Appendix I

Paleontological Resources Report

PALEONTOLOGICAL RESOURCES ASSESSMENT REPORT

GATEWAY AVIATION CENTER PROJECT

March Air Reserve Base, Moreno Valley Area
Riverside County, California

For Submittal to:

March Joint Powers Authority
14205 Meridian Parkway, #140
Riverside, CA 92518
and
Federal Aviation Administration
Western-Pacific Region, Airports Division
El Segundo, CA 90245

Prepared for:

Lewis Retail Centers
1156 North Mountain Avenue
Upland, CA 91785

Prepared by:

Harry M. Quinn, Lead Geologist/Paleontologist
Ben Kerridge, Project Paleontologist
CRM TECH
1016 East Cooley Drive, Suite A/B
Colton, CA 92324

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

September 25, 2020

CRM TECH Contract #3611P
Approximately 79 acres
USGS Perris, Riverside East, Sunnymead, and Steele Peak, Calif., 7.5' (1:24,000) quadrangles
Section 25, T3S R3W, San Bernardino Baseline and Meridian

EXECUTIVE SUMMARY

Between May and September 2020, at the request of Lewis Retail Centers, CRM TECH performed a paleontological resources assessment on the Area of Potential Effects (APE) for the proposed Gateway Aviation Center Project on a portion of March Air Reserve Base (ARB), near the City of Moreno Valley, Riverside County, California. The subject property of the study consists of portions of Assessor's Parcel Nos. 294-170-006 and -010, encompassing approximately 79 acres of vacant land located to the southwest of the intersection of Heacock Street and Krameria Avenue, in the southeast quarter of Section 25, T3S R4W, San Bernardino Baseline and Meridian.

The project entails the development of an air freight cargo center with an approximately 201,200-square-foot industrial warehouse, an approximately 69,130-square-foot accessory maintenance building, a parking apron to accommodate up to eight commercial cargo airplanes, 100 trailer storage positions, and paved parking areas for employees and visitors. The existing taxiways and aprons in the APE will be expanded as a part of the project. All construction staging and storage will occur within the project footprint. The maximum depth of excavation required for the project, or the vertical extent of the APE below surface, will not exceed eight feet.

The present study is part of the environmental review process for the project, as required by the March Joint Powers Authority (JPA) in compliance with the California Environmental Quality Act (CEQA). As the project may require oversight by the Federal Aviation Administration (FAA), the study was designed to comply with both CEQA and the National Environmental Policy Act (NEPA). The purpose of the study is to provide the March JPA and the FAA with the necessary information and analysis to determine whether the proposed project would adversely affect any significant, nonrenewable paleontological resources and to design a paleontological mitigation program, if necessary.

In order to identify any paleontological localities that may exist in or near the APE and to assess the possibility 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 entire APE. Findings from these research procedures indicate that the project's potential to impact paleontological resources appears to be low in the disturbed surface soils but high in the undisturbed or relatively undisturbed native soils of early Quaternary age both on the ground surface and below the surface.

Based on these findings, CRM TECH recommends that a mitigation program be developed and implemented for the proposed project to prevent potential impact on significant, nonrenewable paleontological resources or reduce such impact to a level less than significant. As the primary component of the mitigation program, all earth-moving operations in the relatively undisturbed surface and subsurface sediments in the APE will require continuous monitoring for potential paleontological remains. Under this condition, CRM TECH further recommends that the proposed project may be cleared to proceed in compliance with CEQA and NEPA provisions on paleontological resources.

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INTRODUCTION

Between May and September 2020, at the request of Lewis Retail Centers, CRM TECH performed a paleontological resources assessment on the Area of Potential Effects (APE) for the proposed Gateway Aviation Center Project on a portion of March Air Reserve Base (ARB), near the City of Moreno Valley, Riverside County, California (Fig, 1). The subject property of the study consists of portions of Assessor's Parcel Nos. 294-170-006 and -010, encompassing approximately 79 acres of vacant land located to the southwest of the intersection of Heacock Street and Krameria Avenue, in the southeast quarter of Section 25, T3S R4W, San Bernardino Baseline and Meridian (Figs. 2, 3).

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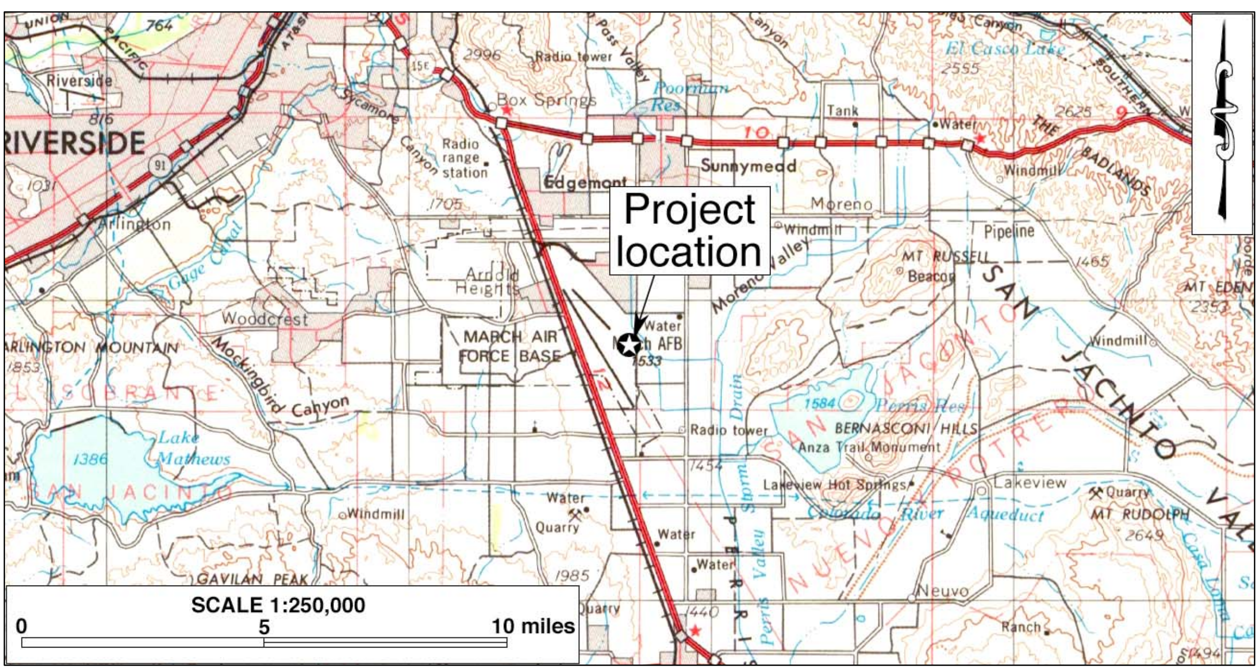

Figure 1. Project vicinity. (Based on USGS Santa Ana, Calif., 120'x60' quadrangle, 1979 edition)

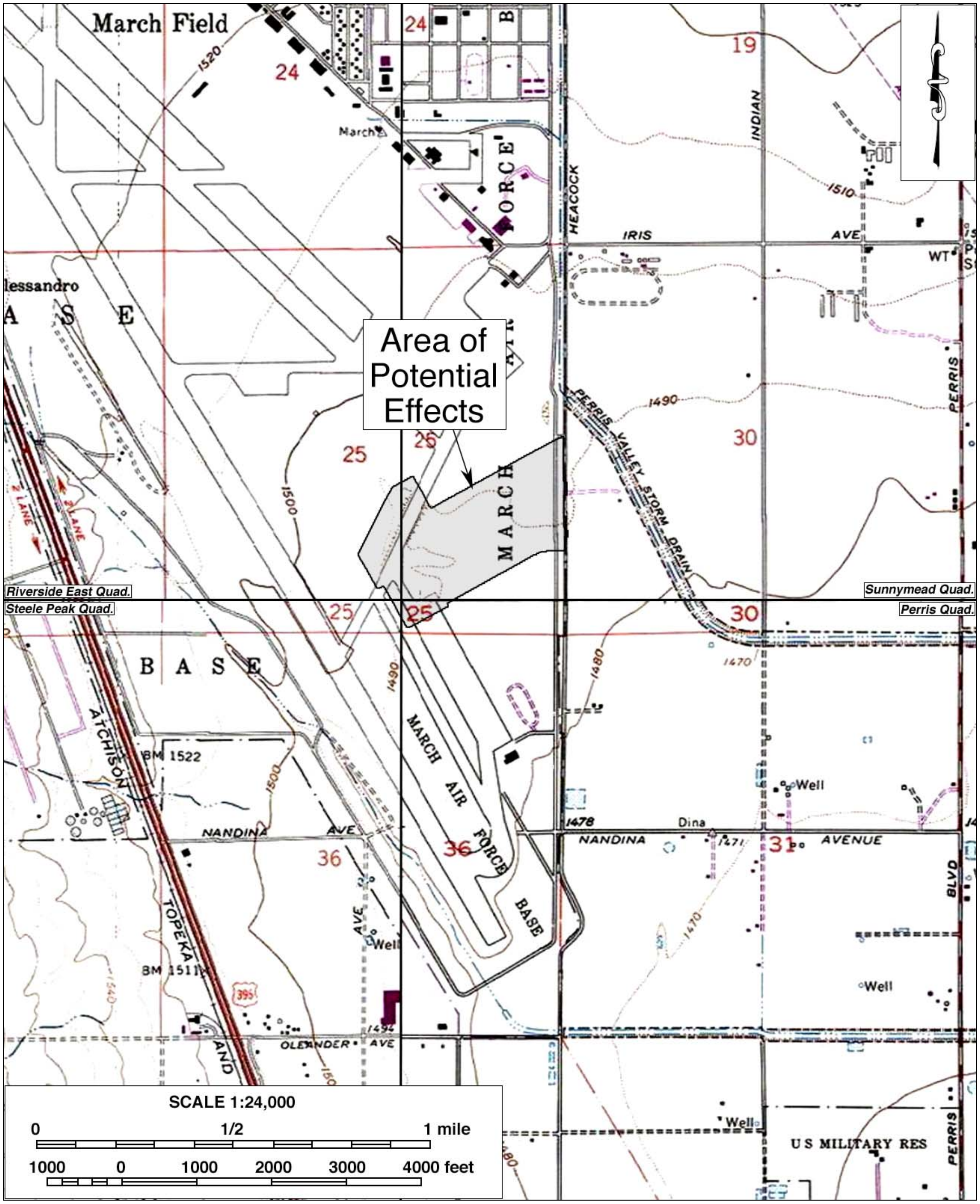

Figure 2. Area of Potential Effects. (Based on USGS Perris, Riverside East, Steele Peak, and Sunnymead, Calif., 7.5' quadrangles, 1978-1980 edition)

Figure 3. Aerial image of the APE and vicinity.

In order to identify any paleontological localities that may exist in or near the APE and to assess the possibility 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 entire APE. 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.

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, which is typically regarded as older than approximately 12,000 years, the generally accepted temporal boundary marking the end of the last late Pleistocene (circa 2.6 million to 12,000 years B.P.) glaciation and the beginning of the current Holocene epoch (circa 12,000 years B.P. to the present).

Common fossil remains include marine shells; the bones and teeth of fish, amphibians, reptiles, and mammals; leaf 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) 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 for yielding vertebrate fossils but also the potential of yielding a few significant fossils that may 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

March Air Reserve Base is situated on the eastern edge of a lowland area in the northern portion of the Peninsular Ranges geomorphic province, which is bounded on the north by the Transverse Ranges province, on the northeast by the Colorado Desert province, and on the west by the Pacific Ocean (Jenkins 1980:40-41; Harms 1996:150). The Peninsular Ranges province extends southward to the southern tip of Baja California (Jahns 1954:Plate 3). The natural landscape in the Transverse Ranges province features a number of inland valleys divided by groups of rolling hills and rocky knolls. The mild Mediterranean climate of the region is typical of inland southern California lowlands, characterized by hot and dry summers and mild and wet winters. The average annual rainfall in the region is approximately 10 inches, the majority of which typically falls seasonally between December and March.

More specifically, the APE lies in a portion of the Perris Block, which was defined by English (1926) as the region between the San Jacinto and Elsinore-Chino fault zones and consisting of a series of tectonically controlled valleys and ridges. The block is bounded on the north by the Cucamonga (San Gabriel) Fault and on the south by a vaguely delineated boundary near the southern end of the Temecula Valley (*ibid*.). The structural blocks are considered to have been active since Pliocene time (Woodford et al. 1971:3421). The Pliocene- and Pleistocene-age non-marine sedimentary rocks found filling the valley areas have produced vertebrate fossils, as well as plant and invertebrate fossil remains (Mann 1955:13).

The APE consists of mostly undeveloped and currently unused land in the southeastern portion of March ARB (Figs. 3, 4). It is bounded roughly by Heacock Street on the east, the March ARB Fire Department facility on the north, Taxiways A and G on the west, and an industrial warehouse and an air cargo center on the south. The terrain is relatively level with a gradual decline to the southeast, and the elevations range approximately between 1,490 feet to 1,500 feet above mean sea level. Most of the APE features open fields covered by dense, low-lying ruderal grasses and weeds, although some areas have been cleared of vegetation (Fig. 4), and portions of the APE are occupied by the two taxiways and a paved apron. The topsoil generally consists of fine to medium-grained clayey loam, reddish brown in color and mixed with some small rocks. No bedrock outcrops were observed within the APE.

Past construction and maintenance activities associated with the aviation facilities and underground utility lines have disturbed much of the APE (Fig. 4). The eastern portion of the APE, for examples, shows evidence of underground powerlines as well as gas and water pipelines. An above-ground

Figure 4. Typical landscape in the APE. *Left*: view to the southeast; *right*: view to the west. (Photographs taken on June 23, 2020)

power transmission line runs in a north-south direction adjacent to a road, and several water wells are also located in that portion of the APE. Plant species observed in the vicinity include dove mullein, foxtail, wild mustard, tumbleweed, and other shrubs and grasses (Fig. 4).

METHODS AND PROCEDURES

RECORDS SEARCHES

The records search service for this study was provided by the Western Science Center in Hemet, California, which maintains files of regional paleontological localities as well as supporting maps and documents. The records search results were used to identify previously performed paleontological resource assessments as well as known paleontological localities within a one-mile radius of the APE.

LITERATURE REVIEW

In conjunction with the records searches, CRM TECH paleontologist Ben Kerridge pursued a literature review on the APE and vicinity under the direction of lead geologist/paleontologist Harry M. Quinn, California Professional Geologist #3477. Sources consulted during the review included primarily topographic, geologic, and soil maps of the Moreno Valley-Riverside area, published geologic literature pertaining to the project location, and other materials in the CRM TECH library, such as unpublished reports produced during similar surveys in the vicinity.

FIELD SURVEY

On June 23, 2020, CRM TECH paleontological surveyors Daniel Ballester and Nina Gallardo carried out the field survey of the APE under Harry M. Quinn's direction. The survey was completed on foot by walking a series of parallel north-south and northeast-southwest transects at

15-meter (approximately 50-foot) intervals. In this way, the entire APE was systematically examined for any indications of paleontological remains and to verify geological formations and soil types. Ground visibility was variable, ranging from poor (nearly 0%) in open fields with dense vegetation to excellent (100%) where the ground surface had been cleared. In light of past ground disturbances in the vicinity, the ground visibility is considered adequate for this study.

RESULTS AND FINDINGS

RECORDS SEARCHES

The Western Science Center found no known paleontological localities within the boundaries of the APE or within the one-mile scope of the records search (Radford 2020; see App. 2). However, numerous specimens have been reported in areas further away from the project location but from sediment lithologies similar to those that are known to occur in the project vicinity (*ibid.*). According to the Western Science Center, the APE lies atop very old alluvial fan deposits dating to the early Pleistocene (*ibid.*). These deposits are considered to be highly sensitive for paleontological resources, and any fossils unearthed during the proposed project would likely be scientifically significant (*ibid.*). Therefore, the Western Science Center assigned the project a high potential for impacting significant, nonrenewable fossil resources (*ibid.*).

LITERATURE REVIEW

The surface geology in the vicinity of the APE was mapped by Rogers (1965) as *Qal*, or alluvium of Recent (Holocene) age. More recently, however, Morton (2001; 2003), Morton and Cox (2001), Morton and Matti (2001), and Morton and Miller (2006) mapped the area as $Qvof_a$, namely very old alluvial fan deposits of early Pleistocene age, described as well dissected, well indurated, reddish-brown sand deposits containing minor amounts of gravel (Fig. 5). These sediments are attributed to nearby Mt. Russell, which is composed of heterogeneous granitic rock (*Khg*; Morton 2003).

$Qvof_a$ is often elevated relative to surrounding Quaternary units (Morton and Miller 2006). While some of this sediment may represent debris flows, much of this unit here is thought to be stream deposited (*ibid.*). Further, the portion of the Perris block on which the APE lies consists of widespread exposures of basement in a series of interconnected alluviated valleys (*ibid.*). This has created erosional surfaces throughout the surrounding low-lying areas of Perris Block (*ibid.*).

The Natural Resources Conservation Service mapped the surface soils in the vicinity of the APE as mainly *EnA* and *MmB* with some *HgA* and *GyA* (NRCS 2020). *EnA* represents the Exeter sandy loam, with 0-2% slopes and a depth of 20-40 inches to duripan. This soil type covers more than 70% of the ground surface in the APE (*ibid.*). *MmB* represents the Monserate sandy loam, with 0-5% slopes and a depth of 20-39 inches to duripan, which covers more than 20% of the ground surface in the APE (*ibid.*). The rest of the APE (less than 8%) is covered by the *HgA* and *Gya* soils (Handford and Greenfield, respectively). Both of these occur on 0-2% slope with a duripan at 80 inches below ground surface (*ibid.*). All of these soil types are well-drained sandy loam alluvial soils derived from granite (*ibid.*).

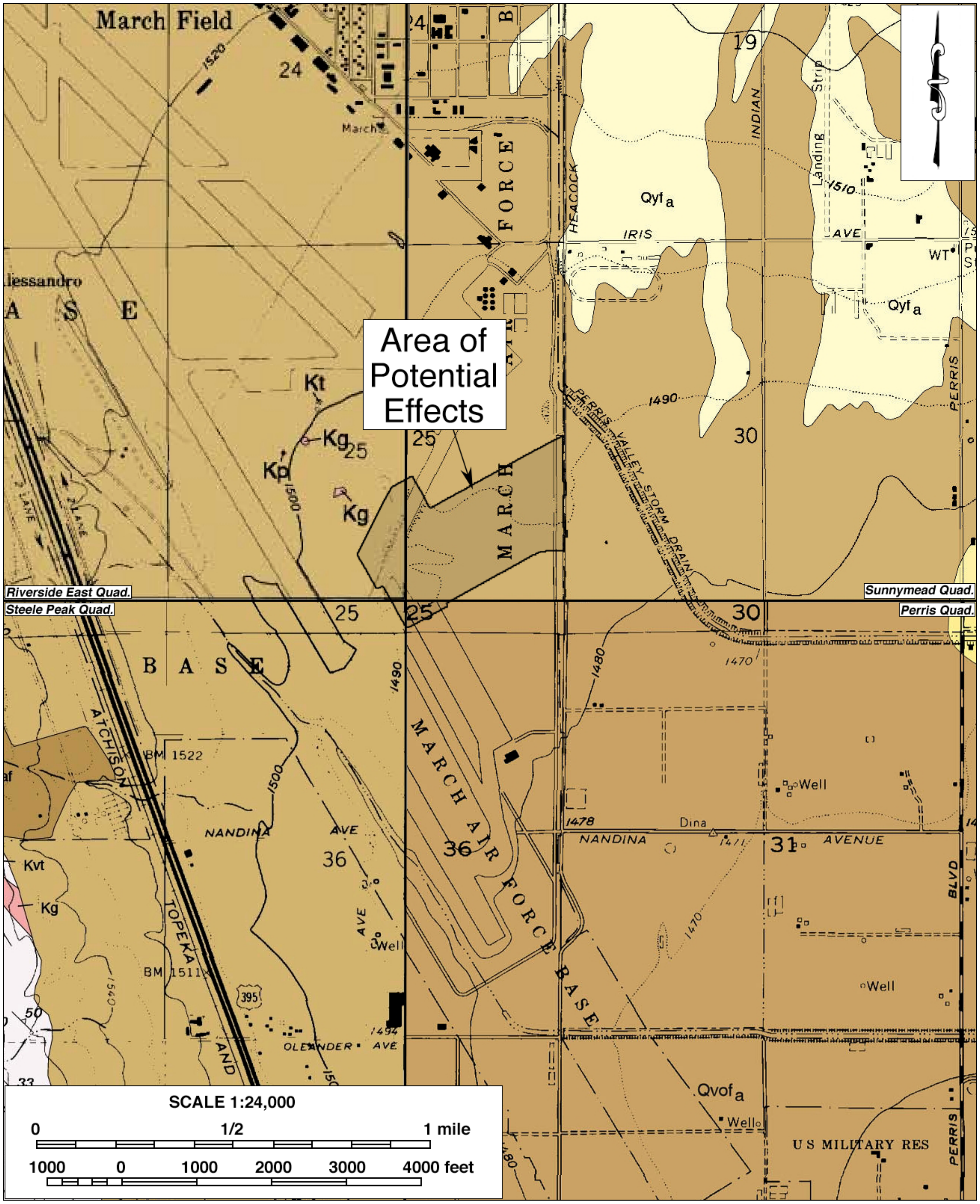

Figure 5. Geologic map of the project vicinity. (Based on Morton [2001; 2003], Morton and Cox [2001], and Morton and Matti [2001])

FIELD SURVEY

During the field survey, no evidence of any paleontological resources was observed on the ground surface throughout the APE. The surface soils within March ARB have been extensively disturbed by past construction and military activities since the initial establishment of the base in 1918. Closer to the project location, the aviation facilities were constructed in the early 1940s, during a major expansion of the base (USGS 1953a-d; March ARB 2010; n.d.). Today, the presence of a drainage channel, the taxiways, and the underground utility lines within the APE indicates prior disturbances to the surface as well as subsurface sediments.

DISCUSSION

The geologic and soil maps of the project vicinity indicate that the APE is located in an area of exposed Pleistocene-age soils developed from the decomposition of upthrown granitic rock unit on nearby Mt. Russel. The gradual southeastern decline in elevation in and near of the APE, along with a regional character of erosional surfaces in the Perris Block, indicates little Holocene deposition on the surface at this location.

The soil profile in more than 90% of the APE features alluvium with duripans at recorded depths of 20-40 inches below surface in the region, and the geologic particulars of the APE would place that horizon on the shallow end of that spectrum within the APE. These early Pleistocene-age sediments have a high potential to contain nonrenewable paleontological resources. The presence of the Pleistocene alluvial soils may be confirmed through on-site boring logs, should they be available.

While much of the ground surface of the APE has been disturbed, the level of disturbance varies greatly at different locations. Portions of the APE are now covered with paved taxiways and aprons, while other portions appear to have been left largely unused after the initial leveling and perhaps grading in the early 1940s (NETR 1966-2016). Therefore, any ground-disturbing activities impacting relatively undisturbed native soils at or below the surface will have a high potential to disturb potentially significant paleontological remains.

CONCLUSION AND RECOMMENDATIONS

The results of the records searches, literature research, and field survey demonstrate that the proposed project's potential to impact paleontological resources appears to be low in the disturbed surface soils but high in the undisturbed or relatively undisturbed native soils of early Quaternary age both on the ground surface and below the surface. Based on these findings, CRM TECH recommends that a mitigation program be developed and implemented for the project to prevent potential impact on significant, nonrenewable paleontological resources or reduce such impact to a level less than significant. The mitigation program should be developed in accordance with the provisions of CEQA and NEPA as well as the proposed guidelines of the Society of Vertebrate Paleontology (2010), and should include but not be limited to the following:

- All earth-moving operations in the relatively undisturbed surface and subsurface sediments in the APE will require continuous monitoring for potential paleontological remains. The monitor should be prepared to quickly salvage fossils, if they are unearthed, to avoid construction delays, but must have the power to temporarily halt or divert construction equipment to allow for removal of abundant or large specimens.

- Samples of sediments should be collected and processed to recover small fossil remains.
- Recovered specimens should be identified and curated at a repository with permanent retrievable storage that would allow for further research in the future.
- A report of findings, including an itemized inventory of recovered specimens and a discussion of their significance when appropriate, should be prepared upon completion of the research procedures outlined above. The approval of the report and the inventory by the March JPA and the FAA would signify completion of the mitigation program.

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

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1953b Map: Riverside East, Calif. (7.5', 1:24,000); aerial photographs taken 1951, field-checked in 1953.
1953c Map: Steele Peak, Calif. (7.5', 1:24,000); aerial photographs taken in 1951, field-checked in 1953.
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APPENDIX 1

PERSONNEL QUALIFICATIONS

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

Education

1968 M.S., Geology, University of Southern California, Los Angeles, California.
1964 B.S, Geology, Long Beach State College, Long Beach.
1962 A.A., Los Angeles Harbor College, Wilmington, California.

- Graduate work oriented toward invertebrate paleontology; M.S. thesis completed as a stratigraphic paleontology project on the Precambrian and Lower Cambrian rocks of Eastern California.

Professional Experience

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

Previous Work Experience in Paleontology

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

Memberships

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

Publications in Geology

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

PROJECT PALEONTOLOGIST/REPORT WRITER
Ben Kerridge, M.A.

Education

2019-2020	Graduate course work in paleontology, Department of Geological Sciences, California State University, Fullerton.
2014	Geoarchaeological Field School, Institute for Field Research, Kephallenia, Greece.
2010	M.A., Anthropology, California State University, Fullerton.
2009	Project Management Training, Project Management Institute/CH2M HILL.
2004	B.A., Anthropology, California State University, Fullerton.

Professional Experience

2015- Project Archaeologist/Paleontological Surveyor/Report Writer, CRM TECH, Colton, California.

- Cross-trained in paleontological field procedures and identifications by CRM TECH Geologist/Paleontologist Harry M. Quinn.
- Paleontological surveys and monitoring at various locations in southern California; fossil recovery; soil sample collection; stratigraphic profile sketches.

2015	Teaching Assistant, Institute for Field Research, Kephallenia, Greece.
2009-2014	Publications Delivery Manager, CH2M HILL, Santa Ana, California.
2010-	Naturalist, Newport Bay Conservancy, Newport Beach, California.
2006-2009	Technical Publishing Specialist, CH2M HILL, Santa Ana, California.

PALEONTOLOGICAL SURVEYOR
Nina Gallardo, B.A.

Education

2004 B.A., Anthropology/Law and Society, University of California, Riverside.

Professional Experience

2004- Project Archaeologist/Paleontological Surveyor/Monitor, CRM TECH, Riverside/Colton, California.

- Cross-trained in paleontological field procedures and identifications by CRM TECH Geologist/Paleontologist Harry M. Quinn.
- Paleontological field surveys and monitoring; mapping of resources; fossil recovery; soil sample collection; stratigraphic profiles.

Cultural Resources Management Reports

Co-author of and contributor to numerous cultural resources management reports since 2004.

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.
2007	Certificate in Geographic Information Systems (GIS), California State University, San Bernardino.

Professional Experience

2002-	Field Director/GIS Specialist, CRM TECH, Riverside/Colton, California. • Cross-trained in paleontological field procedures and identifications by CRM TECH Geologist/Paleontologist Harry M. Quinn.
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.

Cultural Resources Management Reports

Co-author and contributor to numerous cultural and paleontological resources management reports since 2002.

APPENDIX 2

RECORDS SEARCH RESULTS

WESTERN SCIENCE CENTER

CRM TECH
Daniel Ballester
1016 E. Cooley Drive, Ste A/B
Colton, CA 92324

April 22, 2020

Dear Mr. Ballester,

This letter presents the results of a record search conducted for the Gateway Aviation Center Project on March Air Reserve Base, Riverside County, California. The project site is located west of Heacock Street, and east of Interstate 215 in Township 3 South, Range 3 West, Section 25 on the Sunnymead and Perris, CA USGS 7.5 minute quadrangle.

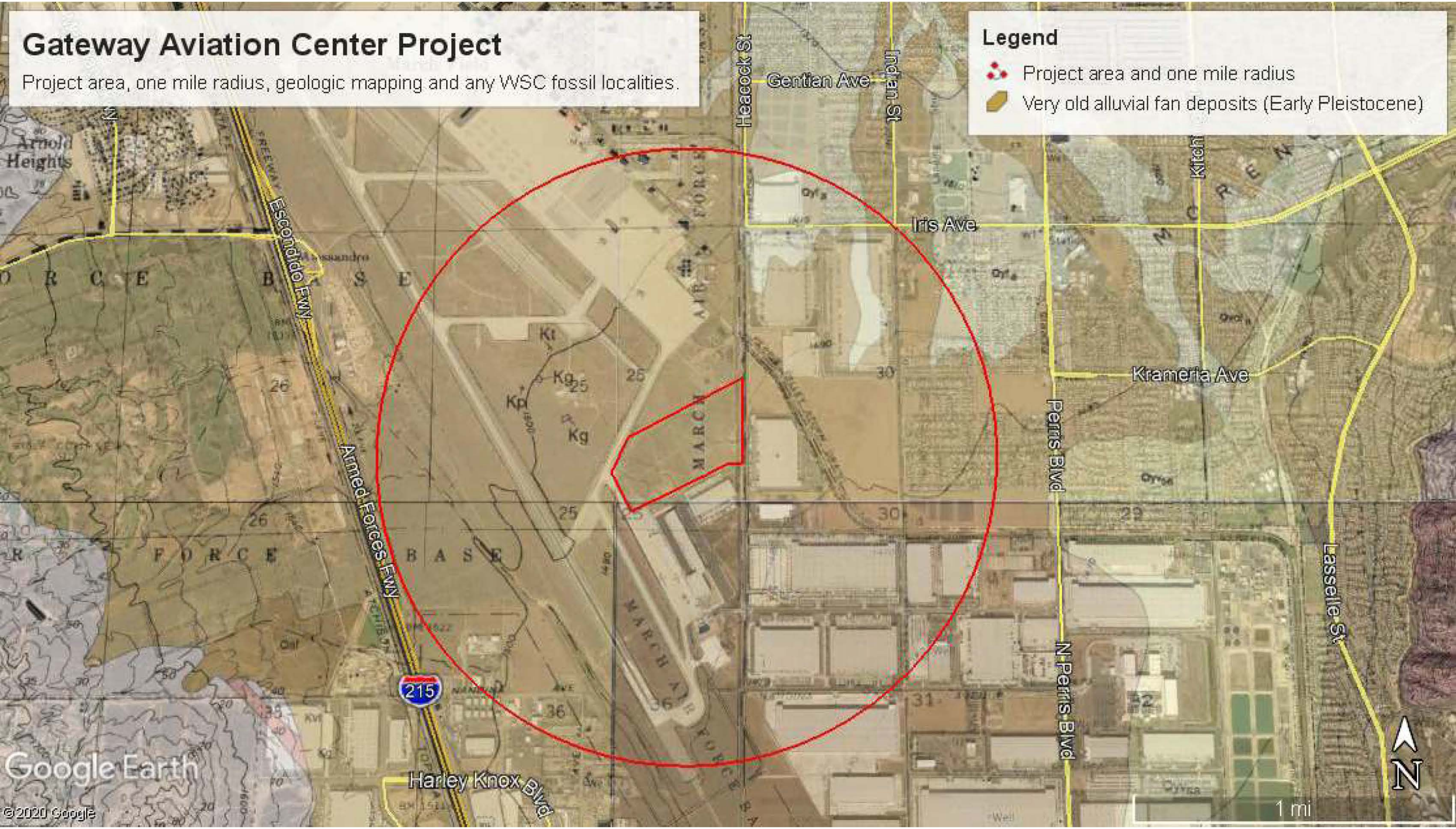
The geologic units underlying this project are mapped entirely as very old alluvial fan deposits dating from the Early Pleistocene period (Morton & Matti, 1997). Pleistocene alluvial units are considered to be of high paleontological sensitivity. The Western Science Center does not have localities within the project area or within a 1 mile radius, but does have numerous fossil localities within 10 miles associated with the Aldi Distribution Project in Moreno Valley. The Aldi Distribution Center Project is in similarly mapped sediments and is located roughly 6 miles from the project area. The Aldi Distribution Center Project produced multiple unidentified specimen associated with large Pleistocene fauna, and one specimen identified to giant ground sloth.

Any fossils recovered from the project area would be scientifically significant. Excavation activity associated with 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 associated with the current study area.

If you have any questions, or would like further information about the Aldi Distribution Center Project, please feel free to contact me at dradford@westerncentermuseum.org

Sincerely,

Darla Radford
Collections Manager


Gateway Aviation Center Project
Project area, one mile radius, geologic mapping and any WSC fossil localities.
Legend
Project area and one mile radius
Very old alluvial fan deposits (Early Pleistocene)
Heacock St
Gentian Ave
Indian St
Iris Ave
Krameria Ave
Perris Blvd
N Perris Blvd
Lasselle St
Escondido Fwy
Armed Forces Fwy
215
Harley Knox Blvd
1 mi
N
Google Earth
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