

# PALEONTOLOGICAL ASSESSMENT FOR THE 16323 SHOEMAKER AVENUE PROJECT

CITY OF CERRITOS  
LOS ANGELES COUNTY, CALIFORNIA

APN 7010-016-050

**Prepared on Behalf of:**

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**Prepared for:**

City of Cerritos  
18125 Bloomfield Avenue  
Cerritos, California 90703

**Prepared by:**

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*April 25, 2022*

## **Paleontological Database Information**

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**Report Date:** April 25, 2022

**Report Title:** Paleontological Assessment for the 16323 Shoemaker Avenue Project, City of Cerritos, Los Angeles County, California

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**Assessor's Parcel Number:** 7010-016-050

**USGS Quadrangle:** Section 29, Township 3 South, Range 11 West, USGS *Whittier, California* Quadrangle (7.5-minute).

**Study Area:** 7.21 acres

**Key Words:** City of Cerritos; paleontological assessment; Pleistocene old alluvial fan deposits; High sensitivity; part-time monitoring below eight feet recommended.

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## **I. INTRODUCTION AND LOCATION**

A paleontological resource assessment has been completed for the 16323 Shoemaker Avenue Project, located in the northern portion of the City of Cerritos, Los Angeles County, California (Figures 1 and 2). The 7.21-acre project occupies Assessor's Parcel Number 7010-016-050. On the United States Geological Survey 7.5-minute, 1:24,000-scale *Whittier, California* topographic quadrangle map, the project is located in Section 29, Township 3 South, Range 11 West, of the San Bernardino Baseline and Meridian (Figure 2). The project proposes the construction of a 159,948 square-foot industrial warehouse with associated parking and hardscape. Currently, the subject property is occupied by an existing industrial warehouse.

As the lead agency, the City of Cerritos has required the preparation of a paleontological assessment to evaluate the project's potential to yield paleontological resources. The paleontological assessment of the project included a review of paleontological literature and fossil locality records in the area; a review of the underlying geology; and recommendations to mitigate impacts to potential paleontological resources, if necessary.

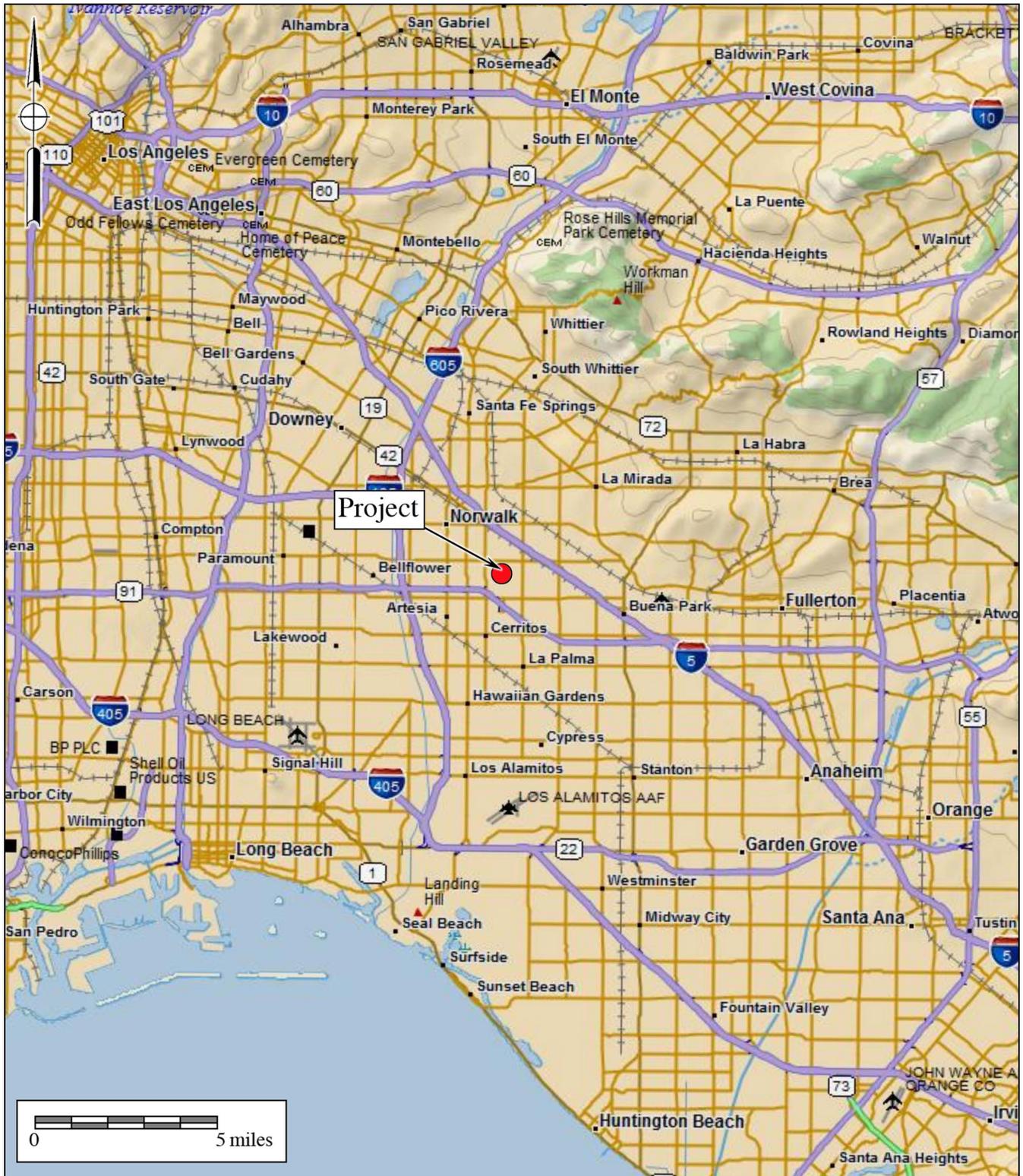
## **II. REGULATORY SETTING**

The California Environmental Quality Act (CEQA), which is patterned after the National Environmental Policy Act, is the overriding environmental regulation that sets the requirement for protecting California's paleontological resources. CEQA mandates that governing permitting agencies (lead agencies) set their own guidelines for the protection of nonrenewable paleontological resources under their jurisdiction.

### **State of California**

Under "Guidelines for Implementation of CEQA," as amended in December 2018 (California Code of Regulations [CCR] Title 14, Division 6, Chapter 3, Sections 15000 et seq.), procedures define the types of activities, persons, and public agencies required to comply with CEQA. Section 15063 of the CCR provides a process by which a lead agency may review a project's potential impact to the environment, whether the impacts are significant, and provide recommendations, if necessary.

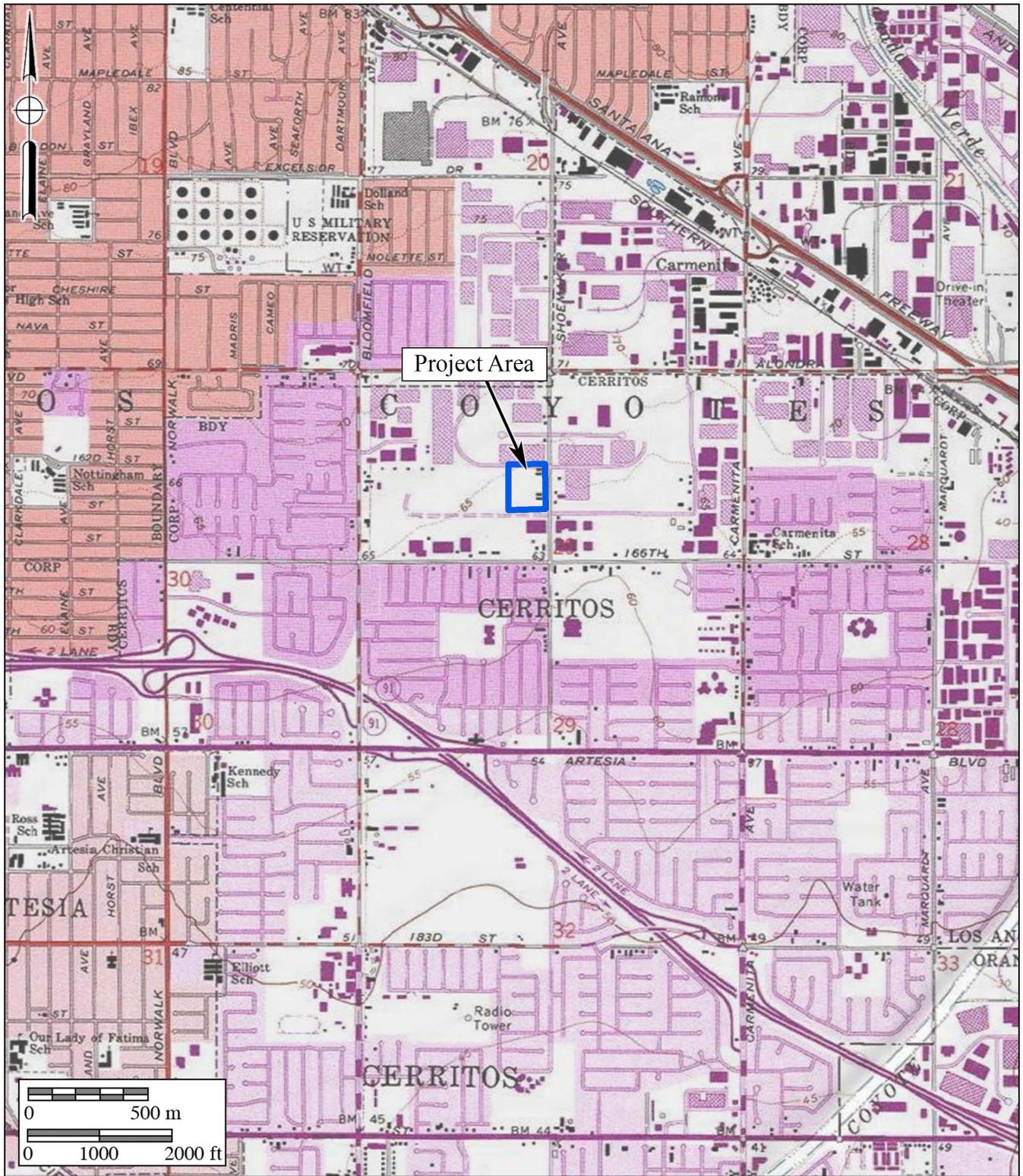
In CEQA's Environmental Checklist Form, one of the questions to answer is, "Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?" (Appendix G, Section VII, Part f). This is to ensure compliance with California Public Resources Code Section 5097.5, the law that protects nonrenewable resources, including fossils:



**Figure 1**  
**General Location Map**  
 The 16323 Shoemaker Avenue Project

DeLorme (1:250,000)





**Figure 2**

**Project Location Map**

The 16323 Shoemaker Avenue Project

USGS *Whittier* Quadrangle (7.5 minute series)



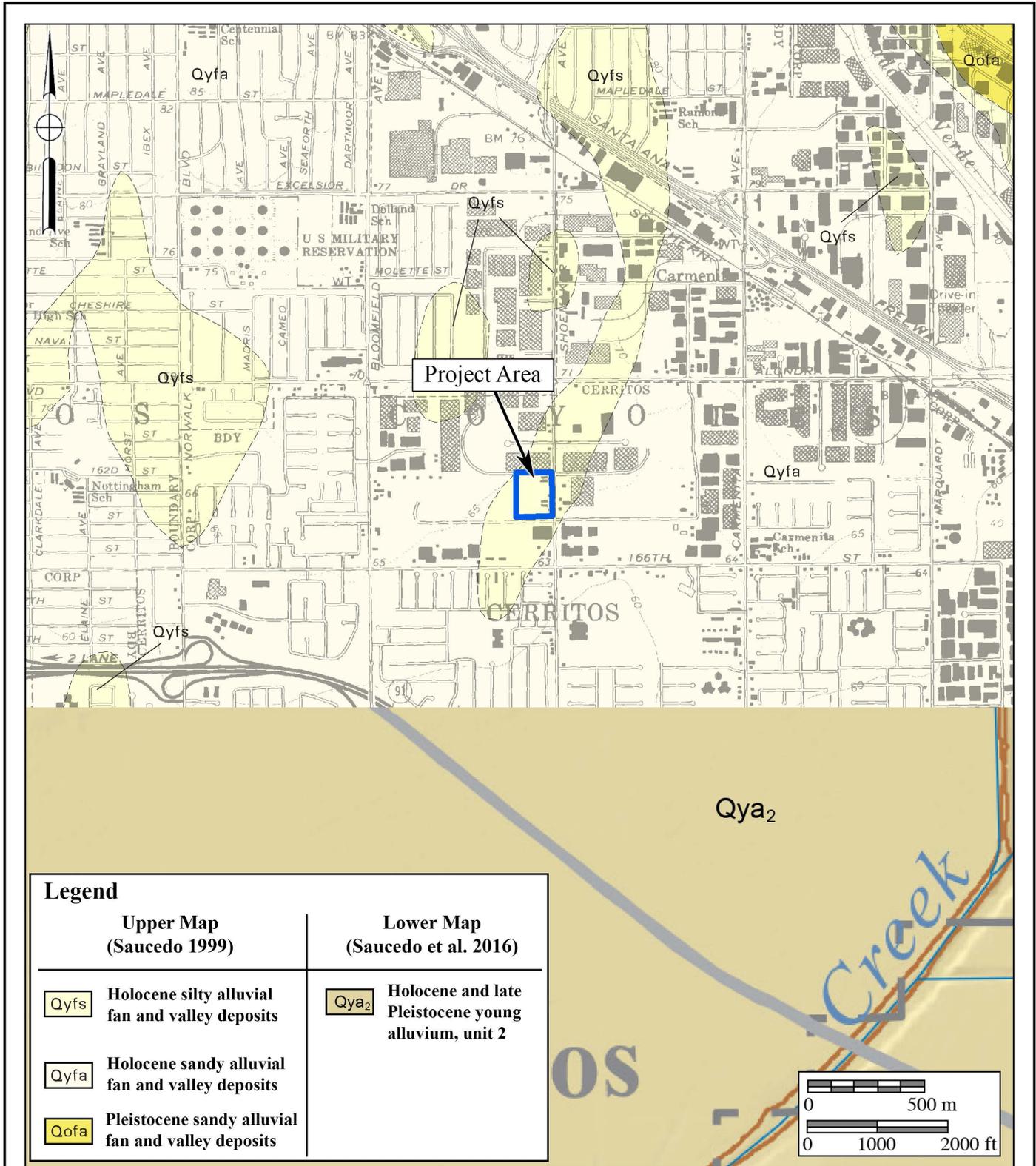
- a) A person shall not knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands.
- b) As used in this section, “public lands” means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.
- c) A violation of this section is a misdemeanor.

### **City of Cerritos**

The current Environmental Impact Report (EIR) for the General Plan of the City of Cerritos indicates paleontological resources are not known from the city (City of Cerritos 2004: Section 4.12, “Cultural Resources”). The cultural resource impact analysis in the EIR indicates that, by complying with all local, state, and federal regulations, a project-by-project analysis by the City of a proposed project’s potential impacts would be less than significant; therefore, no mitigation measures are required.

## **III. GEOLOGY**

The project is located within the Central Basin of the larger Los Angeles Basin, a large structural sedimentary basin bounded and cut through by several active fault systems in the Los Angeles metropolitan area (Hillhouse et al. 2002). The San Gabriel River is approximately two-and-a-half miles to the west (Figure 1). As mapped by Saucedo (1999), the project is underlain by undivided younger silty, alluvial fan and valley deposits (yellow area labeled as “Qyfs” on the upper portion of Figure 3). Similarly, Yerkes (1972) assigns a Holocene age for these alluvial deposits, describing them as unconsolidated gravels, sands, and silts, and estimates their thickness in the vicinity of the project at approximately 200 feet. A small-scaled map by Saucedo et al. (2016) covers the southern portion of Figure 3, indicating the flat areas in the vicinity of the project are mapped as Holocene and late Pleistocene-aged flood-plain deposits consisting of soft clays, silts, sands, and silty sands (mustard-colored area labeled as “Qya<sub>2</sub>” on the lower portion of Figure 3). Pleistocene alluvial deposits are mapped to the northeast, less than two miles distant (olive colored area labeled “Qofa” on Figure 3).



**Figure 3**  
**Geologic Map**

The 16323 Shoemaker Avenue Project

Geology after Saucedo (1999) and Saucedo et al. (2016)



## **IV. PALEONTOLOGICAL RESOURCES**

### **Definition**

Paleontological resources are the remains of prehistoric life that have been preserved in geologic strata. These remains are called fossils and include bones, shells, teeth, and plant remains (including their impressions, casts, and molds) in the sedimentary matrix, as well as trace fossils such as footprints and burrows. Fossils are considered older than 5,000 years of age (Society of Vertebrate Paleontology 2010) but may include younger remains (subfossils), for example, when viewed in the context of local extinction of the organism or habitat. Fossils are considered a nonrenewable resource under state and local guidelines (see Section II of this report).

### **Fossil Locality Search**

A paleontological locality and records search was performed for the project by the Natural History Museum of Los Angeles County (LACM) (Bell 2022, Appendix B). The records search indicates that no fossil localities were identified within the project boundaries or near the project. The closest-known fossil locality is located approximately four miles northeast of the project, consisting of Pleistocene-aged horse remains from lacustrine (lake) deposits of the La Habra Formation (LACM loc. VP 3347). The nearest locality from unnamed alluvial deposits, possibly similar to those at the project, is identified in Commerce, between nine and 10 miles to the northwest, consisting of Pleistocene-aged fish, snake, rodent, and rabbit remains, from a depth of 30 feet (LACM loc. VP 7702). Other, more distant nearby localities are summarized in the records search in Appendix B.

A review of published and unpublished literature was conducted for potential paleontological resources that are known in the vicinity of the project. Miller (1971) and Jefferson (1991) report on a locality between three and four miles northeast of the project along the Imperial Highway, yielding turkey, mastodon, ground sloth, deer, and horse remains of Pleistocene age (LACM loc. VP 1052). This locality, just southeast of LACM loc. VP 3347, is positioned within the Pleistocene La Habra Formation (Jefferson 1991), as mapped by Yerkes (1972). At a locality in southern Artesia (LACM loc. VP 1285), about two to three miles southwest of the project, a femur of a Pleistocene horse was discovered at a depth of 10 feet (Miller 1971), indicating the depth of the Holocene-Pleistocene transition of the alluvium occurs less than 10 feet deep in this area. The surface geology at this locality is mapped as Holocene and late Pleistocene-aged flood-plain deposits by Saucedo et al. (2016).

## V. PALEONTOLOGICAL SENSITIVITY

### Overview

The degree of paleontological sensitivity of any particular area is based on a number of factors, including the documented presence of fossiliferous resources on a site or in nearby areas, the presence of documented fossils within a particular geologic formation or lithostratigraphic unit, and whether or not the original depositional environment of the sediments is one that might have been conducive to the accumulation of organic remains that might have become fossilized over time. Holocene alluvium is generally considered to be geologically too young to contain significant nonrenewable paleontological resources (*i.e.*, fossils), and is therefore typically assigned a Low paleontological sensitivity. Pleistocene (more than 11,700 years old) alluvial and alluvial fan deposits in the Los Angeles Basin, however, often yield important Ice Age terrestrial vertebrate fossils, such as extinct mammoths, mastodons, giant ground sloths, extinct species of horse, bison, and camel, saber-toothed cats, and others (Jefferson 1991). These Pleistocene sediments are accorded a High paleontological resource sensitivity.

### Professional Standards

The Society of Vertebrate Paleontology (2010) has drafted guidelines that include four categories of paleontological sensitivity for geologic units (formations) that might be impacted by a proposed project, as listed below:

- 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; further study is needed to determine the potential of the rock unit.
- Low Potential: Rock units that are poorly represented by fossil specimens in institutional collections or based on a general scientific consensus that 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.

Using these criteria, based on significant but scattered nearby Pleistocene vertebrate localities and descriptions of the underlying regional and project-specific geology, an undetermined potential may be assigned to the project.

### Field Survey

BFSA staff conducted a pedestrian survey on March 28 and April 6, 2022 under the direction of Principal Investigator Todd A. Wirths. The field methodology employed for the

project included walking evenly spaced survey transects set approximately 10 meters apart. The project property was 100 percent developed, with about 90 percent of the parcel built over or paved; the remaining 10 percent consists of landscaped strips. No paleontological resources, or evidence of paleontological resources, were identified during the field survey.

## **VI. CONCLUSIONS AND RECOMMENDATIONS**

Research has confirmed the existence of Holocene young alluvial deposits mapped at the surface of the project. The occurrence of terrestrial vertebrate fossils at shallow depths from Pleistocene old alluvial fan sediments across the Los Angeles Basin is well documented. The “High” paleontological sensitivity rating typically assigned to Pleistocene alluvial fan sediments for yielding paleontological resources supports the recommendation that paleontological monitoring be implemented during mass grading and excavation activities in undisturbed Pleistocene old alluvial fan sediments to mitigate any adverse impacts (loss or destruction) to potential nonrenewable paleontological resources. However, the depth of Pleistocene old alluvium below the Holocene young alluvium at the project is not known. The occurrence of Pleistocene horse remains from a depth of 10 feet in nearby Artesia in a similar depositional setting as that of the project suggests a potential for the presence of paleontological resources. Therefore, part-time monitoring of undisturbed alluvial fan deposits at the project is recommended starting at a depth of eight feet below the surface. A suggested monitoring schedule may consist of brief “spot checks” (one to three hours) two to three times per week. The monitoring schedule may be adjusted by the project paleontologist based on observations of the geology and stratigraphy at the project. If significant fossils are found, full-time monitoring for paleontological resources is warranted.

If a fossil(s) is found at shallower depths, earth disturbance activities should be halted within a radius of 50 feet from the location of the fossil, and a qualified, project-level paleontologist shall be consulted to determine the significance of the fossilized remains. If the fossil is deemed significant by the paleontologist, full-time monitoring should be initiated at the project.

A suggested paleontological Mitigation Monitoring and Reporting Program (MMRP) is proposed for the project, below. The paleontological MMRP is based on the conclusions and recommendations outlined above and will reduce impacts to potential paleontological resources to a level below significant.

### **Paleontological MMRP**

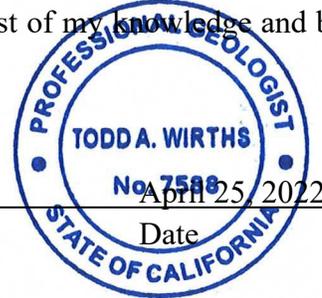
1. Prior to initiation of any grading, drilling, and/or excavation activities, a preconstruction meeting will be held and attended by the paleontologist of record, representatives of the grading contractor and subcontractors, the project owner or developer, and a representative of the lead agency. The nature of potential

- paleontological resources shall be discussed, as well as the protocol that is to be implemented following the discovery of any fossiliferous materials.
2. Monitoring of mass grading and excavation activities shall be performed by a qualified paleontologist or paleontological monitor. Starting at a depth of eight feet, monitoring will be conducted part-time in areas of grading or excavation in undisturbed sediments of alluvial fan deposits. If a fossil is found and determined by the project-level paleontologist to be significant, full-time monitoring is warranted.
  3. If a fossil(s) is found at a shallower depth, earth disturbance activities should be halted within a radius of 50 feet from the location of the fossil, and a project-level paleontologist shall be consulted to determine the significance of the fossilized remains. If the fossil is deemed significant by the project-level paleontologist, full-time monitoring should be initiated at the project.
  4. Paleontological monitors will be equipped to salvage fossils as they are unearthed to avoid construction delays. The monitor must be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or, if present, are determined on exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources. The monitor shall notify the project paleontologist, who will then notify the concerned parties of the discovery.
  5. Paleontological salvage during trenching and boring activities is typically from the generated spoils and does not delay the trenching or drilling activities. Fossils are collected and placed in cardboard flats or plastic buckets and identified by field number, collector, and date collected. Notes are taken on the map location and stratigraphy of the site, which is photographed before it is vacated and the fossils are removed to a safe place. On mass grading projects, discovered fossil sites are protected by flagging to prevent them from being overrun by earthmovers (scrapers) before salvage begins. Fossils are collected in a similar manner, with notes and photographs being taken before removing the fossils. Precise location of the site is determined with the use of handheld GPS units. If the site involves remains from a large terrestrial vertebrate, such as large bone(s) or a mammoth tusk, that is/are too large to be easily removed by a single monitor, a fossil recovery crew shall excavate around the find, encase the find within a plaster and burlap jacket, and remove it after the plaster is set. For large fossils, use of the contractor's construction equipment may be solicited to help remove the jacket to a safe location.
  6. Isolated fossils are collected by hand, wrapped in paper, and placed in temporary collecting flats or five-gallon buckets. Notes are taken on the map location and stratigraphy of the site, which is photographed before it is vacated and the fossils are removed to a safe place.

7. Particularly small invertebrate fossils typically represent multiple specimens of a limited number of organisms, and a scientifically suitable sample can be obtained from one to several five-gallon buckets of fossiliferous sediment. If it is possible to dry screen the sediment in the field, a concentrated sample may consist of one or two buckets of material. For vertebrate fossils, the test is usually the observed presence of small pieces of bones within the sediments. If present, multiple five-gallon buckets of sediment can be collected and returned to a separate facility to wet-screen the sediment.
8. In accordance with the “Microfossil Salvage” section of the Society of Vertebrate Paleontology guidelines (2010:7), bulk sampling and screening of fine-grained sedimentary deposits (including carbonate-rich paleosols) must be performed if the deposits are identified to possess indications of producing fossil “microvertebrates” to test the feasibility of the deposit to yield fossil bones and teeth.
9. In the laboratory, individual fossils are cleaned of extraneous matrix, any breaks are repaired, and the specimen, if needed, is stabilized by soaking in an archivally approved acrylic hardener (*e.g.*, a solution of acetone and Paraloid B-72).
10. Recovered specimens are prepared to a point of identification and permanent preservation (not display), including screen-washing sediments to recover small invertebrates and vertebrates. Preparation of individual vertebrate fossils is often more time-consuming than for accumulations of invertebrate fossils.
11. Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage (*e.g.*, the LACM) shall be conducted. The paleontological program should include a written repository agreement prior to the initiation of mitigation activities. Prior to curation, the lead agency (*e.g.*, the City of Cerritos) will be consulted on the repository/museum to receive the fossil material.
12. A final report of findings and significance will be prepared, including lists of all fossils recovered and necessary maps and graphics to accurately record their original location(s). The report, when submitted to, and accepted by, the appropriate lead agency, will signify satisfactory completion of the project program to mitigate impacts to any potential nonrenewable paleontological resources (*i.e.*, fossils) that might have been lost or otherwise adversely affected without such a program in place.

## VII. CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this paleontological report, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief, and have been compiled in accordance with CEQA criteria.



Todd A. Wirths  
Senior Paleontologist  
California Professional Geologist No. 7588

## VIII. REFERENCES

Bell, Alyssa. 2022. Paleontological resources for the 16323 Shoemaker Avenue Project (22-102). Natural History Museum of Los Angeles County. Letter prepared for Brian F. Smith and Associates, Inc., Poway, California.

City of Cerritos. 2004. Final General Plan Environmental Impact Report, State Clearinghouse #2002081107. Electronic document, [http://www.cerritos.us/GOVERNMENT/\\_pdfs/General\\_Plan\\_EIR\\_Body.pdf](http://www.cerritos.us/GOVERNMENT/_pdfs/General_Plan_EIR_Body.pdf).

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Miller, W.E. 1971. Pleistocene vertebrates of the Los Angeles Basin and vicinity (exclusive of Rancho La Brea). *Bulletin of the Los Angeles County Museum of Natural History; Science* (Number 10, 124 pp.).

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mitigation of adverse impacts to paleontological resources; by the SVP Impact Mitigation Guidelines Revision Committee. Electronic document, [http://vertpaleo.org/Membership/Member-Ethics/SVP\\_Impact\\_Mitigation\\_Guidelines.aspx](http://vertpaleo.org/Membership/Member-Ethics/SVP_Impact_Mitigation_Guidelines.aspx).

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**APPENDIX A**

**Qualifications of Key Personnel**

# Todd A. Wirths, MS, PG No. 7588

## Senior Paleontologist

Brian F. Smith and Associates, Inc.

14010 Poway Road • Suite A •

Phone: (858) 679-8218 • Fax: (858) 679-9896 • E-Mail: twirths@bfsa-ca.com



## Education

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**Master of Science, Geological Sciences, San Diego State University, California** 1995

**Bachelor of Arts, Earth Sciences, University of California, Santa Cruz** 1992

## Professional Certifications

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California Professional Geologist #7588, 2003

Riverside County Approved Paleontologist

San Diego County Qualified Paleontologist

Orange County Certified Paleontologist

OSHA HAZWOPER 40-hour trained; current 8-hour annual refresher

## Professional Memberships

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Board member, San Diego Geological Society

San Diego Association of Geologists; past President (2012) and Vice President (2011)

South Coast Geological Society

Southern California Paleontological Society

## Experience

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Mr. Wirths has more than a dozen years of professional experience as a senior-level paleontologist throughout southern California. He is also a certified California Professional Geologist. At BFSa, Mr. Wirths conducts on-site paleontological monitoring, trains and supervises junior staff, and performs all research and reporting duties for locations throughout Los Angeles, Ventura, San Bernardino, Riverside, Orange, San Diego, and Imperial Counties. Mr. Wirths was formerly a senior project manager conducting environmental investigations and remediation projects for petroleum hydrocarbon-impacted sites across southern California.

## Selected Recent Reports

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2019 *Paleontological Assessment for the 10575 Foothill Boulevard Project, City of Rancho Cucamonga, San Bernardino County, California.* Prepared for T&B Planning, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2019 *Paleontological Assessment for the MorningStar Marguerite Project, Mission Viejo, Orange County, California.* Prepared for T&B Planning. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

- 2019 *Paleontological Monitoring Report for the Nimitz Crossing Project, City of San Diego.* Prepared for Voltaire 24, LP. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2019 *Paleontological Resource Impact Mitigation Program (PRIMP) for the Jack Rabbit Trail Logistics Center Project, City of Beaumont, Riverside County, California.* Prepared for JRT BP 1, LLC. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2020 *Paleontological Monitoring Report for the Oceanside Beachfront Resort Project, Oceanside, San California.* Prepared for S.D. Malkin Properties. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2020 *Paleontological Resource Impact Mitigation Program for the Nakase Project, Lake Forest, Orange County, San California.* Prepared for Glenn Lukos Associates, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2020 *Paleontological Resource Impact Mitigation Program for the Sunset Crossroads Project, Banning, Riverside County.* Prepared for NP Banning Industrial, LLC. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2020 *Paleontological Assessment for the Ortega Plaza Project, Lake Elsinore, Riverside County.* Prepared for Empire Design Group. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2020 *Paleontological Resource Record Search Update for the Green River Ranch III Project, Green River Ranch Specific Plan SP00-001, City of Corona, California.* Prepared for Western Realco. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2020 *Paleontological Assessment for the Cypress/Slover Industrial Center Project, City of Fontana, San Bernardino County, California.* Prepared for T&B Planning, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2020 *Paleontological Monitoring Report for the Imperial Landfill Expansion Project (Phase VI, Segment C-2), Imperial County, California.* Prepared for Republic Services, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2021 *Paleontological Assessment for the Manitou Court Logistics Center Project, City of Jurupa Valley, Riverside County, California.* Prepared for Link Industrial. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2021 *Paleontological Resource Impact Mitigation Program for the Del Oro (Tract 36852) Project, Menifee, Riverside County.* Prepared for D.R. Horton. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2021 *Paleontological Assessment for the Alessandro Corporate Center Project (Planning Case PR-2020-000519), City of Riverside, Riverside County, California.* Prepared for OZI Alessandro, LLC. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2021 *Paleontological Monitoring Report for the Boardwalk Project, La Jolla, City of San Diego.* Prepared for Project Management Advisors, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

**APPENDIX B**

**Paleontological Records Search**

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

tel 213.763.DINO  
www.nhm.org

Research & Collections

e-mail: [paleorecords@nhm.org](mailto:paleorecords@nhm.org)

April 9, 2022

Brian F. Smith and Associates, Inc.  
Attn: Todd Wirths

re: Paleontological resources for the 16323 Shoemaker Avenue Project (22-102)

Dear Todd:

I have conducted a thorough search of our paleontology collection records for the locality and specimen data for proposed development at the 16323 Shoemaker Avenue project area as outlined on the portion of the Whittier USGS topographic quadrangle map that you sent to me via e-mail on March 24, 2022. We do not have any fossil localities that lie directly within the proposed project area, but we do have fossil localities nearby from the same sedimentary deposits that occur in the proposed project area, either at the surface or at depth.

The following table shows the closest known localities in the collection of the Natural History Museum of Los Angeles County (NHMLA).

Locality Number	Location	Formation	Taxa	Depth
LACM VP 3347	11204 Bluefield; Whittier	La Habra Formation (lacustrine silt with caliche and plant detritus)	Horse ( <i>Equus</i> )	2 feet bgs
LACM VP 7702	Intersection of 26th St and Atlantic Blvd, Bell Gardens	Unknown Formation (Pleistocene; silt)	Fish ( <i>Gasterosteus</i> ); Snake (Colubridae), Rodents ( <i>Thomomys</i> , <i>Microtus</i> , <i>Reithrodontomys</i> ); Rabbit ( <i>Sylvilagus</i> )	30 feet bgs
LACM VP 3363	W of Monterey Pass Road in Coyote Pass; E of the Long Beach Freeway & S of the N boundary of Section 32; Monterey Park	Unknown Formation (Pleistocene; sand and silt)	Horse ( <i>Equus</i> )	Unknown
LACM VP 2032	Los Angeles Brickyard Mission Rd. & Daly St.	Unknown Formation (Pleistocene, silt & clay)	Mastodon ( <i>Mammuth</i> )	20-35 feet bgs
LACM VP 1023	Workman & Alhambra Sts	Unknown Formation (Pleistocene)	Sabertooth cat ( <i>Smilodon</i> ), horse ( <i>Equus</i> ), deer	Unknown (excavations)

			( <i>Odocoileus</i> ), turkey ( <i>Meleagris</i> )	for storm drains)
LACM VP 3660	Cover St & Pixie Ave; Lakewood	Unknown formation (Pleistocene)	Mammoth ( <i>Mammuthus</i> )	19 feet bgs

*VP, Vertebrate Paleontology; IP, Invertebrate Paleontology; bgs, below ground surface*

This records search covers only the records of the NHMLA. It is not intended as a paleontological assessment of the project area for the purposes of CEQA or NEPA. Potentially fossil-bearing units are present in the project area, either at the surface or in the subsurface. As such, NHMLA recommends that a full paleontological assessment of the project area be conducted by a paleontologist meeting Bureau of Land Management or Society of Vertebrate Paleontology standards.

Sincerely,



Alyssa Bell, Ph.D.  
Natural History Museum of Los Angeles County

enclosure: invoice