

PALEONTOLOGICAL ASSESSMENT FOR THE FIRST HATHAWAY LOGISTICS PROJECT

CITY OF BANNING, COUNTY OF RIVERSIDE

**SCH No. 2022040441; Project No. DR 21-7015; ENV 21-1519; TPM 21-4002
APNs 532-110-001 to -003 and -008 to -010**

Prepared on Behalf of:

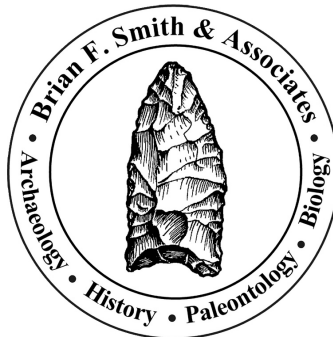
**First Industrial Realty Trust, Inc.,
First Industrial L.P., and
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1938 Kellogg Avenue, Suite 116
Carlsbad, California 92008**

Prepared for:

**City of Banning
Community Development Department
99 East Ramsey Street
Banning, California 92220**

Prepared by:

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July 26, 2021; Revised November 19, 2021; Revised June 13, 2022; Revised April 4, 2024

Paleontological Database Information

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Report Date: July 26, 2021; Revised November 19, 2021; Revised June 13, 2022; Revised April 4, 2024

Report Title: Paleontological Assessment for the First Hathaway Project, City of Banning, County of Riverside, SCH No. 2022040441; Project No. DR 21-7015; ENV 21-1519; TPM 21-4002; APNs 532-110-001 to -003 and -008 to -010

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Assessor's Parcel Numbers: 532-110-001 to -003 and -008 to -010

USGS Quadrangle: *Cabazon, California (7.5 minute)*

Study Area: 94.86 acres

Key Words: Paleontological assessment; Holocene alluvial fan deposits; low sensitivity; city of Banning; Riverside County; no paleontological monitoring.

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I. INTRODUCTION AND LOCATION

A paleontological resource assessment has been completed for the First Hathaway Logistics Project (“project”) (Assessor’s Parcel Numbers [APNs] 532-110-001 to -003 and -008 to -010), located southeast of the intersection of North Hathaway Street and Morongo Road in the city of Banning, Riverside County, California (Figures 1 and 2). On the U.S. Geological Survey, 7.5-minute, 1:24,000-scale *Cabazon, California* topographic quadrangle map, the project is located within Sections 2 and 11, Township 3 South, Range 1 East, of the San Bernardino Baseline and Meridian (see Figure 2). The 94.86-acre development will include the construction of a 1,420,722-square-foot warehouse building with office space, and associated parking and hardscape. To accomplish the proposed improvements, an excavation cut as much as 40 feet on the west side of the property is estimated, while up to 31 feet of engineered fill is estimated for placement on the east side. An excavation cut of approximately 950,000 cubic yards is anticipated to accomplish the development. Additionally, off-site road and utility improvements are planned to existing public rights-of-way.

The project surface has been previously disturbed, and in part, developed with older structures. The southern and eastern areas of the current project were previously rough graded in 2011 for a proposed development that was not completed (Frias and Trazo 2021). Reportedly, these parcels are generally vacant, with the exception of six storm water detention basins that were excavated on the project parcels ranging from approximately 10 to 17 feet deep. Also present at the project are stockpiles of boulders and large cobbles (Frias and Trazo 2021).

As the lead agency, the City of Banning 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 records of fossil localities 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 document 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.

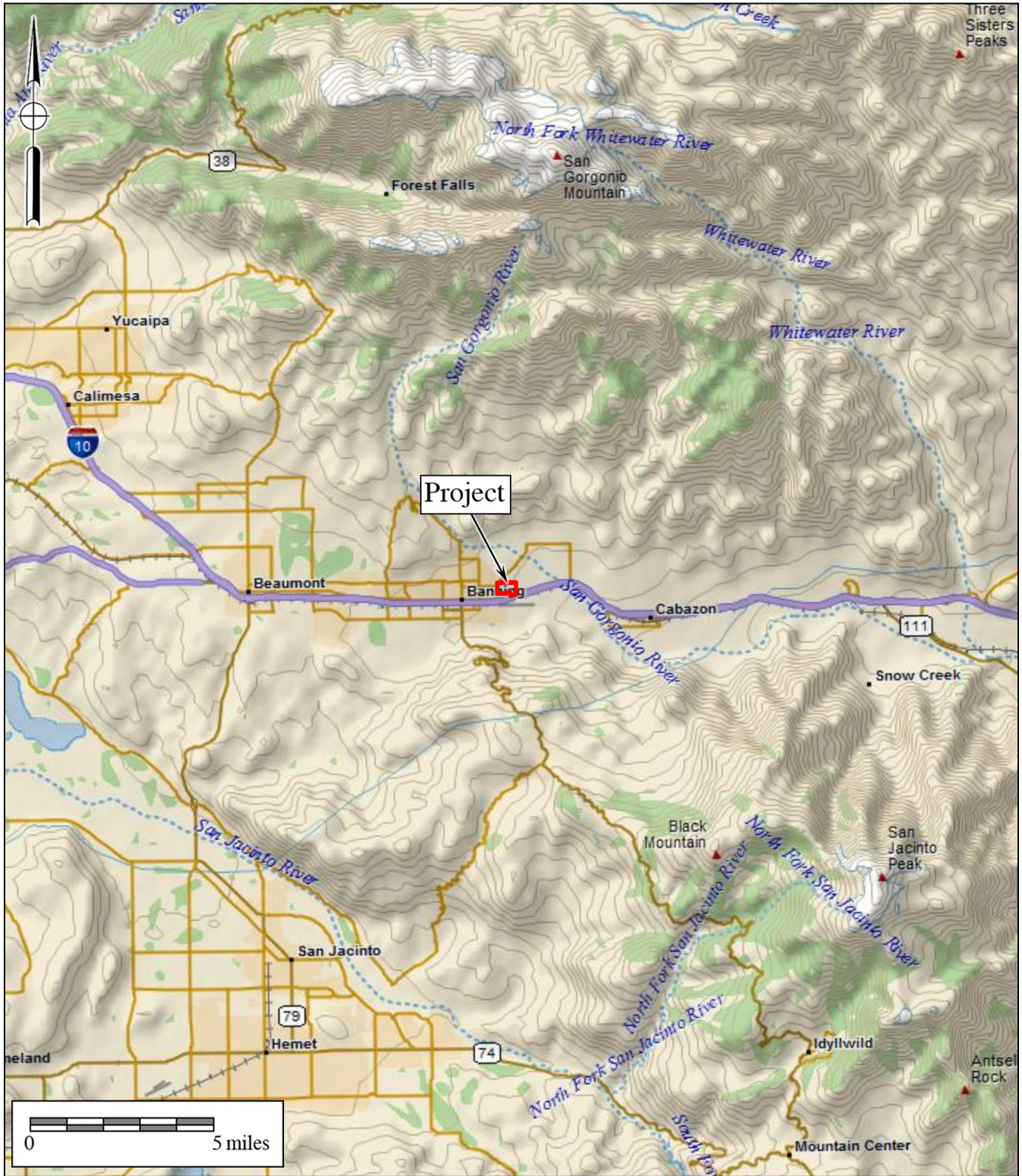


Figure 1
General Location Map
 The First Hathaway Logistics Project
 DeLorme (2020) (1:250,000)



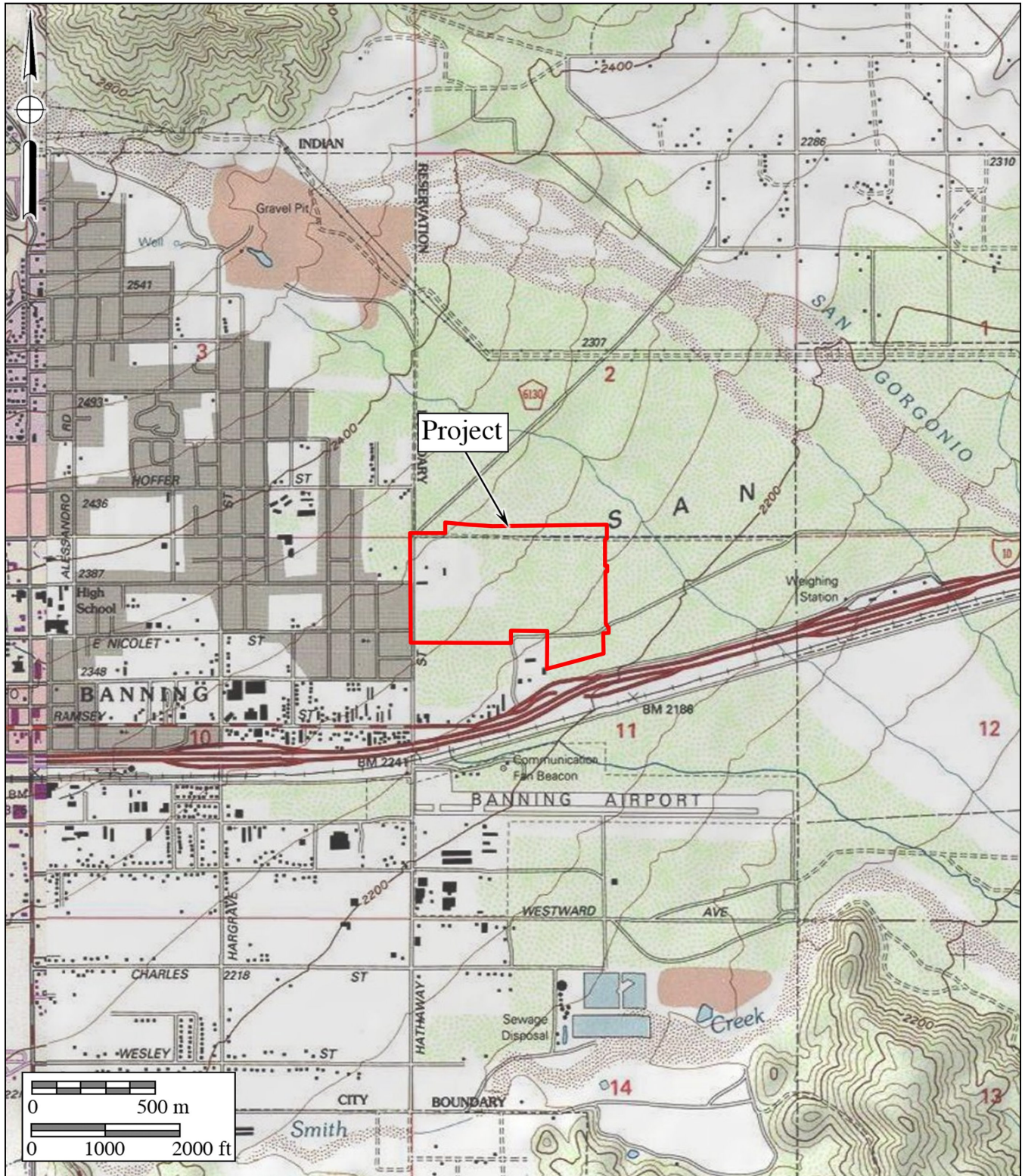


Figure 2
Project Location Map
 The First Hathaway Logistics Project
 USGS *Cabazon* Quadrangle (1980) (7.5-minute series)



State of California

Under “Guidelines for Implementation of the California Environmental Quality Act,” 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 by which protects nonrenewable resources including fossils, which is paraphrased below:

- 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 Banning

Under Chapter 17.24.070 of the City of Banning Code of Ordinances:

All development proposals shall be reviewed for compliance with [CEQA]. If the proposal is determined to qualify as a project under CEQA, the project proponent may be required to submit specialized studies to determine the effect on specific resources and hazards, including, but not limited to, biological resources, cultural resources, geotechnical hazards, hydrology, air quality, noise, and traffic. No project shall be approved without first satisfying the requirements of CEQA. (Municode 2020)

III. GEOLOGY

Regionally, the project lies within Banning Pass in the greater San Gorgonio Pass fault zone valley that separates the granitic mountain blocks of the San Bernardino Mountains to the

north and the San Jacinto Mountains to the southeast. This region of Banning Pass is characterized by sediments mapped as Holocene to late Pleistocene (present day to approximately 120,000 years ago [Cohen and Gibbard 2011]) young alluvial fan deposits (labeled “Qyf” in Figure 3, after Lancaster et al. 2012). These sediments have been shed off the topographic highs of the San Bernardino Mountains and deposited onto the valley floor below by the intermittent flows of the San Gorgonio River, and to a lesser extent, Hathaway Creek. The deposits are composed of “unconsolidated to slightly consolidated, undissected to slightly dissected boulder, cobble, gravel, sand, and silt deposits” (Lancaster et al. 2012).

A geotechnical investigation was conducted by Southern California Geotechnical (SCG) in 2006 at the property, which included exploratory trenching activities to a maximum depth of 14 feet (Mitchell and Seminara 2006). The results indicated the project is generally underlain by four feet of alluvium consisting of silty fine- to coarse-grained sand, gravel, cobbles, and occasional boulders. Below four feet, the alluvium becomes coarser.

Another geotechnical exploration at the project was conducted by SCG in 2018 (Frias and Trazo 2021). Four borings generally located in the northwest one-third of the project were drilled to depths of 10 to 20 feet deep. Results indicated fill soils as much as four feet thick were present in this area, overlying alluvium consisting of gravelly fine to coarse-grained sands, fine to coarse-grained sandy gravels, and fine to coarse-grained sands with occasional cobbles.

Another, more recent, geotechnical exploration was conducted by SCG at the property in March of 2021 that focused on investigating the geologic parameters underlying the proposed building footprint (Frias and Trazo 2021). For this investigation, six borings were drilled to depths ranging from approximately six to 15 feet below the existing surface, and 10 trenches were dug to depths of approximately six to 10 feet. Three borings and seven trenches failed to reach their planned depths due to encountering cobbles and boulders. Engineered and artificial fill soils were encountered, ranging from about six to 12 feet thick. Fill soils consisted of mixtures of silts, sands, gravels, and cobbles, as well as construction debris. Alluvium underlies the fill soils, composed of “silty sands, gravelly sands, and well- and poorly-graded sands, with varying silt, cobble and boulder content” (Frias and Trazo 2021).

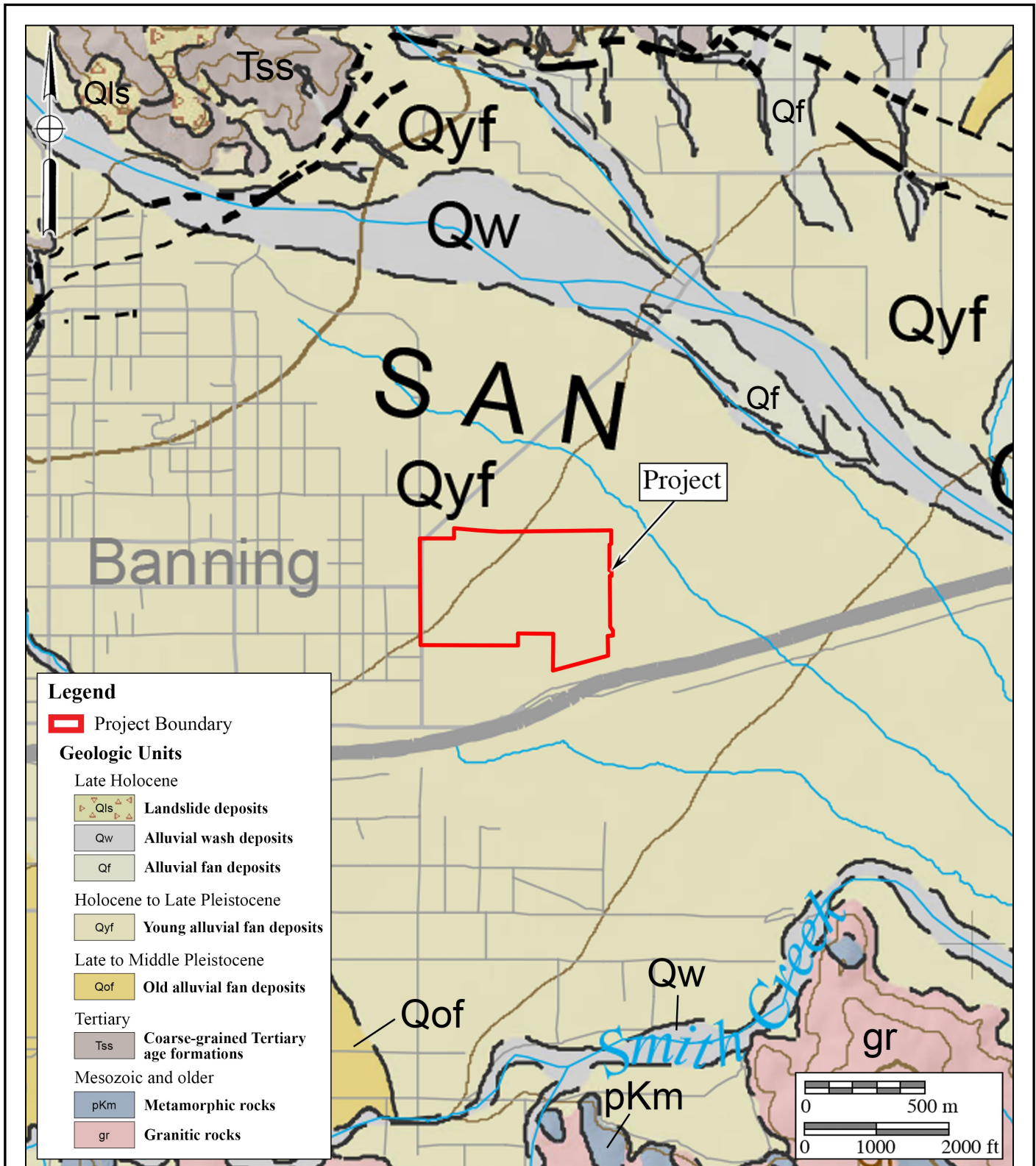


Figure 3
Geologic Map

The First Hathaway Logistics Project
Geology after Lancaster et al. (2012)



SCG also documented that remedial grading was performed in 2011 in the areas that were proposed to receive fill for the proposed construction:

The remedial grading consisted of the removal of the upper 4± feet of soils present in the “fill” portion of the proposed building pad areas. Generally, the fill areas were overexcavated to depths ranging from 4 to 24± feet below the proposed pad grades. The on-site soils were then used for structural compacted fill in order to establish the planned pad grades within the fill areas [...] Sorting of oversize rock material was performed during the rough grading operations [...] A portion of the 18-inch and greater diameter material was placed at the bottom of the deeper overexcavation (15 to 20 feet below pad grade) at the east end of northeast building pad. On-site sandy soils were then flooded around the oversize material that was placed at the bottom of the overexcavation. (Frias and Trazo 2021)

Reportedly, remedial grading was not performed within the portions of the project slated for cut.

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 policies (see Section II of this report).

Fossil Locality Records Search

A fossil locality records search was performed by the paleontological collections manager of the Western Science Center in Hemet in Riverside County, and is attached in Appendix B (Radford 2021). Although no fossils are recorded within the subject property or in the vicinity of the project, the records search indicated that the Pleistocene alluvial fan deposits that underlie the project are similar to other deposits of the same age in Riverside County that have yielded numerous fossil localities. In addition,

Pleistocene alluvial deposits in southern California are well documented and known to contain abundant fossil resources including those associated with Columbian mammoth (*Mammuthus columbi*), Pacific mastodon (*Mammut pacificus*),

Sabertooth cat (*Smilodon fatalis*), Ancient horse (*Equus* sp.) and many other Pleistocene megafauna.

While the presence of any fossil material is unlikely in Holocene alluvial deposits, if excavation activity disturbs deeper sediment dating to the earliest parts of the Holocene or Late Pleistocene periods, the material would be scientifically significant. (Radford 2021)

Field Survey

BFSA personnel conducted a pedestrian survey on March 3, 2021 under the direction of Principal Investigator Todd Wirths. Ground visibility was generally poor, as the majority of the ground surface was covered with hardscape and vegetation. The entire property appears to have been previously graded and, at the time of the survey, was characterized as flat and partially paved with one modern structure, the Orco Block Company building, in the west half of the property and modern trash throughout. Subsequently, on June 1, 2022, an additional survey was conducted of the areas of potential off-site improvements along public rights-of-way within 200 feet of the subject property. No paleontological resources were identified during the field surveys.

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, therefore, is typically assigned a low paleontological sensitivity. Pleistocene (more than 11,700 years old) alluvial and alluvial fan deposits in the Inland Empire, 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). Therefore, these Pleistocene deposits are accorded a high paleontological resource sensitivity.

Professional Standards

The Society of Vertebrate Paleontology (SVP) 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 (SVP 2010):

- *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, and that 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 upon 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 upon the geologically young age of the sediments mapped at the surface of the project and no known nearby fossils, the young alluvial fan deposits may be considered to have a low to undetermined potential to yield significant paleontological resources.

VI. CONCLUSIONS AND RECOMMENDATIONS

Research has revealed the presence of Holocene to late Pleistocene young alluvial fan deposits mapped across the project. Within western Riverside County, young alluvial fan deposits rarely produce terrestrial vertebrate fossils; furthermore, as indicated by previous geotechnical testing (Mitchell and Seminara 2006; Frias and Trazo 2021), coarse alluvial sediments are present beneath the property as much as 20 feet deep. Young alluvial fan deposits, such as those underlying the project, are typically assigned a low paleontological sensitivity. However, excavation activities are planned to proceed as much as 40 feet deep in the western half of the project, potentially deep enough to encounter late Pleistocene-aged alluvium. Late Pleistocene alluvial deposits are known to yield significant vertebrate fossils in western Riverside County, as indicated by Radford (2021). Therefore, a Paleontological Resources Impact Mitigation Program (PRIMP) should be prepared for the project. It is recommended that part-time “spot check” monitoring be performed during excavation activities greater than 20 feet deep in undisturbed alluvial deposits following the guidelines set forth in a PRIMP. The duration of paleontological monitoring during earth disturbance activities will be based on the observed geological conditions; adjustments to the intensity and appropriateness of monitoring shall be at the discretion of the project paleontologist. If significant fossils are found, full-time monitoring should be implemented. A PRIMP detailing the provisions and protocols for monitoring at the project is recommended for submission and approval by the Community Development Department of Banning and implemented prior to earth disturbance activities. When implemented with the provisions of CEQA, and the guidelines of the Society of Vertebrate Paleontology (2010), the PRIMP would mitigate any adverse impacts (loss or destruction) to potential nonrenewable paleontological resources (fossils), if present, to a level below significant at the project.

VII. CERTIFICATION

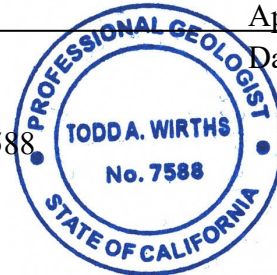
I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this paleontological report, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief, and have been compiled in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



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

April 4, 2024

Date



VIII. REFERENCES

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- Society of Vertebrate Paleontology. 2010. Standard Procedures for the Assessment and 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.
- United States Geological Survey. 1980. *Cabazon, California* (USGS 7.5-minute quadrangle series).

north and the San Jacinto Mountains to the southeast. This region of Banning Pass is characterized by sediments mapped as Holocene to late Pleistocene (present day to approximately 120,000 years ago [Cohen and Gibbard 2011]) young alluvial fan deposits (labeled “Qyf” in Figure 3, after Lancaster et al. 2012). These sediments have been shed off the topographic highs of the San Bernardino Mountains and deposited onto the valley floor below by the intermittent flows of the San Gorgonio River, and to a lesser extent, Hathaway Creek. The deposits are composed of “unconsolidated to slightly consolidated, undissected to slightly dissected boulder, cobble, gravel, sand, and silt deposits” (Lancaster et al. 2012).

A geotechnical investigation was conducted by Southern California Geotechnical (SCG) in 2006 at the property, which included exploratory trenching activities to a maximum depth of 14 feet (Mitchell and Seminara 2006). The results indicated the project is generally underlain by four feet of alluvium consisting of silty fine- to coarse-grained sand, gravel, cobbles, and occasional boulders. Below four feet, the alluvium becomes coarser.

Another geotechnical exploration at the project was conducted by SCG in 2018 (Frias and Trazo 2021). Four borings generally located in the northwest one-third of the project were drilled to depths of 10 to 20 feet deep. Results indicated fill soils as much as four feet thick were present in this area, overlying alluvium consisting of gravelly fine to coarse-grained sands, fine to coarse-grained sandy gravels, and fine to coarse-grained sands with occasional cobbles.

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APPENDIX A

Qualifications of Key Personnel

Todd A. Wirths, MS, PG No. 7588

Senior Paleontologist

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Education

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

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

Professional Certifications

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

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

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

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

Fossil Locality Search



Brian F. Smith and Associates
2021
Todd Wirths
14010 Poway Road,
Poway, CA 92064

March 17,

Dear Mr. Wirths,

This letter presents the results of a record search conducted for the Hathaway Banning Project (21-043) in the city of Banning, Riverside County, California. The project site is located north of Interstate 10, east of Hathaway Street in Section 11 of Township 3 South and Range 1 East on the Cabazon and Beaumont, CA USGS 7.5 minute topographic quadrangle.

The geologic unit underlying the project area is mapped entirely as alluvial fan deposits with depositional dates varied depending on the geologic map sources. The 2004 *Geologic Map of the Cabazon Quadrangle, Riverside County, California* by Thomas W. Dibblee has the entire area mapped as alluvial fan dating to the Pleistocene epoch. The 2012 *Preliminary Geologic Map of Quaternary Deposits of Southern California, Palm Springs 30 x 60 Quadrangle* by Jeremy T. Lancaster et al. has the same area mapped as alluvial fan deposits dating from the Holocene to Late Pleistocene. Pleistocene alluvial units are considered to be of high paleontological sensitivity, while Holocene alluvial units are unlikely to produce fossil resources due to the relatively recent dates associated with deposition. The Western Science Center does not have localities within the project area, or within a one mile radius but does have numerous localities within similarly mapped alluvial sediments throughout the region. Pleistocene alluvial deposits in southern California are well documented and known to contain abundant fossil resources including those associated with Columbian mammoth (*Mammuthus columbi*), Pacific mastodon (*Mammut pacificus*), Sabertooth cat (*Smilodon fatalis*), Ancient horse (*Equus sp.*) and many other Pleistocene megafauna.

While the presence of any fossil material is unlikely in Holocene alluvial deposits, if excavation activity disturbs deeper sediment dating to the earliest parts of the Holocene or Late Pleistocene periods, the material would be scientifically significant.

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

Sincerely,

A handwritten signature in black ink, appearing to read 'David Radford', is written below the text.



Darla Radford
Collections Manager