PALEONTOLOGICAL TECHNICAL STUDY

RAMONA E-COMMERCE PARK PROJECT

City of Perris

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PSI Report: CA20RiversideHEL04R

November 19, 2020

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1.0 EXECUTIVE SUMMARY

This report presents the results of the paleontological technical study conducted by Paleo Solutions, Inc. (Paleo Solutions), under contract to HELIX Environmental Planning, Inc. (HELIX), in support of the Ramona E-Commerce Park Project (Project) in the City of Perris, Riverside County, California. This work was required by the City of Perris to fulfill their responsibilities as the lead agency under the California Environmental Quality Act (CEQA).

The paleontological potential of the Project area was evaluated based on an analysis of existing paleontological data. The three components of the analysis of existing data included a geologic map review, a literature search, and a museum records search at the Western Science Center (WSC) in Hemet, California. Geologic mapping by Dibblee (2003) indicates that the Project area is entirely underlain by Holocene-age alluvial sediments (Qa) (High B sensitivity). In contrast, mapping by Morton and Miller (2006) indicates that the Project area is entirely underlain by middle to early Pleistocene-age very old alluvial-fan deposits (Qvof) (High A sensitivity). Although not mapped, recent artificial fill (Low sensitivity) may be present within the bounds of the Project area. Thus, these units are also included in the analysis of existing data for this Project.

There are no documented paleontological localities within the boundaries of the Project area; however, fossils have been recovered from similar older sedimentary deposits in the region of the Project area (Radford, 2020; Appendix A).

Based on the ground disturbance necessary to complete the Project, there is potential for adverse direct impacts to scientifically significant paleontological resources within middle to early Pleistocene-age very old alluvial-fan deposits (Qvof) (High A), either at the surface or at depth. Therefore, it is recommended that excavations are initially monitored to determine if middle to early Pleistocene-age very old alluvial-fan deposits (Qvof) (High A) will be impacted. If it is determined that only Holocene-age alluvial sediments (Qa) (High B) or artificial fill are impacted, the monitoring program should be reduced or suspended. However, if it is determined that middle to early Pleistocene-age very old alluvial-fan deposits (Qvof) (High A) are impacted, the full-time monitoring program should continue.

Prior to the start of construction, a paleontological resources Worker Environmental Awareness Program (WEAP) training should be presented to all earthmoving personnel to inform them of the possibility for buried resources and the procedures to follow in the event of fossil discoveries. Any subsurface bones or potential fossils that are unearthed during construction should be evaluated by a Qualified Paleontologist. Any fossils determined to be significant or potentially significant should be recovered, prepared, identified, analyzed, and curated at the WSC or another accredited repository.

2.0 INTRODUCTION

This report presents the results of the paleontological technical study conducted by Paleo Solutions, under contract to HELIX, in support of the Ramona E-Commerce Park Project in the City of Perris, Riverside County, California (Figure 1). All paleontological work was completed in compliance with CEQA, local regulations, and best practices in mitigation paleontology (Murphey et al., 2019).

2.1 PROJECT DESCRIPTION AND LOCATION

The Project area is situated in the City of Perris and is generally bound by Indian Avenue to the west, Perris Boulevard to the west, Ramona Express Way to the south, and residential and vacant parcels to the north. The Project consists of creating a 250,000 square-foot development and a parking lot. It encompasses approximately 15 acres and is located in San Jacinto Nuevo y Potrero Land Grant of Township 4 South and Range 3 West and is mapped on the United States Geologic Survey (USGS) Perris (2018) 7.5' topographic quadrangle (Figure 2; Table 1).

Geologic mapping by Dibblee (2003) indicates that the Project area is entirely underlain by Holocene-age alluvial sediments (Qa) (High B sensitivity). In contrast, mapping by Morton and Miller (2006) indicates that the Project area is entirely underlain by middle to early Pleistocene-age very old alluvial-fan deposits (Qvof) (High A sensitivity). Although not mapped, recent artificial fill (Low sensitivity) may be present within the bounds of the Project area. Thus, these units are also included in the analysis of existing data for this Project.

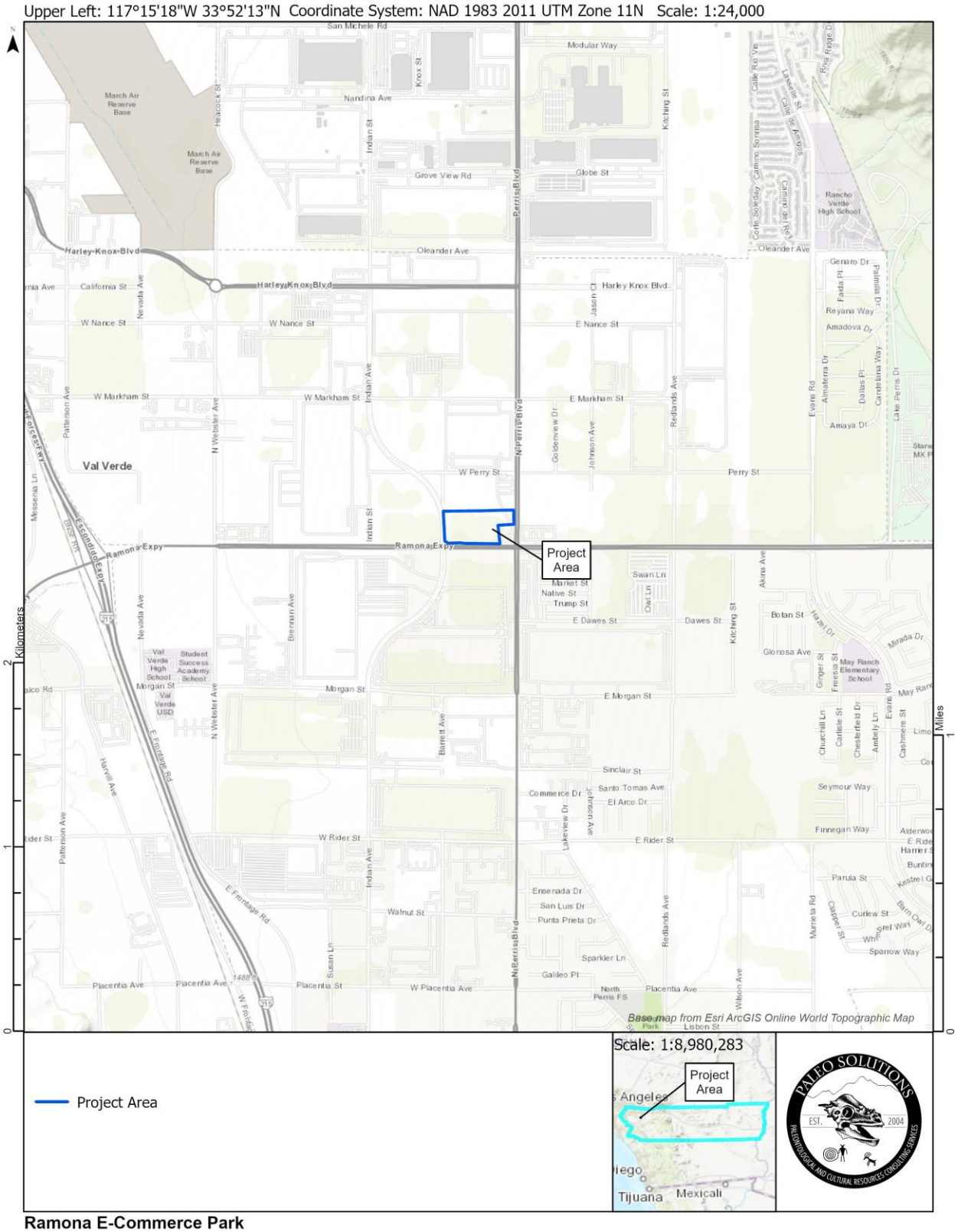

Figure 1. Project location map.

Figure 2. Project overview map.

Table 1. Ramona E-Commerce Park Project Summary

Project Name	Ramona E-Commerce Park Project			
Project Description	The Project consists of creating a 250,000 square-foot development and a parking lot.			
Project Area	The Project area is in the City of Perris and is generally bound by Indian Avenue to the west, Perris Boulevard to the west, Ramona Express Way to the south, and residential and vacant parcels to the north.			
Total Acreage	15 acres			
Location (PLSS)	**Quarter-Quarter**	**Section**	**Township**	**Range**
	San Jacinto Nuevo y Potrero Land Grant	N/A	4S	3W
Land Owner	Undetermined			
Topographic Map(s)	Perris (2018) 7.5' Topographic Quadrangle			
Geologic Map(s)	Dibblee, T.W., 2003, Geologic Map of the Perris Quadrangle, Riverside County, California: Dibblee Geological Foundation, Map DF-112, scale 1:24,000. Morton, D.M. and Miller, F.K., 2006, Geologic Map of the San Bernardino and Santa Ana 30' x 60' Quadrangles, California: United States Geological Survey; Open-File Report OF-2006-1217, scale 1:100,000.			
Mapped Geologic Unit(s) and Age(s)	**Geologic Unit**	**Map Symbol**	**Age**	**Paleontological Sensitivity**
	Artificial fill	N/A – Not Mapped	Recent	Low
	Alluvial sediments	Qa	Holocene	High B
	Very old alluvial-fan deposits	Qvof	middle to early Pleistocene	High A
Previously Documented Fossil Localities within the Project area	According to the WSC, there are no previously recorded fossil localities within the Project area nor from within one mile of the Project area. However, numerous fossil localities have been recorded from similar units throughout the region (Radford, 2020).			
Recommendation(s)	Based on the ground disturbance necessary to complete the Project, there is potential for adverse direct impacts to scientifically significant paleontological resources within middle to early Pleistocene-age very old alluvial-fan deposits (Qvof) (High A), either at the surface or at depth. Therefore, it is recommended that excavations are initially monitored to determine if middle to early Pleistocene-age very old alluvial-fan deposits (Qvof) (High A) will be impacted. If it is determined that only Holocene-age alluvial sediments (Qa) (High B) or artificial fill are impacted, the monitoring program should be reduced or suspended. However, if it is determined that middle to early Pleistocene-age very old alluvial-fan deposits (Qvof) (High A) are impacted, the full-time monitoring program should continue. Prior to the start of construction, a paleontological resources WEAP training should be presented to all earthmoving personnel to inform them of the possibility for buried resources and the procedures to follow in the event of fossil discoveries. Any subsurface bones or potential fossils that are unearthed during construction should be evaluated by a Qualified Paleontologist. Any fossils determined to be significant or potentially significant should be recovered, prepared, identified, analyzed, and curated at the WSC or another accredited repository.			

*Not mapped at the surface within the Project area but may be present in the subsurface.

3.0 DEFINITION AND SIGNIFICANCE OF PALEONTOLOGICAL RESOURCES

As defined by Murphey and Daitch (2007): "Paleontology is a multidisciplinary science that combines elements of geology, biology, chemistry, and physics in an effort to understand the history of life on earth. Paleontological resources, or fossils, are the remains, imprints, or traces of once-living organisms preserved in rocks and sediments. These include mineralized, partially mineralized, or unmineralized bones and teeth, soft tissues, shells, wood, leaf impressions, footprints, burrows, and microscopic remains. Paleontological resources include not only fossils themselves, but also the associated rocks or organic matter and the physical characteristics of the fossils' associated sedimentary matrix.

The fossil record is the only evidence that life on earth has existed for more than 3.6 billion years. Fossils are considered non-renewable resources because the organisms they represent no longer exist. Thus, once destroyed, a fossil can never be replaced. Fossils are important scientific and educational resources because they are used to:

- Study the phylogenetic relationships amongst extinct organisms, as well as their relationships to modern groups;
- Elucidate the taphonomic, behavioral, temporal, and diagenetic pathways responsible for fossil preservation, including the biases inherent in the fossil record;
- Reconstruct ancient environments, climate change, and paleoecological relationships;
- Provide a measure of relative geologic dating that forms the basis for biochronology and biostratigraphy, and which is an independent and corroborating line of evidence for isotopic dating;
- Study the geographic distribution of organisms and tectonic movements of land masses and ocean basins through time;
- Study patterns and processes of evolution, extinction, and speciation; and
- Identify past and potential future human-caused effects to global environments and climates."

Fossil resources vary widely in their relative abundance and distribution and not all are regarded as significant. According to Bureau of Land Management (BLM) Instructional Memorandum (IM) 2009-011, a "Significant Paleontological Resource" is defined as:

> "Any paleontological resource that is considered to be of scientific interest, including most vertebrate fossil remains and traces, and certain rare or unusual invertebrate and plant fossils. A significant paleontological resource is considered to be of scientific interest if it is a rare or previously unknown species, it is of high quality and well-preserved, it preserves a previously unknown anatomical or other characteristic, provides new information about the history of life on earth, or has an identified educational or recreational value. Paleontological resources that may be considered not to have scientific significance include those that lack provenience or context, lack physical integrity due to decay or natural erosion, or that are overly redundant or are otherwise not useful for research. Vertebrate fossil remains and traces include bone, scales, scutes, skin impressions, burrows, tracks, tail drag marks, vertebrate coprolites (feces), gastroliths (stomach stones), or other physical evidence of past vertebrate life or activities" (BLM, 2008).

Vertebrate fossils, whether preserved remains or track ways, are classified as significant by most state and federal agencies and professional groups (and are specifically protected under the California Public Resources Code). In some cases, fossils of plants or invertebrate animals are also considered significant and can provide important information about ancient local environments.

The full significance of fossil specimens or fossil assemblages cannot be accurately predicted before they are collected, and in many cases, before they are prepared in the laboratory and compared with previously collected fossils. Pre-construction assessment of significance associated with an area or formation must be made based on previous finds, characteristics of the sediments, and other methods that can be used to determine paleoenvironmental and taphonomic conditions.

4.0 LAWS, ORDINANCES, REGULATIONS, AND STANDARDS

This section of the report presents the regulatory requirements pertaining to paleontological resources that apply to this Project.

4.1 STATE REGULATORY SETTING

4.1.1 California Environmental Quality Act (CEQA)

The procedures, types of activities, persons, and public agencies required to comply with the CEQA are defined in the Guidelines for Implementation of CEQA (State CEQA Guidelines), as amended on March 18, 2010 (Title 14, Section 15000 et seq. of the California Code of Regulations) and further amended January 4, 2013 and December 28, 2018. One of the questions listed in the CEQA Environmental Checklist is: "Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?" (State CEQA Guidelines Appendix G, Section VII, Part F).

4.1.2 State of California Public Resources Code

The State of California Public Resources Code (Chapter 1.7), Sections 5097 and 30244, includes additional state level requirements for the assessment and management of paleontological resources. These statutes require reasonable mitigation of adverse impacts to paleontological resources resulting from development on state lands, and define the excavation, destruction, or removal of paleontological "sites" or "features" from public lands without the express permission of the jurisdictional agency as a misdemeanor. As used in Section 5097, "state lands" refers to lands owned by, or under the jurisdiction of, the state or any state agency. "Public lands" is defined as lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.

4.2 LOCAL REGULATORY SETTING

4.2.1 Riverside County

The Riverside County General Plan requires consideration of paleontological resources under the Multipurpose Open Space Element of the general plan (County of Riverside, 2015). The Riverside County General Plan recommendations are based on the Society of Vertebrate Paleontology (SVP) Guidelines (SVP, 2010) for the mitigation of paleontological resources. The Multipurpose Open Space Element of the general plan (County of Riverside, 2015) provides the following requirements for paleontological sensitive areas within the county:

- **OS 19.6** Whenever existing information indicates that a site proposed for development has high paleontological sensitivity as shown on Figure OS-8 [of the County of Riverside General Plan Multipurpose Open Space Element, 2015], a paleontological resource impact mitigation program (PRIMP) shall be filed with the County Geologist prior to site grading. The PRIMP shall specify the steps to be taken to mitigate impacts to paleontological resources.
- **OS 19.7** Whenever existing information indicates that a site proposed for development has low paleontological sensitivity as shown on Figure OS-8, no direct mitigation is required unless a fossil is encountered during site development. Should a fossil be encountered, the County Geologist shall be notified and a paleontologist shall be retained by the project proponent. The paleontologist shall document the extent and potential significance of the paleontological resources on the site and establish appropriate mitigation measures for further site development.
- **OS 19.8** Whenever existing information indicates that a site proposed for development has undetermined paleontological sensitivity as shown on Figure OS-8, a report shall be filed with the County Geologist documenting the extent and potential significance of the paleontological resources on site and identifying mitigation measures for the fossil and for impacts to significant paleontological resources prior to approval of that department.
- **OS 19.9** Whenever paleontological resources are found, the County Geologist shall direct them to a facility within Riverside County for their curation, including the Western Science Center in the City of Hemet.

Figure OS-8 of the County of Riverside General Plan Multipurpose Open Space Element (2015) identifies the Project area as having High B paleontological sensitivity.

4.2.2 City of Perris

The City of Perris General Plan (2005) has one goal, one policy, and three implementation measures relating to paleontological resources. Goal 4 requires the protection of historical, archaeological and paleontological sites. Policy IV.A requires that the City of Perris comply with state and federal regulations and ensure preservation of the significant historical, archaeological and paleontological resources within the City. The three implementation measures require that all new construction involving grading require appropriate surveys and necessary site investigations in conjunction with the earliest environmental documents prepared for a project, that in specifically delineated areas shown on the City's paleontological sensitivity map that levels of paleontological monitoring will be required, from full-time monitoring to part-time monitoring in some less-sensitive areas. Finally, the General Plan requires that the City of Perris identify and collect previous surveys of cultural resources, evaluate each resource and consider preparation of a comprehensive citywide inventory of cultural resources including both prehistoric sites and man-made resources.

Exhibit CN-7 of the City of Perris General Plan Conservation Element (2005) identifies the Project area as being at the boundary between high sensitivity: Pleistocene older valley deposits and low to high sensitivity: younger alluvium overlying older valley alluvium at depth.

5.0 METHODS

This paleontological analysis of existing data included a geologic map review, a literature search, and museum records search. The goal of this report is to evaluate the paleontological potential of the Project area and make recommendations for the mitigation of adverse impacts on paleontological resources that may occur as a result of the proposed Project. Betsy Kruk, M.S., performed the background research and authored this report. Robert Fritz, M.S., created the GIS figures. Courtney Richards, M.S., oversaw all aspects of the Project as the Paleontological Principal Investigator.

Paleo Solutions will retain an archival copy of all Project information including field notes, maps, and other data.

5.1 ANALYSIS OF EXISTING DATA

Paleo Solutions reviewed geologic mapping of the Project area by Dibblee (2003) and Morton and Miller (2006). The literature reviewed included published and unpublished scientific papers. Paleontological museum records search results from the WSC were analyzed and incorporated into this paleontological investigation.

6.0 ANALYSIS OF EXISTING DATA

The Project area is located within the northwestern portion of the Peninsular Ranges Geomorphic Province, a region characterized by northwest-trending fault-bounded mountain ranges, broad intervening valleys, and low-lying coastal plains (Yerkes et al., 1965). The Peninsular Ranges extend approximately 920 miles from the Los Angeles Basin to the southern tip of Baja California and vary in width from approximately 30 to 100 miles. Bedrock units within the Peninsular Ranges include pre-Cretaceous- and Cretaceous-age igneous rocks of the Southern California Batholith, Late Cretaceous-age sedimentary rocks, and post-Cretaceous-age sedimentary rocks or sediment (Yerkes et al., 1965; Norris and Webb, 1976). All post-Cretaceous-age rocks lie unconformably on either the Cretaceous-age sedimentary rocks or on basement rocks (Norris and Webb, 1976). Pliocene-age nonmarine rocks and sediments and thick and widespread throughout the northern Peninsular Ranges, and Quaternary deposits include fluvial and lacustrine sediments within the inland interior of the province (Norris and Webb, 1976).

6.1 LITERATURE SEARCH

Geologic mapping by Dibblee (2003) indicates that the Project area is entirely underlain by Holocene-age alluvial sediments (Qa) (Figure 3). In contrast, mapping by Morton and Miller (2006) indicates that the Project area is entirely underlain by middle to early Pleistocene-age very old alluvial-fan deposits (Qvof) (Figure 4). Although not mapped, recent artificial fill may be present within the bounds of the Project area. Thus, these units are also included in the analysis of existing data for this Project.

6.1.1 Artificial Fill (Unmapped)

Although Dibblee (2003) and Morton and Miller (2006) do not map fill within the Project area or its immediately vicinity, recent artificial fill may be present within the bounds of the Project area. These sediments consist of previously disturbed, reworked sediments and any fossils recovered from artificial fill have lost their stratigraphic and scientific significance. Therefore, artificial fill has a Low paleontological potential.

6.1.2 Alluvial Sediments (Qa) (Holocene)

Holocene-age alluvial sediments (Qa) were formed during the Holocene (approximately 11,700 years ago to present) and late Pleistocene (11,700 years ago to 129,000 years ago). Alluvial sediments are undissected, unconsolidated, and composed of clay and are covered by gray soil (Dibblee, 2003).

Holocene-age (less than 11,700 years old) sediments are typically too young to contain fossilized material, but they transition to, and may overlie sensitive older (e.g., Pleistocene-age) deposits at variable depth. These deposits (Qa) are assigned High (High B) paleontological sensitivity that increases with depth since there is potential for these deposits to be conformably underlain by older, paleontologically sensitive geologic units.

6.1.3 Very Old Alluvial-Fan Deposits (Qvof) (middle to early Pleistocene)

Middle to early Pleistocene-age very old alluvial-fan deposits (Qvof) are moderately to well consolidated silt, sand, gravel, and conglomerate, orangish-brown and typically well dissected (Morton and Miller, 2006).

Taxonomically diverse and locally abundant Pleistocene-age fossil animals and plants have been collected from older alluvial deposits throughout southern California and include mammoth (*Mammuthus*), mastodon (*Mammut*), camel (Camelidae), horse (Equidae), bison (*Bison*), giant ground sloth (*Megatherium*), peccary (Tayassuidae), cheetah (*Acinonyx*), lion (*Panthera*), saber tooth cat (*Smilodon*), capybara (*Hydrochoerus*), dire wolf (*Canis dirus*), and numerous taxa of smaller mammals (e.g., Rodentia) (Blake, 1991; Jahns, 1954; Jefferson, 1991). According to the Paleobiology Database (PBDB), numerous Pleistocene-age fossil localities have been recorded within Riverside County, including those from the Diamond Valley Lake east and west dams, which yielded a new species of mastodon (*Mammut pacificus*), Columbian mammoth (*Mammuthus columbi*), fox (*Urocyon* sp.), rabbit (*Sylvilagus* sp.), mole (*Scapanus* sp.), rodent (*Dipodomys* sp., *Thomomys* sp., *Neotoma* sp., *Microtus* sp.), quail (*Callipepla* sp.), and snake (Colubridae) (Dooley et al., 2019; PBDB, 2020). The University of California Museum of Paleontology (UCMP) online fossil locality database also contains numerous records of Pleistocene-age fossils in Riverside County, including horse (*Equus* sp., *Equus bautistensis*, *Hipparionini*), tapir (*Tapirus merriami*), pronghorn (*Capromeryx* sp., *Antilocapra* sp.), deer (*Odocoileus*), giant ground sloth (*Megalonyx*), mammoth (*Mammuthus* sp.), rabbit (*Lepus* sp.), rodent (*Microtus* sp., *Microtus californicus*, *Neotoma* sp.), and tortoise (*Gopherus* sp., *Gopherus agassizii*), as well as invertebrates and plants (UCMP, 2020). Therefore, Pleistocene-age older sedimentary units are assigned a High paleontological potential (High A) and may contain paleontological resources both at or near the surface and at depth.

6.2 PALEONTOLOGICAL RECORD SEARCH RESULTS

According to the WSC, there are no previously recorded fossil localities within the Project area nor from within one mile of the Project area. However, numerous fossil localities have been recorded from similar units throughout the region producing fossil mammoth (*Mammuthus pacificus*), horse (*Equus* sp.), camel (*Camelops hesternus*), and saber tooth cat (*Smilodon fatalis*) (Radford, 2020).

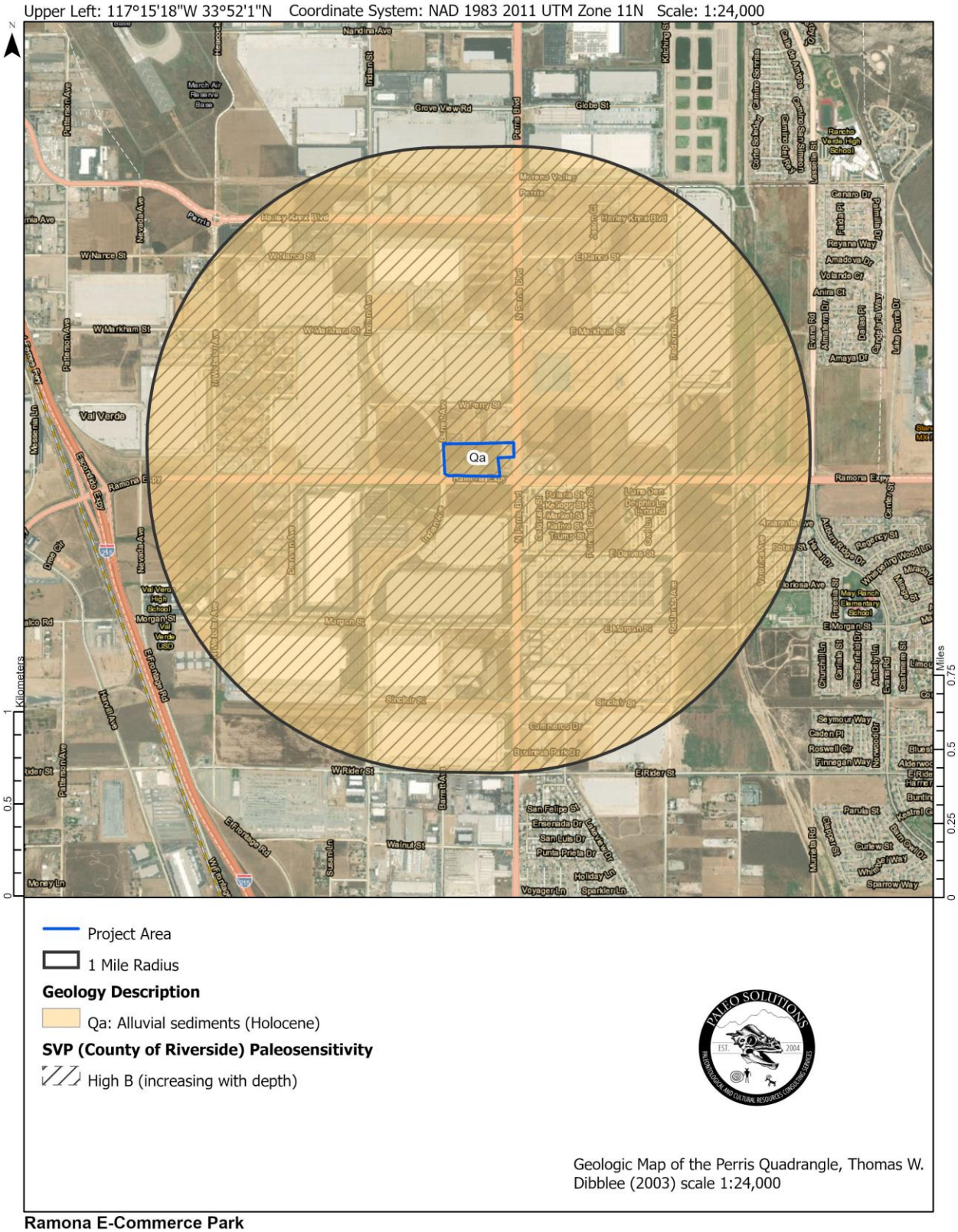

Figure 3. Project geology map (Dibblee, 2003).

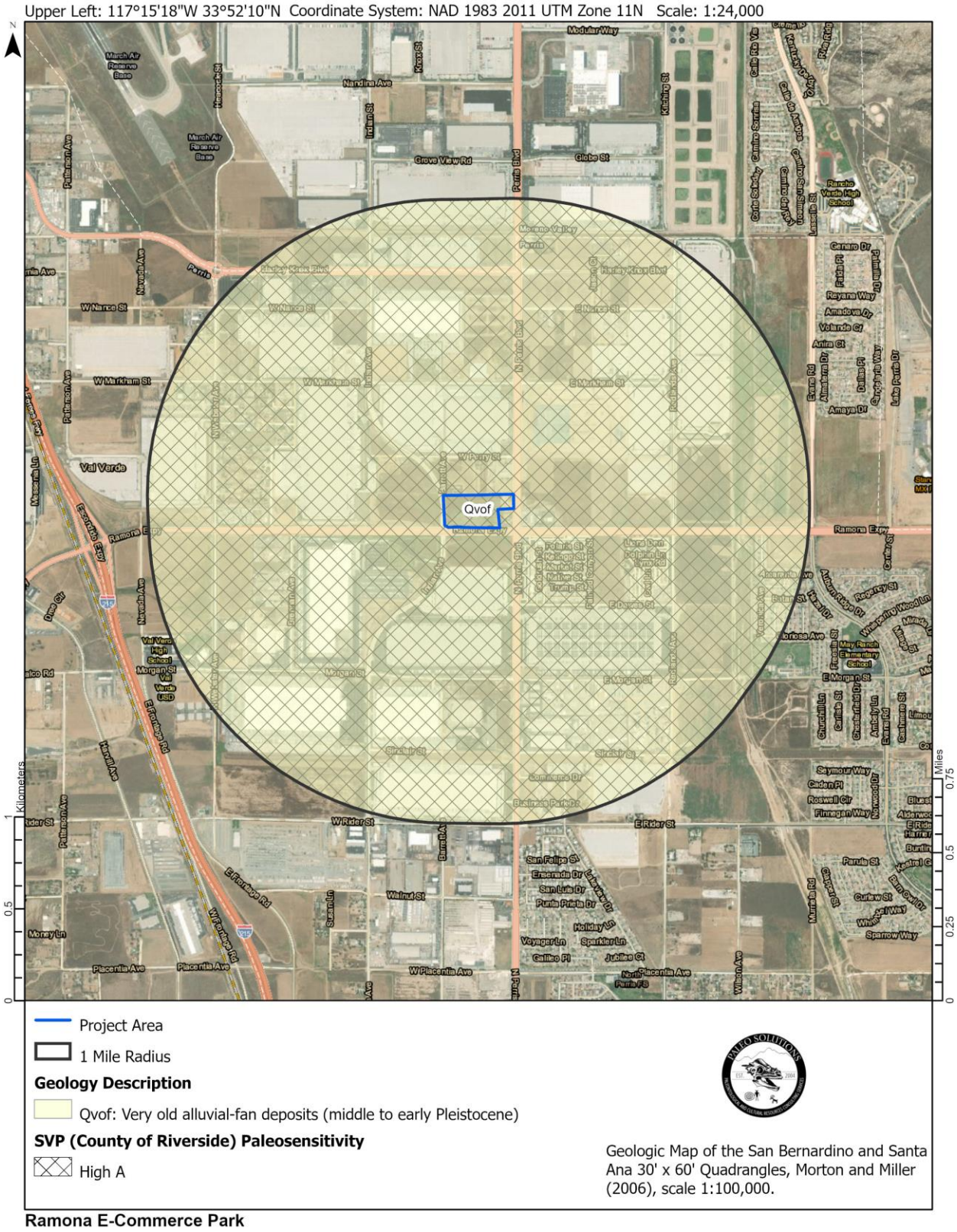

Figure 4. Project geology map (Morton and Miller, 2006).

7.0 IMPACTS TO PALEONTOLOGICAL RESOURCES

Impacts on paleontological resources can generally be classified as either direct, indirect, or cumulative. Direct adverse impacts on surface or subsurface paleontological resources are the result of destruction by breakage and crushing as the result of surface disturbing actions including construction excavations. In areas that contain paleontologically sensitive geologic units, ground disturbance has the potential to adversely impact surface and subsurface paleontological resources of scientific importance. Without mitigation, these fossils and the paleontological data they could provide if properly recovered and documented, could be adversely impacted (damaged or destroyed), rendering them permanently unavailable to science and society.

Indirect impacts typically include those effects which result from the continuing implementation of management decisions and resulting activities, including normal ongoing operations of facilities constructed within a given project area. They also occur as the result of the construction of new roads and trails in areas that were previously less accessible. This increases public access and therefore increases the likelihood of the loss of paleontological resources through vandalism and unlawful collecting. Human activities that increase erosion also cause indirect impacts to surface and subsurface fossils as the result of exposure, transport, weathering, and reburial.

Cumulative impacts can result from incrementally minor but collectively significant actions taking place over a period of time. The incremental loss of paleontological resources over time as a result of construction-related surface disturbance or vandalism and unlawful collection would represent a significant cumulative adverse impact because it would result in the destruction of non-renewable paleontological resources and the associated irretrievable loss of scientific information.

Excavations within the Project area that impact middle to early Pleistocene-age very old alluvial-fan deposits (Qvof), either at the surface or at depth beneath Holocene-age alluvial deposits (Qa), may well result in an adverse direct impact on scientifically important paleontological resources. Surface grading or shallow excavations entirely within Holocene-age alluvial deposits (Qa) or artificial fill are unlikely to uncover significant fossil remains. However, these deposits may shallowly overlie older *in situ* sedimentary deposits. Therefore, grading and other earthmoving activities may potentially result in significant adverse direct impacts to paleontological resources throughout the entirety of the Project area.

No indirect or cumulative impacts are anticipated from any of the planned Project activities.

8.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the ground disturbance necessary to complete the Project, there is potential for adverse direct impacts to scientifically significant paleontological resources within middle to early Pleistocene-age very old alluvial-fan deposits (Qvof) (High A), either at the surface or at depth. Therefore, it is recommended that excavations are initially monitored to determine if middle to early Pleistocene-age very old alluvial-fan deposits (Qvof) (High A) will be impacted. If it is determined that only Holocene-age alluvial sediments (Qa) (High B) or artificial fill are impacted, the monitoring program should be reduced or suspended. However, if it is determined that middle to early Pleistocene-age very old alluvial-fan deposits (Qvof) (High A) are impacted, the full-time monitoring program should continue.

Prior to the start of construction, a paleontological resources WEAP training should be presented to all earthmoving personnel to inform them of the possibility for buried resources and the procedures to follow in the event of fossil discoveries. Any subsurface bones or potential fossils that are unearthed during construction should be evaluated by a Qualified Paleontologist. Any fossils determined to be significant or potentially significant should be recovered, prepared, identified, analyzed, and curated at the WSC or another accredited repository.

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APPENDIX A. MUSEUM RECORDS SEARCH RESULTS

WESTERN SCIENCE CENTER

Paleo Solutions
Robert W.J. Fritz
911 S. Primrose Ave., Unit N
Monrovia, CA 91016

October 27, 2020

Dear Mr. Fritz,

This letter presents the results of a record search conducted for the Romona E-Commerce Park Project in the city of Perris, Riverside County, California. The project site is located north of Romona Expressway, west of North Perris Boulevard, and east of Indian Avenue in Section 6 of Township 4 South, and Range 3 West, on the Perris USGS 7.5 minute quadrangle.

The geologic units underlying the project area are mapped entirely as very old alluvial fan deposits dating from the early Pleistocene epoch (Morton, 1996). Pleistocene alluvial units are considered to be of high paleontological sensitivity, and while the Western Science Center does not have localities within the project area or within a 1 mile radius we do have numerous fossil localities from similarly mapped units from throughout the region. Southern California Pleistocene alluvial units are well documented to contain extinct fauna including those associated with mastodon (*Mammut pacificus*), mammoth (*Mammuthus columbi*), ancient horse (*Equus sp.*), camel (*Camelops hesternus*), sabertooth cat (*Smilodon fatalis)* and many more.

Any fossil specimens recovered from the Romona E-Commerce Park Project would be scientifically significant. Excavation activity associated with the development of the project area would impact the paleontologically sensitive Pleistocene units, and it is the recommendation of the Western Science Center that a paleontological resource mitigation program be put in place to monitor, salvage, and curate any recovered fossils from the study area.

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

Sincerely,

Darla Radford
Collections Manager

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