APPENDIX 6c

PALEONTOLOGICAL RESOURCES ASSESSMENT REPORT

PRAIRIE VIEW MULTI-FAMILY RESIDENTIAL PROJECT

Assessor's Parcel Number 311-502-001
City of Perris, Riverside County, California

For Submittal to:

City of Perris
Development Services Department, Planning Division
101 North D Street
Perris, CA 92570

Prepared for:

Tom Dodson & Associates
2150 North Arrowhead Avenue
San Bernardino, CA 92405

Prepared by:

Deirdre Encarnación, Paleontologist/Report Writer
Ron Schmidtling, Principal Paleontologist
CRM TECH
1016 East Cooley Drive, Suite A/B
Colton, CA 92324

Bai "Tom" Tang, Principal Investigator
Michael Hogan, Principal Investigator

July 13, 2022

CRM TECH Contract No. 3893P
Approximately 13.4 acres
USGS Perris, Calif., 7.5' (1:24,000) quadrangle
Section 29, T4S R3W, San Bernardino Baseline and Meridian

EXECUTIVE SUMMARY

Between May and July 2022, at the request of Tom Dodson & Associates, CRM TECH performed a paleontological resource assessment on approximately 13.4 acres of vacant land in the City of Perris, Riverside County, California. The subject property of the study, Assessor's Parcel Number 311-502-001, is located on the north side of Dale Street between Wilson Avenue and Murrieta Road, in the northeast quarter of Section 29, Township 4 South, Range 3 West, San Bernardino Baseline and Meridian as depicted in the United States Geological Survey Perris, California, 7.5' quadrangle.

The study is part of the environmental review process for the proposed construction of a multi-family residential complex with 31 buildings, paved parking lots, concrete sidewalks, a community center, and other associated amenities. The City of Perris, as the lead agency for the project, required the study in compliance with the California Environmental Quality Act (CEQA). The purpose of the study is to provide the City with the necessary information and analysis to determine whether the proposed project would adversely affect any significant, nonrenewable paleontological resources, as required by CEQA, and to design a paleontological mitigation program if necessary.

In order to identify any paleontological resource localities that may exist in or near the project area and to assess the probability for such resources to be encountered during the project, CRM TECH initiated a records search at the appropriate repository, conducted a literature review, and carried out a systematic field survey of the project area. The results of these research procedures indicate that the proposed project's potential to impact significant, nonrenewable paleontological resources is low in the previously disturbed surface and near-surface soils of Holocene age but high in the subsurface deposits of older Pleistocene alluvial sediments. Therefore, CRM TECH recommends that a paleontological resource impact mitigation program be developed and implemented during the project to prevent impacts on such resources or reduce them to a level less than significant.

As the primary component of the mitigation program, all earth-moving operations impacting relatively undisturbed soils in the project area beyond the depth of three feet should be monitored periodically by a qualified paleontological monitor to identify potentially fossil-bearing sediments when they are encountered, at which time continuous monitoring will become necessary. Samples of sediment should be collected and processed to recover small fossils, and all fossil remains should be identified and curated at a repository with permanent retrievable storage. Under these conditions, CRM TECH further recommends that the project may be cleared to proceed in compliance with CEQA provisions on paleontological resources.

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INTRODUCTION

Between May and July 2022, at the request of Tom Dodson & Associates, CRM TECH performed a paleontological resource assessment on approximately 13.4 acres of vacant land in the City of Perris, Riverside County, California (Fig. 1). The subject property of the study, Assessor's Parcel Number 311-502-001, is located on the north side of Dale Street between Wilson Avenue and Murrieta Road, in the northeast quarter of Section 29, Township 4 South, Range 3 West, San Bernardino Baseline and Meridian as depicted in the United States Geological Survey (USGS) Perris, California, 7.5' quadrangle (Figs. 2, 3).

The study is part of the environmental review process for the proposed construction of a multi-family residential complex with 31 buildings, paved parking lots, concrete sidewalks, a community center, and other associated amenities. The City of Perris, as the lead agency for the project, required the study in compliance with the California Environmental Quality Act (CEQA; PRC §21000, et seq.). The purpose of the study is to provide the City with the necessary information and analysis to determine whether the proposed project would adversely affect any significant, nonrenewable paleontological resources, as required by CEQA, and to design a paleontological mitigation program if necessary.

In order to identify any paleontological resource localities that may exist in or near the project area and to assess the probability for such resources to be encountered during the project, CRM TECH initiated a records search at the appropriate repository, conducted a literature review, and carried out a systematic field survey of the project area. The following report is a complete account of the methods, results, and final conclusion of this study. Personnel who participated in the study are named in the appropriate sections below, and their qualifications are provided in Appendix 1.

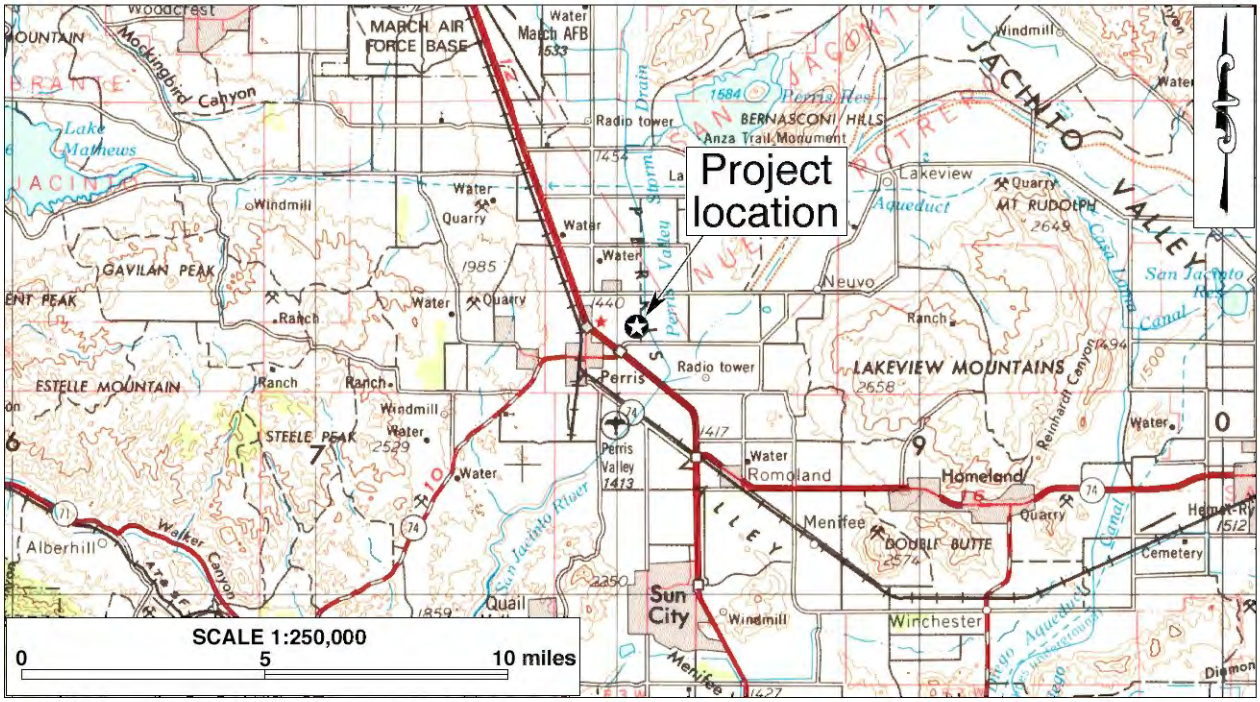

Figure 1. Project vicinity. (Based on USGS Santa Ana, Calif., 120'x60' quadrangle, 1979 edition)

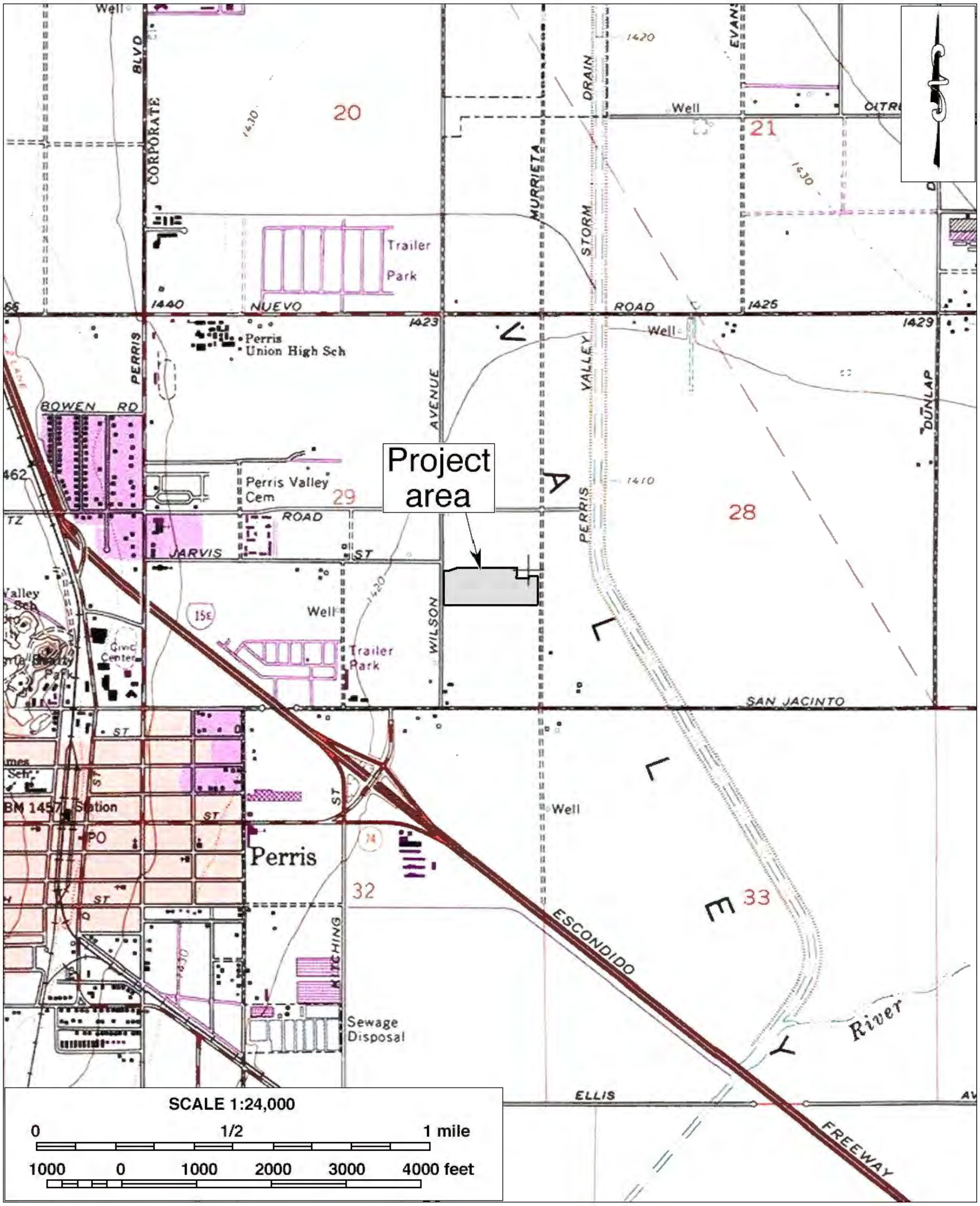

Figure 2. Project location. (Based on USGS Perris, Calif., 7.5' quadrangle, 1979 edition)

Figure 3. Aerial image of the project area.

PALEONTOLOGICAL RESOURCES

DEFINITION

Paleontological resources represent the remains of prehistoric life, exclusive of any human remains, and include the localities where fossils were collected as well as the sedimentary rock formations in which they were found. The defining character of fossils or fossil deposits is their geologic age, typically older than recorded human history and/or older than the middle Holocene Epoch, which dates to circa 5,000 radiocarbon years (Society of Vertebrate Paleontology 2010:11).

Common fossil remains include marine and freshwater mollusk shells; the bones and teeth of fish, amphibians, reptiles, and mammals; leaf imprint assemblages; and petrified wood. Fossil traces, another type of paleontological resource, include internal and external molds (impressions) and casts created by these organisms. These items can serve as important guides to the age of the rocks and sediments in which they are contained, and may prove useful in determining the temporal relationships between rock deposits from one area and those from another as well as the timing of geologic events. They can also provide information regarding evolutionary relationships, development trends, and environmental conditions.

Fossil resources generally occur only in areas of sedimentary rock (e.g., sandstone, siltstone, mudstone, claystone, or shale). Because of the infrequency of fossil preservation, fossils, particularly vertebrate fossils, are considered nonrenewable paleontological resources. Occasionally fossils may be exposed at the surface through the process of natural erosion or because of human disturbances; however, they generally lay buried beneath the surficial soils. Thus, the absence of fossils on the surface does not preclude the possibility of their being present within subsurface deposits, while the presence of fossils at the surface is often a good indication that more remains may be found in the subsurface.

SIGNIFICANCE CRITERIA

According to guidelines proposed by Eric Scott and Kathleen Springer (2003:6) of the San Bernardino County Museum, paleontological resources can be considered to be of significant scientific interest if they meet one or more of the following criteria:

1. The fossils provide information on the evolutionary relationships and developmental trends exhibited among organisms, living or extinct;
2. The fossils provide data useful in determining the age(s) of the rock unit or sedimentary stratum, including data important in determining the depositional history of the region and the timing of geologic events therein;
3. The fossils provide data regarding the development of biological communities or the interactions between paleobotanical and paleozoological biotas;
4. The fossils demonstrate unusual or spectacular circumstances in the history of life; and/or
5. The fossils are in short supply and/or in danger of being depleted or destroyed by the elements, vandalism, or commercial exploitation, and are not found in other geographic locations.

PALEONTOLOGICAL SENSITIVITY

The fossil record is unpredictable, and the preservation of organic remains is rare, requiring a particular sequence of events involving physical and biological factors. Skeletal tissue with a high percentage of mineral matter is the most readily preserved within the fossil record; soft tissues not intimately connected with the skeletal parts, however, are the least likely to be preserved (Raup and Stanley 1978). For this reason, the fossil record contains a biased selection not only of the types of organisms preserved but also of certain parts of the organisms themselves. As a consequence, paleontologists are unable to know with certainty, the quantity of fossils or the quality of their preservation that might be present within any given geologic unit.

Sedimentary units that are paleontologically sensitive are those geologic units (mappable rock formations) with a high potential to contain significant nonrenewable paleontological resources. More specifically, these are geologic units within which vertebrate fossils or significant invertebrate fossils have been determined by previous studies to be present or are likely to be present. These units include, but are not limited to, sedimentary formations that contain significant paleontological resources anywhere within their geographical extent as well as sedimentary rock units temporally or lithologically amenable to the preservation of fossils.

A geologic formation is defined as a stratigraphic unit identified by its lithic characteristics (e.g., grain size, texture, color, and mineral content) and stratigraphic position. There is a direct relationship between fossils and the geologic formations within which they are enclosed and, with sufficient knowledge of the geology and stratigraphy of a particular area, it is possible for paleontologists to reasonably determine the formation's potential to contain significant nonrenewable vertebrate, invertebrate, marine, or plant fossil remains.

The paleontological sensitivity for a geologic formation is determined by the potential for that formation to produce significant nonrenewable fossils. This determination is based on what fossil resources the particular geologic formation has produced in the past at other nearby locations. Determinations of paleontologic sensitivity must consider not only the potential to yield a large collection of fossil remains but also the potential to yield a few fossils that can provide new and significant taxonomic, phylogenetic, and/or stratigraphic data.

The Society of Vertebrate Paleontology issued a set of standard guidelines intended to assist paleontologists to assess and mitigate any adverse effects/impacts to nonrenewable paleontological resources. The guidelines defined four categories of paleontological sensitivity for geologic units that might be impacted by a proposed project, as listed below (Society of Vertebrate Paleontology 2010:1-2):

- **High Potential**: Rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered.
- **Undetermined Potential**: Rock units for which little information is available concerning their paleontological content, geologic age, and depositional environment.
- **Low Potential**: Rock units that are poorly represented by fossil specimens in institutional collections, or based on general scientific consensus only preserve fossils in rare circumstances.
- **No Potential**: Rock units that have no potential to contain significant paleontological resources, such as high-grade metamorphic rocks and plutonic igneous rocks.

SETTING

The City of Perris is situated on the northwestern edge of the Perris Valley, a semi-arid inland alluvial valley in western Riverside County that extends generally in a northwest-southeast direction. A number of isolated granitic mountains, such as the Lakeview Mountains and the Bernasconi Hills, separate the Perris Valley from the nearby Moreno, San Jacinto, and Menifee Valleys. These valleys are sub-basins of the San Jacinto watershed, one of the three major geographical subdivisions of the Santa Ana Basin. This valley complex is bounded on the northeast by the San Jacinto Mountains and on the southwest by the Santa Ana Mountains. The climate and environment of the region are typical of southern California's inland valleys, with temperatures reaching over 100 degrees Fahrenheit in summer and dipping to near freezing in winter. The average annual precipitation is approximately 12 inches, most of which occurs between December and March.

Geologically, the Perris Valley lies in the northern portion of the Peninsular Ranges geomorphic province, close to the boundary with the adjacent Transverse Ranges province (Jenkins 1980:40-41; Harms 1996:131). The Peninsular Ranges province is made up of a series of northwest-southeast trending structural blocks consisting of uplifted mountains that are separated by valley basins developed along the intervening fault zones. The mountains are made up mainly of igneous intrusive rocks, metasedimentary rocks, and some metavolcanic rocks (Harden 2004:466-468). The non-crystalline rocks in the eastern portion of the mountains contain mainly metasedimentary rocks of Paleozoic and older age, while the crystalline basement rocks consist mainly of Mesozoic-age granitic rocks with some scattered gabbroic intrusions (*ibid.*:466-468, 471-472).

The Perris Valley is a part of the Perris Block, one of the structural blocks in the Peninsular Ranges province. Situated between the San Jacinto and Elsinore-Chino fault zones, the Perris Block includes many tectonically controlled valley-and-ridge systems (English 1926). It 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 (*ibid.*). This structural block has 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 cover the low-lying areas of the block, which are filled with nonmarine sediments of upper Pliocene through Recent ages (Mann 1955:Plate 1; Kennedy 1977:5), and the ridges are composed of plutonic igneous rocks, metasedimentary rocks, and late-stage intrusive dikes.

More specifically, the project lies in a formerly agrarian area on the southeastern outskirts of the city that has been undergoing rapid residential and industrial transformation. It is bounded by Dale Street on the south, Wilson Avenue on the west, Murrieta Road on the east, and former agricultural land on the north. Historically also agricultural in use, portions of the project area were previously graded for streets and building pads but the entire parcel remains undeveloped and overgrown with vegetation. The terrain in the project area is relatively level, and the elevations range roughly from 1,420 feet to 1,425 feet above mean sea level. The surface soil is composed of yellowish-brown, fine- to medium-grain sands mixed with small to medium rocks, and the existing vegetation consists primarily of foxtail, tumbleweed, and ruderal grasses (Fig. 4).

Figure 4. Overview of the current natural setting of the project area. (Photograph taken on May 24, 2022; view to the northwest)

METHODS AND PROCEDURES

RECORDS SEARCH

The records search service for this study was provided by the Western Science Center (WSC) in Hemet. California, which is one of the local institutions that maintain files on regional paleontological localities as well as supporting maps and documents. The focus of the records search was to identify any known paleontological localities and previously performed paleontological resource studies within a one-mile radius of the project area. A copy of the records search results is attached to this report in Appendix 2.

LITERATURE REVIEW

In conjunction with the records search, CRM TECH report writer Deirdre Encarnación reviewed geological literature pertaining to the project vicinity under the direction of principal paleontologist Ron Schmidtling. Sources consulted during the review include primarily topographic, geologic, and soil maps of the Perris area, published geologic literature pertaining to the project location, preliminary paleontological sensitivity assessment by the general plans of the County of Riverside and the City of Perris, aerial and satellite images available at the Nationwide Environmental Title Research (NETR) Online website and through the Google Earth software, and other materials in the CRM TECH library, including unpublished reports produced during similar surveys in the vicinity.

FIELD SURVEY

On May 24, 2022, CRM TECH field director/paleontological surveyor Daniel Ballester carried out the field survey of the project area under Ron Schmidtling's direction. The survey was completed on foot at an intensive level by walking a series of parallel east-west transects at 15-meter (approximately 50-foot) intervals. In this way, the ground surface in the entire project area was systematically examined to determine soil types, verify the geological formations, and search for indications of paleontological remains. Ground visibility was generally fair (75%) despite the low-lying vegetative cover. In light of the extensive disturbance to the ground surface by past agricultural operations and grading throughout the project area, the visibility is considered adequate for the survey effort.

RESULTS AND FINDINGS

RECORDS SEARCH

The records search by the WSC identified no known paleontological localities within the project area or a one-mile radius (Stoneburg 2022; see App. 2). According to the WSC, the surface soils in the project area consist of alluvial sand and clay deposits of Holocene age, with alluvium and marine deposits ranging from Pliocene to Holocene in age present at a substantial depth (*ibid.*). The Holocene-age alluvial sand and clay deposits are considered to have a high preservation value but a low paleontological sensitivity based on the relatively young age of deposition.

The WSC further states that, although these uppermost layers of soil would be too young to contain significant paleontological resources, deeper excavations extending into the older Pleistocene alluvial sediments may encounter vertebrate fossil remains at substantial depth (*ibid*.). Therefore, the WSC concludes that excavations associated with the proposed residential development are unlikely to be paleontologically sensitive but caution should be observed during the project (*ibid.*).

LITERATURE REVIEW

The surface geology in the project area was mapped by Rogers (1965) as *Qal*, or alluvium of Holocene age. This is the same material mapped as the surface material in the Domenigoni Valley, the site of important vertebrate paleontological finds in recent decades (Springer and Scott 1994:47A; Springer et al. 1998:79A; Springer et al. 1999:77A). Most of these fossil remains were recovered from depths greater than 10 feet below the surface, unearthed because of the deep excavation required for a major reservoir construction, much deeper than normally required for typical residential development projects except in such cases as utility installation.

More recently, Morton (2003) mapped the surface geology in most of the project area as Qv_{sc} with some Qyv_{sa} in the northwest corner (Fig. 5). The *Qv* series are defined as active valley deposits of late Holocene age, "active and recently active fluvial deposits along valley floors; gravel, sand, and silt; unconsolidated" (Morton 2003). The *Qyv* soils are described as young alluvial-valley deposits of Holocene and late Pleistocene age (*ibid*.). The County of Riverside's paleontological sensitivity map classifies the project location as high sensitivity ("High B"; RCIT n.d.):

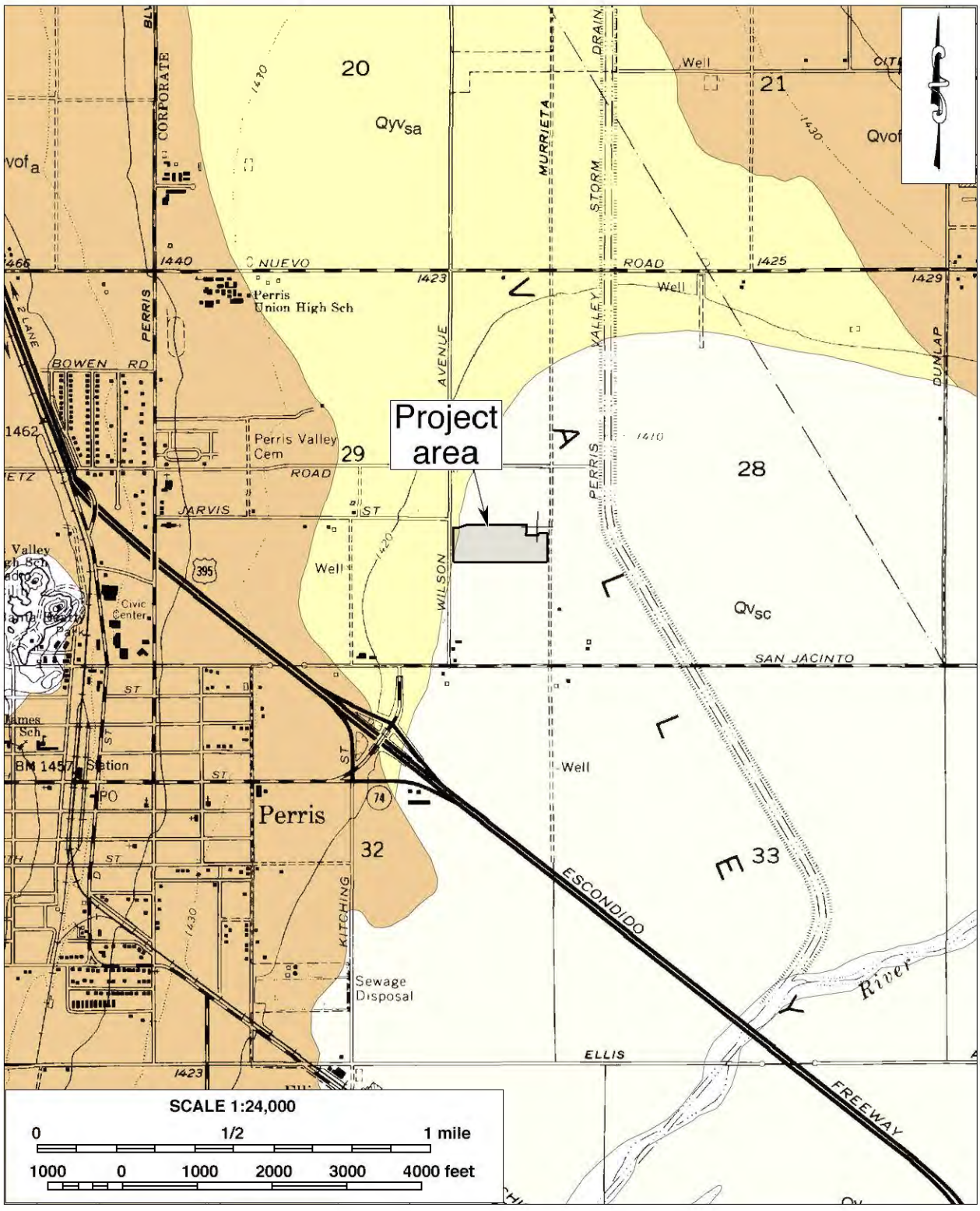

Figure 5. Geologic map of the project vicinity. (Source: Morton 2003)

> High B is a sensitivity equivalent to High A, but is based on the occurrence of fossils at a specified depth below the surface. This category indicates fossils that are likely to be encountered at or below 4 feet of depth and may be impacted during construction activities. (County of Riverside 2015:4.9-11).

The City of Perris General Plan identifies the project area as a part of Area No. 5, which is defined as younger alluvium overlying older fan alluvium at depth (City of Perris 2008:Exhibit CN-7). Since the paleontologically sensitive soils are present at unknown depths beneath the surface soils that are unlikely to contain fossil remains, the area is considered to range from low to high in sensitivity for paleontological resources (*ibid*.).

The project area was used for agriculture during the historic period, and a building, likely a farmstead, was noted in the southwestern corner of the property during the 1930s (USGS 1943; 1953; NETR Online 1966; 1967). Farming operations gradually ceased on the property during the 1980s-1990s era, when residential development began to accelerate in the surrounding area (NETR Online 1978-1997). The project area itself was graded in preparation for similar development between 2005 and 2009, but the project was later abandoned, and the property was left undeveloped and unused to the present time (NETR Online 2002-2018; Google Earth 2002-2021).

FIELD SURVEY

Throughout the course of the field survey, no notable surface manifestation of any paleontological remains was observed within the project area. Field observations confirmed that the surface soils in the project area had been disturbed is the past, as evidenced by the level terrain and the presence of abandoned road cuts and building pads. Given the extent of past ground disturbances, no intact fossil remains were anticipated on the surface or in shallow deposits.

DISCUSSION

The results of the records search and the literature review indicate a consensus among recent studies that the project area is located on Holocene sedimentation that are unlikely to contain fossil materials due to their relatively recent age of deposition. Furthermore, past agricultural activities and earth-moving operations have left the surface sediments extensively disturbed. However, these younger soils sit on top of Pleistocene-age alluvium, which has a high potential to contain significant, nonrenewable fossil remains. Elsewhere in Riverside County, the Pleistocene alluvium has yielded significant fossil finds in the past. Based on the presence of Pleistocene sediments at unknown depth, the County of Riverside categorizes the property in the "High B" category of paleontological sensitivity. Further earth-moving operation at depth, therefore, may potentially disrupt or adversely affect paleontological resources.

CONCLUSION AND RECOMMENDATIONS

CEQA guidelines (Title 14 CCR App. G, Sec. V(c)) require that public agencies in the State of California determine whether a proposed project would "directly or indirectly destroy a unique paleontological resource" during the environmental review process. The present study, conducted in compliance with this provision, is designed to identify any significant, non-renewable

paleontological resources that may exist within or adjacent to the project area, and to assess the possibility for such resources to be encountered in future excavation and construction activities.

Based on the research results presented above, the proposed project's potential to impact significant, nonrenewable paleontological resources is low in the previously disturbed surface and near-surface soils of Holocene age but high in the subsurface deposits of older Pleistocene alluvial sediments. Therefore, CRM TECH recommends that a paleontological resource impact mitigation program be developed and implemented during the project to prevent impacts on such resources or reduce them to a level less than significant. The mitigation program should be formulated in accordance with the provisions of CEQA (Scott and Springer 2003) as well as the proposed guidelines of the Society of Vertebrate Paleontology (2010), and should include but not be limited to the following components:

- All earth-moving operations within the project area reaching beyond the depth of three feet below the current ground surface should be monitored periodically by a qualified paleontological monitor to identify potentially fossil-bearing sediments when they are encountered, at which time continuous monitoring will become necessary. The monitor should be prepared to quickly salvage fossils as they are unearthed to avoid construction delays and should collect samples of sediments that are likely to contain fossil remains of small vertebrates or in vertebrates. However, the monitor must have the power to temporarily halt or divert grading equipment to allow for the removal of abundant or large specimens.
- Samples of sediment should be collected and processed to recover small fossils, and all fossil remains should be identified and curated at a repository with permanent retrievable storage.
- A report of findings, including an itemized inventory of recovered specimens, should be prepared upon completion of the procedures outlined above. The report should include a discussion of the significance of the paleontological findings, if any. The report and the inventory, when submitted to the City of Perris, would signify completion of the program to mitigate potential impacts on paleontological resources.

Under these conditions, CRM TECH further recommends that the proposed project may be cleared to proceed in compliance with CEQA provisions on paleontological resources.

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APPENDIX 1:
PERSONNEL QUALIFICATIONS

PROJECT PALEONTOLOGIST
Ron Schmidtling, M.S.

Education

1995	M.S., Geology, University of California, Los Angeles.
1991	Pasadena City College, Pasadena, California.
1985	B.A., Archaeology, Paleontology, Ancient Folklore, and Art History, University of Southern Mississippi, Hattiesburg.

Professional Experience:

2020-	Project Paleontologist, CRM TECH, Colton, California.
2014-	Instructor of Earth Science, History of Life, Ecology, and Evolutionary Biology, Columbia College Hollywood, Reseda, California.
2013, 2015	Volunteer, excavation of a camarasaur and a diplodocid in southern Utah, Natural History Museum of Los Angeles County, California.
1993-2014	Consultant, Getty Conservation Institute, Brentwood, California. • Geological Consultant on the Renaissance Bronze Project, characterizing constituents of bronze core material; • Paleontological Consultant for Antiquities/Conservation, identifying the foraminifera and mineral constituents of a limestone torso of Aphrodite; • Scientific Consultant on the Brentwood Site Building Project, testing building materials for their suitability in the museum galleries.
1999-2001	Archaeological and Paleontological Monitor, Michael Brandman Associates, Irvine, California.
1997	Department of Archaeology, University of California, Los Angeles.
1994	Scientific Illustrator and Teaching Assistant, Department of Earth and Space Sciences and Department of Biological Sciences, University of California, Los Angeles.

Memberships

AAPS (Association of Applied Paleontological Sciences), USA; CSEOL (Center for the Study of Evolution and the Origin of Life), Department of Earth Sciences, University of California, Los Angeles.

Publications and Reports

Author, co-author, and contributor on numerous paleontological publications and paleontological resource management reports.

REPORT WRITER
Deirdre Encarnación, M.A.

Education

2003	M.A., Anthropology, San Diego State University, California.
2000	B.A., Anthropology, minor in Biology, with honors; San Diego State University, California.

Professional Experience

2004-	Project Archaeologist/Report Writer, CRM TECH, Riverside/Colton, California.
2001-2003	Part-time Lecturer, San Diego State University, California.
2001	Research Assistant for Dr. Lynn Gamble, San Diego State University.
2001	Archaeological Collection Catalog, SDSU Foundation.

PALEONTOLOGICAL SURVEYOR/FIELD DIRECTOR
Daniel Ballester, M.S.

Education

2013	M.S., Geographic Information System (GIS), University of Redlands, California.
1998	B.A., Anthropology, California State University, San Bernardino.
1997	Archaeological Field School, University of Las Vegas and University of California, Riverside.
1994	University of Puerto Rico, Rio Piedras, Puerto Rico.

- Cross-trained in paleontological field procedures and identifications by CRM TECH Geologist/Paleontologist Harry M. Quinn, California Professional Geologist #3477.

Professional Experience

2002-	Field Director/GIS Specialist, CRM TECH, Riverside/Colton, California.
2011-2012	GIS Specialist for Caltrans District 8 Project, Garcia and Associates, San Anselmo, California.
2009-2010	Field Crew Chief, Garcia and Associates, San Anselmo, California.
2009-2010	Field Crew, ECorp, Redlands.
1999-2002	Project Paleontologist/Archaeologist, CRM TECH, Riverside, California.
1998-1999	Field Crew, K.E.A. Environmental, San Diego, California.
1998	Field Crew, A.S.M. Affiliates, Encinitas, California.
1998	Field Crew, Archaeological Research Unit, University of California, Riverside.

APPENDIX 2

RECORDS SEARCH RESULTS

WESTERN SCIENCE CENTER

May 27, 2022

CRM Tech
Nina Gallardo
1016 E. Cooley Drive, Suite A/B
Colton, CA 92324

Dear Ms. Gallardo,

This letter presents the results of a record search conducted for Proposed Prairie View Multi-Family Residential Project in the City of Perris, Riverside County CA. The project area is located on the north side of Dale Street, between Wilson Avenue and Murrieta Road, in Township 4 South, Range 3 West, Section 29 on the *Perris, CA* USGS 7.5 minute quadrangle.

The geologic units underlying this project are mapped entirely as alluvial sand and clay deposits dating from the Holocene period (Dibblee and Minch 2003). Holocene alluvial units are considered to be of high preservation value, but material found is unlikely to be fossil material due to the relatively modern associated dates of the deposits. However, if development requires any substantial depth of disturbance, the likelihood of reaching Pleistocene alluvial sediments would increase. The Western Science Center does not have localities within the project area or within a 1 mile radius.

While the presence of any fossil material is unlikely, if excavation activity disturbs deeper sediment dating to the earliest parts of the Holocene or Late Pleistocene periods, the material would be scientifically significant. Excavation activity associated with the development of the project area is unlikely to be paleontologically sensitive, but caution during development should be observed.

If you have any questions, or would like further information, please feel free to contact me at bstoneburg@westerncentermuseum.org

Sincerely,

Brittney Elizabeth Stoneburg
Collections Technician

Proposed Prairie View Multi-Family Residential Project

project area + 1 mile radius

Legend

- 1 Mile Radius
- Proposed Prairie View Multi-Family Residential Project
- Q: Quaternary alluvium and marine deposits (Pliocene to Holocene)

Wilson Ave
Harvill Ave
Walmart Supercenter
Chick-fil-A
215
Stater Bros. Markets
Jade Ave
E Nuevo Rd
E Nuevo Rd
Nuevo Rd
Nuevo Rd
St James the Less Catholic Church
N A St
N Perris Blvd
Redlands Ave
Lake Perris Village
Riverside County Department of Public...
Rio Ranch Market
Denny's
W 4th St
Perris
EASTSIDE
PARK AVENUE
S A St
Menlo Recycling
S Perris Blvd
United States Postal Service
W 11th St
Google Earth
N
4000 ft