#### PALEONTOLOGICAL RESOURCES IMPACT MITIGATION PROGRAM

# **AUSTIN VINEYARD**

Assessor's Parcel Number 942-030-008 35598 Glenoaks Road Temecula, CA 92592 Riverside County, California

BGR 1800141 BMP 1800135

#### Prepared for:

Austin Vineyard LLC Austin Randall 3060 Upham Street Wheatridge, CO 80033

#### For Submittal to:

County of Riverside Planning Department 4080 Lemon Street Riverside, CA 92502

#### Prepared by:

Michael Hogan, Principal Harry M. Quinn, Paleontologist/Geologist CRM TECH 1016 E. Cooley Drive, Suite A/B Colton, CA 92324

February 13, 2019

SIGNED: \_\_\_\_\_\_\_ Michael Hogan, Principal, CRM TECH

CRM TECH Contract #3441 P
Project size: approximately 10 acres
USGS Bachelor Mountain, Calif., 7.5' (1:24,000) quadrangle
Pauba Land Grant, T7S R2W, San Bernardino Baseline and Meridian

#### INTRODUCTION

The project area is located along the northeast side of Glenoaks Road, southeasterly of Buck Road (at 35620 Glenoaks Road) (Figure 1). The parcel on which the project will occur, APN 942-030-008, lies within the Pauba Land Grant, T7S R2W, San Bernardino Baseline and Meridian, as shown on a portion of the USGS Bachelor Mountain quadrangle (Figure 2). As currently proposed, one residence and a driveway will be constructed close to Glenoaks Road, while most of the remainder of the parcel will remain vacant (Figure 3), or possibly be planted in vineyards.

Because the project area is mapped in the County's General Plan as having a high potential (High A) of containing paleontological resources, the County requires that the project proponent retain a qualified paleontologist to create and implement a project-specific plan to protect and preserve any paleontological resources that may be encountered during earthmoving activities associated with the proposed project. CRM TECH has been hired to fulfill this requirement.

After studying the development plans, the grading plans, examining the geotechnical study done for the project, and reviewing the geologic maps and relevant paleontological locality information and literature, we are able to develop paleontological monitoring and mitigation procedures appropriate to this project at this location. The results of our research are documented in this Paleontological Resources Impact Mitigation Program (PRIMP), as required by the County of Riverside. This document provides background and contextual information useful for the paleontological resources management program. It discusses the geologic and paleontological context of sediments present within the project area and provides details regarding the procedures to be implemented for the treatment of significant paleontological resources as a way to mitigate adverse impacts to such resources, should any be found during earth-disturbing activities associated with the project on this property. Once approved by the County Geologist, these measures will be implemented by a qualified paleontological monitor during earthmoving activities.

#### PROJECT AREA GEOLOGY

#### **Geologic Setting**

The project site is located in the northern portion of the Peninsular Ranges Province (Jenkins 1980:40-41; Harms 1996:150). The Peninsular Ranges Province is bounded on the north by the Transverse Ranges Province, on the northeast by the Colorado Desert Province, and on the west by the Pacific Ocean. The Peninsular Ranges Province extends southward to the southern tip of Baja California (Jahns 1954). The project area lies in the eastern portion of the Elsinore Trough (Mann 1955:Plate 1), a structurally depressed region filled with sediments of upper Pliocene through Recent age (Kennedy 1977:5). The Elsinore Trough is one of the many tectonically controlled valleys within the valley-and-ridge systems to be found within the Perris Block, which is situated between the San Jacinto and Elsinore-Chino fault zones (English 1926). The Perris Block is bounded on the north by the Cucamonga (San Gabriel) Fault and on the south by a vaguely delineated boundary near the southern end of the Temecula Valley (English 1926). This structural block is considered to have been active since Pliocene time (Woodford et al. 1971:3421). Colluvial/alluvial sediments of varying thickness derived from the erosion of the elevated portions of the region fill the low-lying areas of the Perris Block and the Elsinore Trough.



Figure 1. The project area shown on a recent aerial image.

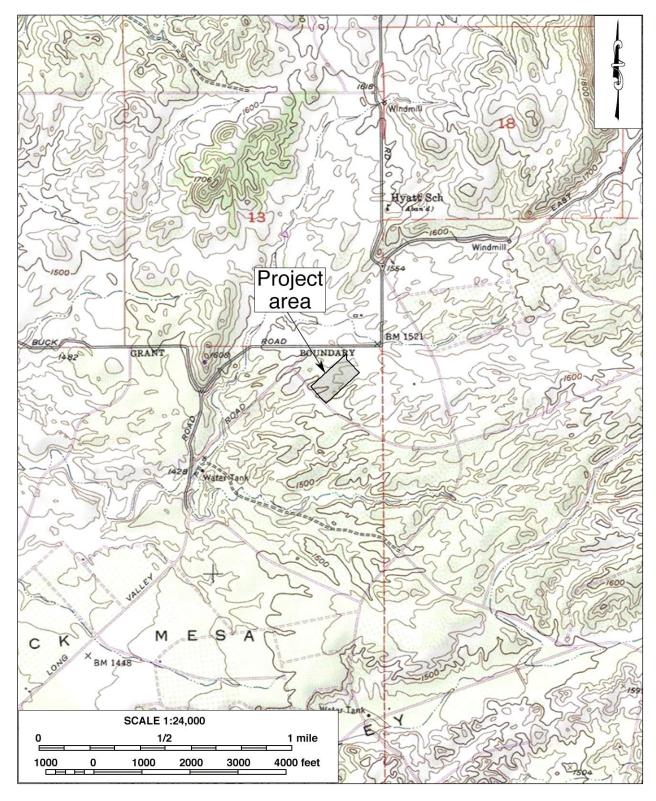


Figure 2. The project location; based on the USGS Bachelor Mountain, Calif. 7.5', 1:24,000 quadrangle (USGS 1978).

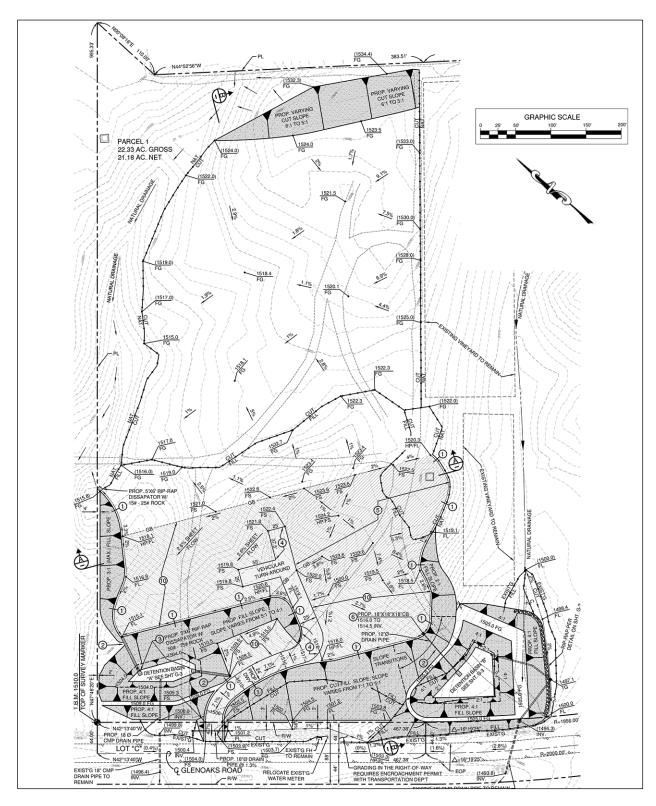


Figure 3. One page of the grading plans for the Austin Vineyards project, adapted from plans provided by the Client.

The project area is located in the Buck Mesa area at the northeastern end of Long Valley, one of the many offshoots of the larger Temecula Valley, and approximately four miles northeast of the City of Temecula. The terrain near this location is characterized by rolling hills with terraces and ravines. Elevations on the property range between approximately 1,500 and 1,530 feet above mean sea level, generally gently sloping down to the south-southwest (Figure 2). According to Historicaerials.com, the property has been under citrus production since at least 1967.

#### **Site Geology**

Morton and Kennedy (2003) mapped the entire project area as **Qpfs**, described as the sandstone member of the Pauba Formation (Figure 4). They stated that this structural member consists of a brown, moderately well-indurated, cross-bedded sandstone containing sparse cobble- to boulder-sized conglomerate beds (Morton and Kennedy 2003). The geotechnical study conducted for the project found that the subject property has shallow colluvium and alluvial deposits with the Pauba Formation below those deposits (ENGEN 2018:3) (Figure 5) [the Pauba Formation soils are labeled **Qps** in ENGEN's figure]. Loose and unconsolidated alluvium was found in undisturbed areas of western portion of the property, north of the proposed driveway (ENGEN 2018:3). It was also found in the shallow drainages in the western, lower, portion of the property, both north and south of the proposed driveway (ENGEN 2018:8) (Figure 5). A thin mantle of colluvium was found covering the natural slopes throughout the site and overlying the Pauba Formation in the higher elevations as well as the majority of the property (ENGEN 2018:4; 7-8).

ENGEN (2018) excavated five (5) exploratory backhoe test pits within the property (Figure 5). Soils encountered consisted of alluvium, colluvium and Pauba Formation bedrock (ENGEN 2018:3). Alluvium (**Qal**) was found in Test Pit 1 from the surface to the bottom of the excavation at about 15 ft below the surface (from ENGEN 2018: Exhibit 2). Colluvium (**CQal**) was found in Test Pit 2 to a depth of approximately 1 ft. Below this colluvium they reported "Pauba Formation Bedrock?" (they labeled it **Qps**) (see Figure 5) to the bottom of the excavation at about 15 ft below the surface. Test Pit 3 also encountered colluvium at the surface to a depth of approximately 2.5 ft, with Pauba Formation Bedrock (**Qps**) below that to the bottom of the excavation, which was about 5 ft below the surface. Soils in Test Pit 4 were essentially the same as Test Pit 3, with the excavation ending at only about 3 ft below the surface. The surface colluvium in Test Pit 5 extended to a depth of slightly more than 2.5 ft before the Pauba Formation Bedrock (**Qps**) was encountered. Test Pit 5 was terminated at 3.5 ft below the surface (from ENGEN 2018: Exhibit 2). ENGEN described the Pauba Formation Bedrock (**Qps**) as a sandstone formation comprised of silty and clayey sands to gravelly clean sands that is partially weathered near the surface and becomes dense to very dense at a depth of 2 to 3 feet (ENGEN 2018:8).

#### DISCUSSION

Based on the slope of the project area and the final elevation of the house pad, several areas will be graded to obtain the final elevations of the house pad and the surrounding areas (Figure 3). The alluvium and colluvium are both derived from the Pauba Formation, which is known to be fossiliferous, so paleontological resources could be present in those soils.

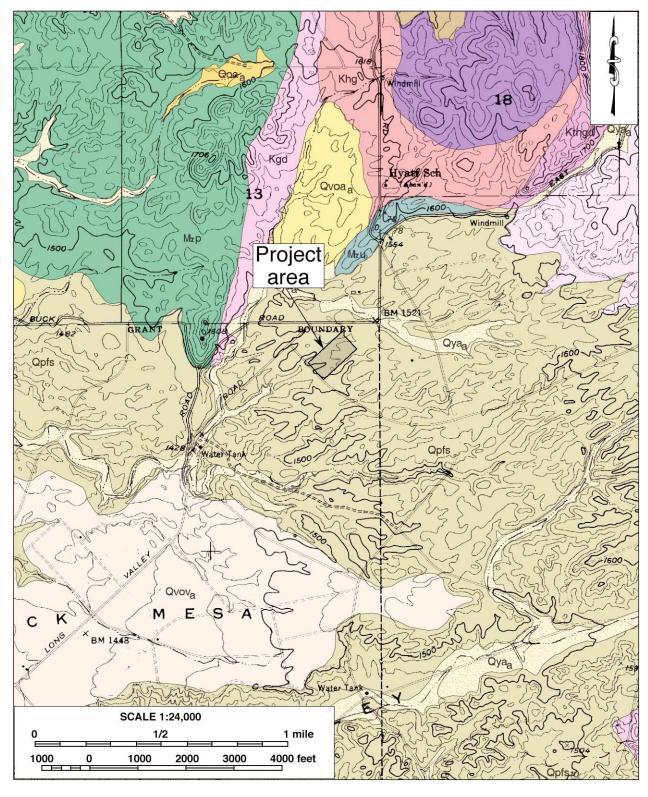


Figure 4. Surface geology of the project area and vicinity, as mapped by Morton and Kennedy (2003).

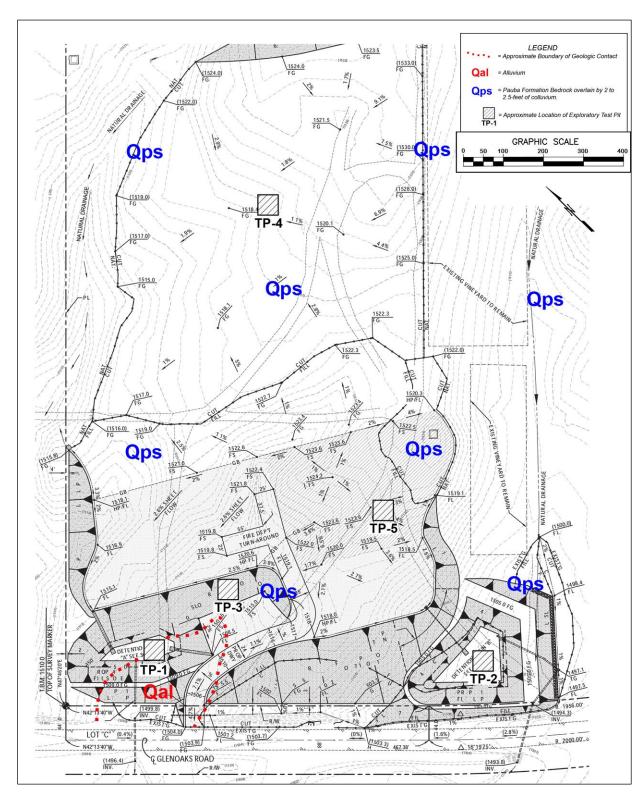


Figure 5. ENGEN's Plate 1 (adapted) showing mapped soils and location of their Test Pits (ENGEN 2018).

A records review of the San Bernardino County Museum's Regional Paleontologic Locality Inventory for a paleontological resource assessment of a property only approximately 0.3 miles southeast along Glenoaks Road, and in the same geologic formation, stated that the sandstone facies of the Pauba Formation (**Qpfs**) has previously proven abundantly fossiliferous (Scott 2008). Scott also stated that this facies has yielded vertebrate and invertebrate fossils of middle Pleistocene age. Scott went on to say that Kennedy (1977) recognized two distinct lithologic units in the Pauba Formation: (1) a light-brown, moderately well-indurated, extensively crossbedded, channeled and filled sandstone and siltstone facies that contains occasional intervening cobble-and-boulder conglomerate beds and (2) a grayish-brown, well-indurated, poorly sorted fanglomerate and mudstone facies (Scott 2008, citing Kennedy 1977:5). At that time the closest paleontological locality was approximately 2 miles west of that project area (Scott 2008). However, more than 400 paleontologic resource localities have been recorded from the Pauba Formation and the underlying unnamed sandstone formation in the Murrieta and Temecula areas. These localities include fossil vertebrates including ground sloth, mammoth, mastodon, horse, tapir, camel, llama, pronghorn, dire wolf, short-faced bear and sabre-toothed cat. The deposits have also yielded important small vertebrate fossils including rodent, rabbit, bat, shrew, bird, lizard, turtle and tortoise (Scott 2008).

Since the Pauba Formation is known to be extremely fossiliferous and the alluvium and colluvium on the property is derived from this Formation, paleontological monitoring is recommended for earthmoving activities in all areas and all soil types on the property. Any fossils recovered from the study area will be considered to be of significant scientific interest if they are unique, unusual, rare, uncommon, diagnostically or stratigraphically important; provide new, important information about evolutionary relationships and developmental trends; if they provide data regarding the development of biological communities and of interaction between paleobotanical and paleozoological biotas; if the fossils demonstrate unusual or spectacular circumstances in the history of life; if they add, stratigraphically, taxonomically, and/or regionally to the knowledge of the specific area; and/or if the fossil types are in danger of being depleted or destroyed. Significant paleontological resources can include fossil remains of large to very small aquatic and terrestrial vertebrates, remains of plants or animals previously not represented in certain portions of the stratigraphic column, and fossils that might aid in stratigraphic correlations, particularly those offering data for the interpretation of tectonic events, geomorphologic evolution, paleoclimatology, and the relationships of aquatic and terrestrial species. Analyses of recovered paleontological resources will include a determination of their significance based on their potential to add to our knowledge of paleo-lifeforms in the area.

#### PALEONTOLOGIC MONITORING METHODS

Paleontological monitoring is recommended for the proposed project, especially in areas of undisturbed Pauba Formation. Previously disked or plowed agricultural land should also be monitored because, even though it has been disturbed, no monitoring occurred during those disturbances and, thus, fossils may be present even in those soils. Additionally, grading may quickly pass through these previously disturbed soils into the native undisturbed Pauba Formation. To preserve and protect any paleontological resources that may be present, a standard paleontological monitoring program that will also adhere to the County Conditions should be followed. The program is outlined below.

A qualified paleontological monitor should attend the preconstruction meeting. The representative will meet with staff and construction crew members and provide educational and sensitivity training. At that time the representative will also establish guidelines and review paleontological monitoring procedures, protocols, and safety issues. Basic construction activities, including the work schedule, will also be discussed. This will be done to ensure that everyone understands the importance of preserving and protecting any paleontological resources that may be encountered and the need to implement any mitigation measures that may be required to be initiated during construction.

The Paleontological Monitor will be properly equipped with tools and supplies to allow rapid documentation and removal of specimens. These would include a GPS unit, compass, graph paper, trowels, brushes, screens, hammers, picks, shovels, foil, burlap, and buckets, bags, and boxes. Additional monitors/assistants may come to the site to help remove large or an abundant amount of fossils.

Some fossils are too small to be readily visible within the sedimentary matrix. These can include bones or fragments of bones from small mammals, birds, reptiles, and amphibians, as well as non-vertebrate paleoenvironmental indicators (such as foraminifers, gastropods, plant seeds, etc.). An adequate amount of bulk matrix sampling and screening of fine-grained sedimentary soils that may contain such fossils will be inspected on-site. If evidence of micro-fossils is found in these "hand samples," then additional bulk samples should be collected and taken to the paleontological lab for processing and closer inspection. The monitor will have the power to halt or divert earthmoving activities from fossiliferous soils until a sufficient quantity of the matrix has been recovered for sampling.

If macro-fossils (fossils large enough to be visible and recognizable) are encountered, earth-moving activities must be halted or diverted until the remains have been reported, evaluated, and recovered, or until potential project effects have been otherwise mitigated to the extent deemed necessary by the qualified project paleontologist. When potential paleontological resources are encountered, the monitor will flag the area for avoidance, identify them (to the extent possible in the field), record pertinent geologic and geographic information, plot fossil/sample site locations, characterize the sedimentary lithology, take photographs, and collect the resources. Any fossil discoveries will be immediately reported to the property owner, who will then immediately notify the County Geologist of the discovery. If fossil remains are found, soils will be recovered from around the fossil site and processed to allow for the recovery of smaller fossil remains. Test samples of soil should also be recovered from other areas in the rock unit, if appropriate. Earthmoving will be allowed to proceed through the resource area only after the project paleontologist determines the fossils have been recovered and/or the area mitigated to the extent necessary.

While monitoring the grading activities the monitor will observe the soils that are being exposed and, at some point will witness the deepest cuts that will occur. This will provide a sample of stratigraphy at the site, which should be essentially the same throughout the project area. If the monitor determines that the sediments are cobbly and not likely to contain fossils, it may be decided that spot checking to verify that the sediments have not changed is appropriate. Likewise, if, after a suitable amount of monitoring of the earth-moving has occurred and no paleontological resources have been discovered, the level of monitoring may be reduced or suspended, at the discretion of the paleontological monitor and principal investigator.

All recovered fossils and its associated soil matrix will be transported to the paleontology laboratory for tracking, processing, cataloguing, and analyses. Potentially fossiliferous sediment samples will be water-washed or dry-screened through stacked sets of increasingly finer-mesh screens and sun dried. They will then be visually examined, when necessary with the aid of a hand lens and/or a binocular microscope, and hand sorted to remove the fossil specimens. The smaller mesh screens are used to recover microscopic fossils, such as ostracodes, small teeth, and foraminifera. All fossils will be identified to lowest taxonomic level possible by the project paleontologist.

A final report of methods and results of the paleontological treatment plan will be provided at the end of the monitoring program. The report will include a description of finds, with an appended itemized list (catalogue) of fossil specimens recovered during grading (if any). It will include a discussion of the significance of the resources and how impacts to them have been mitigated. The report shall be submitted to the County Geologist for review and approval.

After identification and interpretation, and approval of the report, all recovered fossil specimens, will be prepared to a point of permanent preservation. The resources will be prepared for curation according to the requirements of the curation facility designated by the County. Pursuant the County of Riverside "SABER Policy," paleontological fossils found in the County of Riverside should, by preference, be curated at the Western Science Center in the City of Hemet. The remains will then be accessioned into the museum's repository fossil collection, where they will be permanently stored, maintained, and, along with associated specimen and site data, made available for future study by qualified scientific investigators. The project owner, Austin Vineyard LLC, is responsible for the cost of the curation.

#### REFERENCES

#### **ENGEN (ENGEN Corporation)**

2018 Preliminary Geotechnical Feasibility Study, Austin Vineyard, APN: 942-030-006, Temecula, California.

English, W. A.

1926 Geology and Oil Resources of the Puente Hills Region, Southern California. U.S. Geological Survey Bulletin 146. Washington, D.C.

Harms, Nancy S.

1996 A Precollegiate Teachers Guide to California Geomorphic/Physiographic Provinces. National Association of Geoscience Teachers, Far West Section, Concord, California.

Jahns, R. H.

1954 Geology of the Peninsular Range Province, Southern California and Baja California. In R. H. Jahns (ed.): *Geology of Southern California*; Chapter II. California Division of Mines Bulletin 170, Part 3. San Francisco.

Jenkins, Olaf P.

1980 Geomorphic Provinces Map of California. *California Geology* 32(2):40-41. California Division of Mines and Geology, Sacramento.

Kennedy, Michael P.

1977 Recency and Character of Faulting along the Elsinore Fault Zone in Southern Riverside County, California. California Division of Mines and Geology Special Report 131. Sacramento. Mann, John F., Jr.

1955 Geology of a Portion of the Elsinore Fault Zone, California. California Division of Mines Special Report 43. San Francisco.

Morton, Douglas M. and Michael P. Kennedy, K. R. Bovard, and Diane Burns

2003 Geologic Map of the Bachelor Mountain 7.5' quadrangle, Riverside County, California; Version 1.0. U.S. Geologic Survey Open-File Report OF 03-103. Digital preparation by Kelly R. Boyard and Diane Burns.

Scott. Eric

2008 Paleontology Records Review, "Glen Oaks near Vino" Development, Rancho California, Riverside County, California. Records review letter report prepared by the San Bernardino County Museum, Section of Geological Sciences, Redlands, California.

USGS (United States Geological Survey, U.S. Department of the Interior)

Map: Bachelor Mtn., Calif. (7.5', 1:24,000); 1953 edition photorevised in 1973 and photoinspected in 1978.

Woodford, Alfred O., John S. Shelton, Donald O. Doehring, and Richard K. Morton

1971 Pliocene-Pleistocene History of the Perris Block, Southern California. *Geological Society of America Bulletin* 82(12):3421-3448.

# MICHAEL HOGAN, PH.D., RPA\* Principal Investigator

#### **Education**

1991	Ph.D., Anthropology, University of California, Riverside.
1981	B.S., Anthropology, University of California, Riverside; with honors.
1980-1981	Education Abroad Program, Lima, Peru.
2002	"Section 106—National Historic Preservation Act: Federal Law at the Local Level,"
	UCLA Extension Course #888.
2002	"Recognizing Historic Artifacts," workshop presented by Richard Norwood,
	Historical Archaeologist.
2002	"Wending Your Way through the Regulatory Maze," symposium presented by the
	Association of Environmental Professionals.
1992	"Southern California Ceramics Workshop," presented by Jerry Schaefer.
1992	"Historic Artifact Workshop," presented by Anne Duffield-Stoll.

#### Registrations

\*Registered Professional Archaeologist 28576644

#### **Professional Experience**

2002-	Principal Investigator, CRM TECH, Riverside/Colton, California.
1999-2002	Project Archaeologist/Field Director, CRM TECH, Riverside.
1996-1998	Project Director and Ethnographer, Statistical Research, Inc., Redlands.
1992-1998	Assistant Research Anthropologist, University of California, Riverside
1992-1995	Project Director, Archaeological Research Unit, U.C. Riverside.
1993-1994	Adjunct Professor, Riverside Community College, Mt. San Jacinto College, U.C.
	Riverside, Chapman University, and San Bernardino Valley College.
1991-1992	Crew Chief, Archaeological Research Unit, U.C. Riverside.
1984-1998	Project Director, Field Director, Crew Chief, and Archaeological Technician for
	various southern California cultural resources management firms.

#### **Research Interests**

Paleo-environments, Paleo-Biodiversity, Evolutionary Relationships, Stratigraphic Relationships; Cultural Resource Management, Southern Californian Archaeology, Settlement and Exchange Patterns, Specialization and Stratification, Culture Change, Native American Culture.

#### **Cultural Resources Management Reports**

Principal investigator for, author or co-author of, and contributor to numerous cultural resources management study reports since 1986.

#### **Memberships**

Society for American Archaeology; Society for California Archaeology; Pacific Coast Archaeological Society; Coachella Valley Archaeological Society.

#### PROJECT GEOLOGIST/PALEONTOLOGIST Harry M. Quinn, M.S., California Professional Geologist #3477

#### Education

- 1968 M.S., Geology, University of Southern California, Los Angeles, California.
- 1964 B.S, Geology, Long Beach State College, Long Beach.
- 1962 A.A., Los Angeles Harbor College, Wilmington, California.
- Graduate work oriented toward invertebrate paleontology; M.S. thesis completed as a stratigraphic paleontology project on the Precambrian and Lower Cambrian rocks of Eastern California.

#### **Professional Experience**

2000-	Project Paleontologist, CRM TECH, Riverside/Colton, California.
1998-	Project Archaeologist, CRM TECH, Riverside/Colton, California.
1992-1998	Independent Geological/Geoarchaeological/Environmental Consultant, Pinyon Pines,
	California.
1994-1996	Environmental Geologist, E.C E.S., Inc, Redlands, California.
1988-1992	Project Geologist/Director of Environmental Services, STE, San Bernardino, California.
1987-1988	Senior Geologist, Jirsa Environmental Services, Norco, California.
1986	Consulting Petroleum Geologist, LOCO Exploration, Inc. Aurora, Colorado.
1978-1986	Senior Exploration Geologist, Tenneco Oil E & P, Englewood, Colorado.
1965-1978	Exploration and Development Geologist, Texaco, Inc., Los Angeles, California.

#### **Previous Work Experience in Paleontology**

- 1969-1973 Attended Texaco company-wide seminars designed to acquaint all paleontological laboratories with the capability of one another and the procedures of mutual assistance in solving correlation and paleo-environmental reconstruction problems.
- 1967-1968 Attended Texaco seminars on Carboniferous coral zonation techniques and Carboniferous smaller foraminifera zonation techniques for Alaska and Nevada.
- 1966-1972, 1974, 1975 Conducted stratigraphic section measuring and field paleontological identification in Alaska for stratigraphic controls. Pursued more detailed fossil identification in the paleontological laboratory to establish closer stratigraphic controls, mainly with Paleozoic and Mesozoic rocks and some Tertiary rocks, including both megafossil and microfossil identification, as well as fossil plant identification.
- 1965 Conducted stratigraphic section measuring and field paleontological identification in Nevada for stratigraphic controls. Pursued more detailed fossil identification in the paleontological laboratory to establish closer stratigraphic controls, mainly with Paleozoic rocks and some Mesozoic and Tertiary rocks. The Tertiary work included identification of ostracods from the Humboldt and Sheep Pass Formations and vertebrate and plant remains from Miocene alluvial sediments.

#### **Memberships**

Society of Vertebrate Paleontology; American Association of Petroleum Geologists; Association of Environmental Professionals; Rocky Mountain Association of Geologists, Pacific Section; Society of Economic Paleontologists and Mineralogists; San Bernardino County Museum.

#### **Publications in Geology**

Five publications in Geology concerning an oil field study, a ground water and earthquake study, a report on the geology of the Santa Rosa Mountain area, and papers on vertebrate and invertebrate Holocene Lake Cahuilla faunas.



# RIVERSIDE COUNTY PLANNING DEPARTMENT

TLMA Assistant Director Community Development

### **Planning Case Progress Report**

As of: December 20, 2018 6:06 pm

\*Please note this is a project status report current only at the time it was printed, and it is subject to change.

Project / Case Information:

Current Status: Applied

Case

CEQ180113

Planner: Tim Wheeler

Number:

Description:

Environmental Assessment for BGR1800141.

Situs

35598 GLEN OAK RD

Address:

Project

942030008

APN(s):

#### LDC Project Review Status:

Cleared -

Paleontology / Planning

Dan Walsh

12/18/2018

Recommend Approval

#### PRIMP REQUIRED PRIOR TO GRADING

<b>Assignment Pending</b>	Traffic Study / Transportation	Benjie Cho	12/18/2018
Pending Review	Development Review / Transportation	Kevin Tsang	12/18/2018
Assignment Pending	Environmental Health / Environmental Health	Matt Riha	12/18/2018
Cleared - Recommend	Assistant Fire Marshal / Office of Fire Marshal	theDavid Myers	12/18/2018

Approval

Revisions to previously approved grading plan BGR1800141 require fire department approval.

Corrections

Grading / Transportation

Sam Gonzalez

12/18/2018

Corrections:

General Correction General **GRADING CORRECTIONS** 

Riverside Office • 4080 Lemon Street, 12th Floor P.O. Box 1409, Riverside, California 92502-1409 (951) 955-3200 • Fax (951) 955-3157

Desert Office • 77-588 El Duna Court, Suite H Palm Desert, California 92211 (760) 863-8277 • Fax (760) 863-7040

Corrective Action: CORRECTIONS: CEQ180113 Submittal 1

DATE: 12/12/2018

Contact person: Sam Gonzalez

PH: (951) 955-1866

EMAIL: sdgonzal@rivco.org

The Grading Division has reviewed the submitted exhibit for CEQ180113. The review was performed on electronic submittal using Bluebeam software. For Grading Division Comments, please see Bluebeam Session ID: 274-226-759. In order to review the comments Bluebeam software is required. A viewer version of Bluebeam is available as a free download here: http://www.bluebeam.com/us/products/free-viewer/ Please contact your Riverside County Planner for an "Invite". Grading Comments:

- 1) Design so that on-site storm drain is not connected to existing 18" CMP within Glenoaks Road.
- 2) Identify areas around Detention Basin "B" and show proposed drainage flow.
- 3) Design so slopes are located within the property and do not straddle the property line.

Assignment Pending	Geology / Planning	David Jones	12/18/2018
Assignment Pending	Cultural / Planning	Heather Thomson	12/18/2018
Corrections	Biology / Planning	Don Copeland	12/18/2018
Assignment Pending	Park and Open Space / Open Space	Park and Phayvanh Nanthavongdouangsy	12/18/2018
Assignment Pending	Flood Control / Flood Co	ontrol Jesus Bermudez	12/18/2018
No Comment	Waste Resources / Was Resources	ste Kinika Hesterly	12/18/2018
Pending Review	Current / Planning	Tim Wheeler	12/18/2018
Assignment Pending	Project Manager / Plann	ning	12/18/2018

BFE1800024 Agricultural Grading/Clearing Cert Exempt

35620 Glenoaks Temecula

BGR1800141 Precise Grading for SFD

BMP1800135 BMP for Precise Grading for SFD

FPRBP1800761 BGR1800141 Precise Grading for SFD

FPRBP1800761 BGR1800141 Precise Grading for SFD

35598 Glen Oaks Temecula

## Conditions of Approval

060 - Planning-PAL

PRIMP REQUIRED

This site is mapped in the County's General Plan as having a High potential for paleontological resources (fossils). Proposed project site grading/earthmoving activities could potentially impact this resource. HENCE:

#### PRIOR TO ISSUANCE OF GRADING PERMITS:

- 1. The applicant shall retain a qualified paleontologist approved by the County to create and implement a project-specific plan for monitoring site grading/earthmoving activities (project paleontologist).
- 2. The project paleontologist retained shall review the approved development plan and grading plan and conduct any pre-construction work necessary to render appropriate monitoring and mitigation requirements as appropriate. These requirements shall be documented by the project paleontologist in a Paleontological Resource Impact Mitigation Program (PRIMP). This PRIMP shall be submitted to the County Geologist for approval prior to issuance of a Grading Permit. Information to be contained in the PRIMP, at a minimum and in addition to other industry standards and Society of Vertebrate Paleontology standards, are as follows:
- 1. Description of the proposed site and planned grading operations.
- Description of the level of monitoring required for all earth-moving activities in the project area.
- 3. Identification and qualifications of the qualified paleontological monitor to be employed for grading operations monitoring.
- 4. Identification of personnel with authority and responsibility to temporarily halt or divert grading equipment to allow for recovery of large specimens.
- 5. Direction for any fossil discoveries to be immediately reported to the property owner who in turn will immediately notify the County Geologist of the discovery.
- 6. Means and methods to be employed by the paleontological monitor to quickly salvage fossils as they are unearthed to avoid construction delays.
- 7. Sampling of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates.
- 8. Procedures and protocol for collecting and processing of samples and specimens.
- Fossil identification and curation procedures to be employed.
- 10. Identification of the permanent repository to receive any recovered fossil material. \*Pursuant the County "SABER Policy", paleontological fossils found in the County should, by preference, be directed to the Western Science Center in the City of Hemet. A written agreement between the property owner/developer and the repository must be in place prior to site grading.
- 11. All pertinent exhibits, maps and references.
- 12. Procedures for reporting of findings.
- 13. Identification and acknowledgement of the developer for the content of the PRIMP as well as acceptance of financial responsibility for monitoring, reporting and curation fees. The property owner and/or applicant on whose land the paleontological fossils are discovered shall provide appropriate funding for monitoring, reporting, delivery and curating the fossils at the institution where the fossils will be placed, and will provide confirmation to the County that such funding has been paid to the institution.
- 14. All reports shall be signed by the project paleontologist and all other professionals responsible for the report's content (eg. PG), as appropriate. One original signed copy of the report(s) shall be submitted to the County Geologist along with a copy of this condition and the grading plan for appropriate case processing and tracking. These documents should not be submitted to the project Planner, Plan Check staff, Land Use Counter or any other County office. In addition, the applicant shall submit proof of hiring (i.e. copy of executed contract, retainer agreement, etc.) a project paleontologist for the in-grading implementation of the PRIMP.

Safeguard Artifacts Being Excavated in Riverside County (SABER)

Comments: RECOMMEND DWALSH 20181211