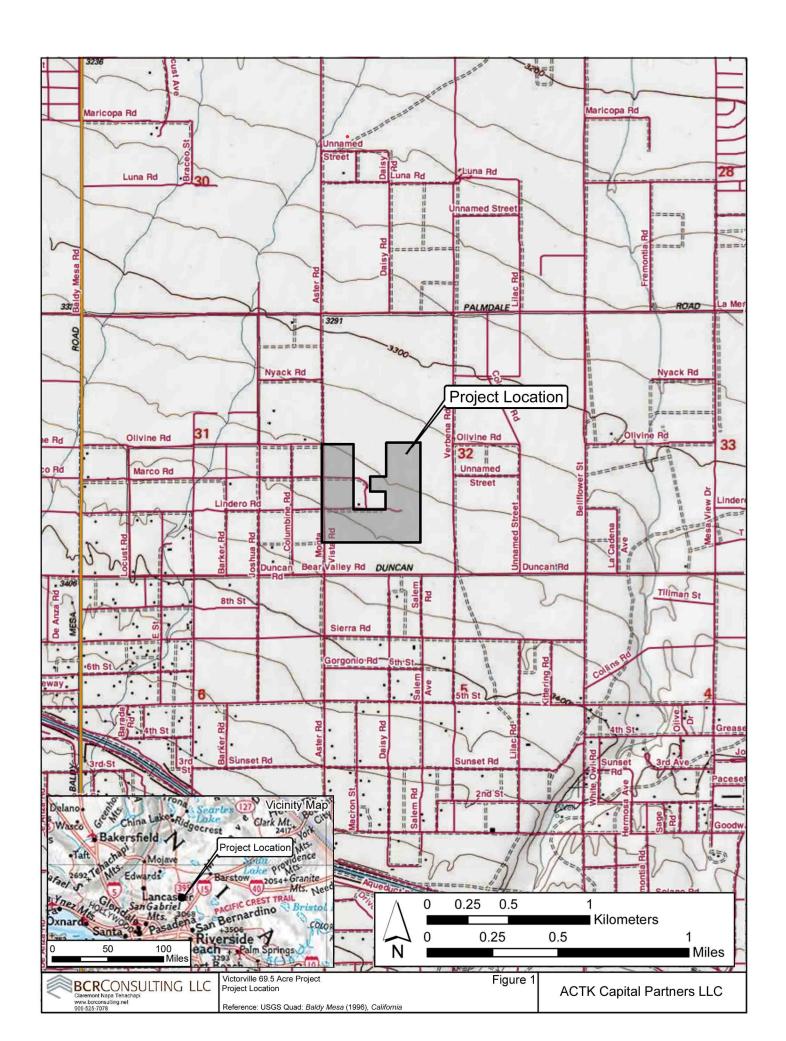
The project is located in the southwestern Mojave Desert. Sediments within the project boundaries include a geologic unit composed of young alluvial-fan deposits formed during the late Pleistocene and Holocene Epochs of the Quaternary Period (Miller and Matti 2006, Lambert 1994:17). The unit is composed of "slightly consolidated, undissected to slightly dissected deposits of poorly sorted sand and silt containing scattered subangular pebbles" (Miller and Matti 2006). Field observations during the current study are basically consistent with these descriptions, and are described in the Field Survey Results section, below.

Hydrology

The project elevation is approximately 3340 feet above mean sea level (AMSL). Sheetwashing occur from southwest to northeast, and water flowing across the project site eventually empties into an unnamed intermittent drainage approximately one mile east of the project site. To the south, the peaks of the San Gabriel Mountains rise above 10,000 feet and are often capped with snow until late spring or early summer. The area currently exhibits a relatively arid climate, with dry, hot summers and cool winters. Rainfall ranges from five to 15 inches annually (Jaeger and Smith 1971:36-37). Precipitation usually occurs in the form of winter and spring rain or snow at high elevations, with occasional warm monsoonal showers in late summer.

Biology

The mild climate of the late Pleistocene allowed piñon-juniper woodland to thrive throughout most of the Mojave (Van Devender et al. 1987). The vegetation and climate during this epoch attracted significant numbers of Rancholabrean fauna, including dire wolf, saber toothed cat, short-faced bear, horse, camel, antelope, mammoth, as well as birds which included pelican, goose, duck, cormorant, and eagle (Reynolds 1988). The drier climate of the middle Holocene resulted in the local development of complementary flora and fauna, which remain largely intact to this day. Common native plants include creosote, cacti, rabbit bush, interior golden bush, cheese bush, species of sage, buckwheat at higher elevations and near drainages, Joshua tree, and various grasses. Common native animals include



coyotes, cottontail and jackrabbits, rats, mice, desert tortoises, roadrunners, raptors, turkey vultures, and other bird species (see Williams et al. 2008).

CULTURAL SETTING

Prehistoric Context

The prehistoric cultural setting of the Mojave Desert has been organized into many chronological frameworks (see Warren and Crabtree 1986; Bettinger and Taylor 1974; Lanning 1963; Hunt 1960; Wallace 1958, 1962, 1977; Wallace and Taylor 1978; Campbell and Campbell 1935), although there is no definitive sequence for the region. The difficulties in establishing cultural chronologies for the Mojave are a function of its enormous size and the small amount of archaeological excavations conducted there. Moreover, throughout prehistory many groups have occupied the Mojave and their territories often overlap spatially and chronologically resulting in mixed artifact deposits. Due to dry climate and capricious geological processes, these artifacts rarely become integrated in-situ. Lacking a milieu hospitable to the preservation of cultural midden, Mojave chronologies have relied upon temporally diagnostic artifacts, such as projectile points, or upon the presence/absence of other temporal indicators, such as groundstone. Such methods are instructive, but can be limited by prehistoric occupants' concurrent use of different artifact styles, or by artifact re-use or re-sharpening, as well as researchers' mistaken diagnosis, and other factors (see Flenniken 1985; Flenniken and Raymond 1986; Flenniken and Wilke 1989). Recognizing the shortcomings of comparative temporal indicators, this study recommends the findings of Warren and Crabree (1986), who have drawn upon this method to produce a commonly cited and relatively comprehensive chronology.

Ethnography

The Uto-Aztecan "Serrano" people occupied the western Mojave Desert periphery. Kroeber (1925) applied the generic term "Serrano" to four groups, each with distinct territories: the Kitanemuk, Tataviam, Vanyume, and Serrano. Only one group, in the San Bernardino Mountains and West-Central Mojave Desert, ethnically claims the term Serrano. Bean and Smith (1978) indicate that the Vanyume, an obscure Takic population, was found along the Mojave River near Apple Valley at the time of Spanish contact. The Kitanemuk lived to the north and west, while the Tataviam lived to the west. The Serrano lived mainly to the south (Bean and Smith 1978). All may have used the western Mojave area seasonally. Historical records are unclear concerning precise territory and village locations. It is doubtful that any group, except the Vanyume, actually lived in the region for several seasons yearly.

History

Historic-era California is generally divided into three periods: the Spanish or Mission Period (1769 to 1821), the Mexican or Rancho Period (1821 to 1848), and the American Period (1848 to present).

Spanish Period. The first European to pass through the project area is thought to be a Spaniard called Father Francisco Garces. Having become familiar with the area, Garces acted as a guide to Juan Bautista de Anza, who had been commissioned to lead a group across the desert from a Spanish outpost in Arizona to set up guarters at the Mission San

Gabriel in 1771 near what today is Pasadena (Beck and Haase 1974). This is the first recorded group crossing of the Mojave Desert and, according to Father Garces' journal, they camped at the headwaters of the Mojave River, one night less than a day's march from the mountains. Today, this is estimated to have been approximately 11 miles southeast of Victorville (Marenczuk 1962). Garces was followed by Alta California Governor Pedro Fages, who briefly explored the western Mojave region in 1772. Searching for San Diego Presidio deserters, Fages had traveled north through Riverside to San Bernardino, crossed over the mountains into the Mojave Desert, and then journeyed westward to the San Joaquin Valley (Beck and Haase 1974).

Mexican Period. In 1821, Mexico overthrew Spanish rule and the missions began to decline. By 1833, the Mexican government passed the Secularization Act, and the missions, reorganized as parish churches, lost their vast land holdings, and released their neophytes (Beattie and Beattie 1974).

American Period. The American Period, 1848–Present, began with the Treaty of Guadalupe Hidalgo. In 1850, California was accepted into the Union of the United States primarily due to the population increase created by the Gold Rush of 1849. The cattle industry reached its greatest prosperity during the first years of the American Period. Mexican Period land grants had created large pastoral estates in California, and demand for beef during the Gold Rush led to a cattle boom that lasted from 1849–1855. However, beginning about 1855, the demand for beef began to decline due to imports of sheep from New Mexico and cattle from the Mississippi and Missouri Valleys. When the beef market collapsed, many California ranchers lost their ranchos through foreclosure. A series of disastrous floods in 1861–1862, followed by a significant drought diminished the economic impact of local ranching. This decline combined with ubiquitous agricultural and real estate developments of the late 19th century, set the stage for diversified economic pursuits that have continued to proliferate to this day (Beattie and Beattie 1974; Cleland 1941).

PERSONNEL

David Brunzell, M.A., RPA acted as the Project Manager and Principal Investigator for the current study. He also compiled the technical report, and provided project oversight. Staff Archaeologist Judy Bernal conducted the cultural resources records search at the South Central Coastal Information Center (SCCIC) located at California State University, Fullerton. BCR Consulting Archaeological Crew Chief Damien Tietjen, B.A., and Ms. Bernal completed the field reconnaissance.

METHODS

Research

Prior to fieldwork, a records search was conducted at the SCCIC. This archival research reviewed the status of all recorded historic and prehistoric cultural resources, and survey and excavation reports completed within one mile of the project site. Additional resources reviewed included the National Register of Historic Places (National Register), the California Register of Historical Resources (California Register), and documents and inventories published by the California Office of Historic Preservation. These include the lists of

California Historical Landmarks, California Points of Historical Interest, Listing of National Register Properties, and the Inventory of Historic Structures.

Field Survey

An archaeological field survey of the project site was conducted on July 9, 2017. The survey was conducted by walking parallel transects spaced approximately 15 meters apart across 100 percent of the project site. All soil exposures were carefully inspected for evidence of cultural resources.

RESULTS

Research

Research completed through the SCCIC revealed that four cultural resources studies have taken place resulting in the recording of four cultural resources (all historic period) within one mile of the project site. Of the previous studies, one has assessed a portion of the project site, and no cultural resources have been previously recorded within its boundaries. A summary of the records search results is included below.

Table A. Cultural Resources and Studies within One Mile of the Project Site

USGS 7.5 Minute Quadrangle	Cultural Resources (Distance from Project Site)	Cultural Resource Studies
Baldy Mesa (1996),	P-36-4180H: historic-period residence (1/2 mile SE)	SB-106-0781, 2202, 5698*,
California	P-36-4181H: historic-period water storage (1/4 mile SE)	5913
	P-36-4418: historic-period road (3/4 mile NW)	
	P-36-21618: historic-period residence (1 mile SW)	

^{*}Previously assessed a portion of the project site.

Field Survey

The project site exhibited approximately 70 percent surface visibility. Artificial disturbances include grading associated with a ca. 1988 building foundation, and with adjacent roads and residential properties. The project site is relatively flat, although some rilling and intermittent drainages were observed. The overall topography of the area exhibits a one to two degree slope with a northeasterly aspect. Vegetation includes creosote scrub and some seasonal grasses. Soils include silty sand with 10-15 percent gravels measuring less than five centimeters in diameter. No historic-period or prehistoric cultural resources of any kind were discovered during the field survey.

RECOMMENDATIONS

Based on these results, BCR Consulting recommends that no additional cultural resources work or monitoring is necessary during activities associated with the project site. Therefore, no significant impacts related to archaeological or historical resources is anticipated and no further investigations are recommended for the proposed project unless:

- the proposed project is changed to include areas not subject to this study;
- the proposed project is changed to include the construction of additional facilities;
- cultural materials are encountered during project activities.

Although the current study has not indicated sensitivity for cultural resources within the project boundaries, ground disturbing activities always have the potential to reveal buried deposits not observed on the surface during previous surveys. Prior to the initiation of ground-disturbing activities, field personnel should be alerted to the possibility of buried prehistoric or historic cultural deposits. In the event that field personnel encounter buried cultural materials, work in the immediate vicinity of the find should cease and a qualified archaeologist should be retained to assess the significance of the find. The qualified archaeologist shall have the authority to stop or divert construction excavation as necessary. If the qualified archaeologist finds that any cultural resources present meet eligibility requirements for listing on the California Register or the National Register, plans for the treatment, evaluation, and mitigation of impacts to the find will need to be developed. Prehistoric or historic cultural materials that may be encountered during ground-disturbing activities include:

- historic artifacts such as glass bottles and fragments, cans, nails, ceramic and pottery fragments, and other metal objects;
- historic structural or building foundations, walkways, cisterns, pipes, privies, and other structural elements;
- prehistoric flaked-stone artifacts and debitage (waste material), consisting of obsidian, basalt, and or cryptocrystalline silicates;
- groundstone artifacts, including mortars, pestles, and grinding slabs;
- dark, greasy soil that may be associated with charcoal, ash, bone, shell, flaked stone, groundstone, and fire affected rocks.

If human remains are encountered during the undertaking, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the NAHC, which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC.

REFERENCES

Bean, Lowell John, and Charles R. Smith

1978 *California*, edited by R.F. Heizer. Handbook of North American Indians, Vol. 8, W.C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

Beattie, George W., and Helen P. Beattie

1974 Heritage of the Valley: San Bernardino's First Century. Biobooks: Oakland.

Beck, Warren A., and Ynez D. Haase

1974 Historical Atlas of California. Oklahoma City: University of Oklahoma Press.

Bettinger, Robert L., and R.E. Taylor

1974 Suggested Revisions in Archaeological Sequences of the Great Basin and Interior Southern California. *Nevada Archaeological Survey Research Papers* 3:1-26.

Campbell, E., and W. Campbell

1935 The Pinto Basin. Southwest Museum Papers 9:1-51.

Cleland, Robert Glass

1941 *The Cattle on a Thousand Hills—Southern California, 1850-80.* San Marino, California: Huntington Library.

Flenniken, J.J.

1985 Stone Tool Reduction Techniques as Cultural Markers. *Stone Tool Analysis: Essays in Honor of Don E. Crabtree*, edited by M.G. Plew, J.C. Woods, and M.G. Pavesic. University of New Mexico Press, Albuquerque.

Flenniken, J.J. and A.W. Raymond

1986 Morphological Projectile Point Typology: Replication, Experimentation, and Technological Analysis. *American Antiquity* 51:603-614.

Flenniken, J.J. and Philip J. Wilke

1989 Typology, Technology, and Chronology of Great Basin Dart Points. *American Anthropologist* 91:149-158.

Heizer, Robert F. and Thomas R. Hester

1973 Great Basin Projectile Points: Forms and Chronology. Ballena Press. Socorro, NM.

Hunt. Alice P.

1960 *The Archaeology of the Death Valley Salt Pan, California.* University of Utah Anthropological Papers No. 47.

Jaeger, Edmund C., and Arthur C. Smith

1971 *Introduction to the Natural History of Southern California*. California Natural History Guides: 13. Los Angeles: University of California Press.

Kroeber, Alfred L.

1925 *Handbook of the Indians of California.* Bureau of American Ethnology Bulletin 78. Washington D.C.: Smithsonian Institution. Reprinted in 1976, New York: Dover.

Lambert, David

1994 The Field Guide to Prehistoric Life. Diagram Visual Information Ltd., New York.

Lanning, Edward P.

1963 The Archaeology of the Rose Spring Site (Iny-372). *University of California Publications in American Archaeology and Ethnology* 49(3):237-336.

Marenczuk, Wesley

1962 *The Story of Oro Grande.* Published by Author; On File Victor Valley College Local History Room.

Miller Fred K. and Jonathan C. Matti

- 2006 Geologic Map of the San Bernardino and Santa Ana 30' x 60' Quadrangles, California. U.S. Geological Survey, Spokane and Tucson.Reynolds, R.E.
- 1988 Paleontologic Resource Overview and Management Plan for Edwards Air Force Base, California. San Bernardino County Museum, Redlands, California.

United States Geological Survey

1996 Baldy Mesa, California 7.5-minute topographic quadrangle map.

Van Devender, Larry M., Gary L. Shumway, and Russell D. Hartill

1987 Desert Fever: An Overview of Mining in the California Desert. Living West Press, Canoga Park, California.

Wallace, William J.

- 1958 Archaeological Investigation in Death Valley National Monument. *University of California Archaeological Survey Reports* 42:7-22.
- 1962 Prehistoric Cultural Development in the Southern California Deserts. *American Antiquity* 28(2):172-180.
- 1977 A Half Century of Death Valley Archaeology. *The Journal of California Anthropology* 4(2):249-258.

Wallace, William J., and Edith S. Taylor

1978 Ancient Peoples and Cultures of Death Valley National Monument. Acoma Books, Ramona, California.

Warren, Claude N., and R.H. Crabtree

1986 The Prehistory of the Southwestern Great Basin. In *Handbook of the North American Indians, Vol. 11, Great Basin,* edited by W.L. d'Azevedo, pp.183-193. W.C. Sturtevant, General Editor. Smithsonian Institution, Washington D.C.

Williams, Patricia, Leah Messinger, Sarah Johnson

2008 Habitats Alive! An Ecological Guide to California's Diverse Habitats. California Institute for Biodiversity, Claremont, California.

APPENDIX A PHOTOGRAPHS



1. Project Site Overview from Southwest Corner (North View)



2. Project Site Overview from Northwest Corner (South View)

APPENDIX B

NATIVE AMERICAN HERITAGE COMMISSION SACRED LANDS FILE SEARCH



Subject: BCR SLF Request, 69.5 Acre Housing Project, Victorville, San Bernardino County

From: david.brunzell@yahoo.com

To: nahc@nahc.ca.gov

Date: Monday, June 26, 2017, 12:32:28 PM PDT

Hi Steve,

I'd like to request a Sacred Lands File Search for the proposed 69.5 Acre Housing Project in the city of Victorville, San Bernardino County. This is for CEQA information purposes only. The Project will be located as follows (SBBM; see attached project location map):

Township 5 North Range 5 West Section 32 USGS 7.5 Minute Topographic Quad: *Baldy Mesa* (1996), *California*

Please send the results and list to my email and please get in touch with any questions.

David Brunzell Principal Investigator/Archaeologist

BCR Consulting LLC

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NATIVE AMERICAN HERITAGE COMMISSION

Environmental and Cultural Department 1550 Harbor Blvd., Suite 100 West Sacramento, CA 95691 (916) 373-3710



June 27, 2017

David Brunzell BCR Consulting LLC

Sent by E-mail: david.brunzell@yahoo.com

RE: Proposed 69.5 Acre Housing Project, City of Victorville; Baldy Mesa USGS Quadrangle, San Bernardino County, California

Dear Mr. Brunzell:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File was completed for the area of potential project effect (APE) referenced above with <u>negative</u> results. Please note that the absence of specific site information in the Sacred Lands File does not indicate the absence of Native American cultural resources in any APE.

Attached is a list of tribes culturally affiliated to the project area. I suggest you contact all of the listed Tribes. If they cannot supply information, they might recommend others with specific knowledge. The list should provide a starting place to locate areas of potential adverse impact within the APE. By contacting all those on the list, your organization will be better able to respond to claims of failure to consult. If a response has not been received within two weeks of notification, the NAHC requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact via email: gayle.totton@nahc.ca.gov.

Sincerely,

Gayle Totton, M.A., PhD.

Associate Governmental Program Analyst

Native American Heritage Commission Native American Contact List San Bernardino County 6/27/2017

Morongo Band of Mission Indians

Robert Martin, Chairperson 12700 Pumarra Rroad Banning, CA, 92220

Cahuilla Serrano

Phone: (951) 849 - 8807 Fax: (951) 922-8146

Morongo Band of Mission Indians

Denisa Torres, Cultural Resources Manager

12700 Pumarra Rroad

Cahuilla Serrano

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San Fernando Band of Mission Indians

John Valenzuela, Chairperson P.O. Box 221838

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tsen2u@hotmail.com

San Manuel Band of Mission Indians

Lee Clauss, Director of Cultural

Resources

26569 Community Center Drive

Highland, CA, 92346 Phone: (909) 864 - 8933 Fax: (909) 864-3370

Iclauss@sanmanuel-nsn.gov

Serrano Nation of Mission Indians

Goldie Walker, Chairperson

P.O. Box 343 Patton, CA, 92369

Phone: (909)528-9027

Serrano

Serrano

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resource Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed 69.5 Acre Housing Project, San Bernardino County.

APPENDIX C PALEONTOLOGICAL OVERVIEW



Natural History Museum of Los Angeles County 900 Exposition Boulevard Los Angeles, CA 90007

tel 213.763.DINO www.nhm.org

Vertebrate Paleontology Section Telephone: (213) 763-3325

e-mail: smcleod@nhm.org

10 July 2017

BCR Consulting 1420 Guadalajara Place Claremont, CA 91711

Attn: David Brunzell, Principal Investigator / Archaeologist

re: Paleontological resources for the Vertebrate Paleontology Records Search for the proposed 69.5 Acre Housing Project, in the city of Victorville, San Bernardino County, project area

Dear David:

I have conducted a thorough check of our paleontology collection records for the locality and specimen data for the proposed 69.5 Acre Housing Project, in the city of Victorville, San Bernardino County, project area as outlined on the portion of the Baldy Mesa USGS topographic quadrangle map that you sent to me via e-mail on 26 June 2017. We do not have any vertebrate fossil localities that lie directly within the proposed project area boundaries, but we do have localities nearby from sedimentary deposits similar to those that may occur subsurface in the proposed project area.

Surface deposits in the entire proposed project area consist of younger Quaternary Alluvium, derived as alluvial fan deposits from the San Gabriel Mountains to the south. These deposits typically do not contain significant vertebrate fossils in the uppermost layers, but they may be underlain by older Quaternary deposits that do contain significant vertebrate fossil remains. Our closest fossil vertebrate locality in these older Quaternary deposits is LACM 1224, east-northeast of the proposed project area west of Spring Valley Lake, that produced a specimen of fossil camel, *Camelops*. Additionally, east-southeast of the proposed project area, on the western side of the Mojave River below the bluffs, an otherwise unrecorded specimen of mammoth was collected in 1961 from older Quaternary Alluvium deposits. North-northeast of

the proposed project area, between Adelanto and the former George Air Force Base, our older Quaternary locality LACM 7786 produced a fossil specimen of meadow vole, *Microtus*.

Shallow excavations in the younger Quaternary Alluvium in the proposed project area are unlikely to produce significant vertebrate fossils. Deeper excavations in the proposed project area that extend down into older Quaternary deposits, however, may well encounter significant fossil vertebrate remains. Any substantial excavations in the proposed project area, therefore, should be monitored closely to quickly and professionally recover any fossil remains discovered while not impeding development. Also, sediment samples should be collected and processed to determine the small fossil potential in the proposed project area. Any fossils recovered during mitigation should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations.

This records search covers only the vertebrate paleontology records of the Natural History Museum of Los Angeles County. It is not intended to be a thorough paleontological survey of the proposed project area covering other institutional records, a literature survey, or any potential on-site survey.

Sincerely,

Samuel A. McLeod, Ph.D. Vertebrate Paleontology

Summel A. M. Leod

enclosure: invoice