



May 28, 2019;
Revised April 1, 2020

Ms. Tracy Zinn
T&B Planning, Inc.
3200 El Camino Real, Suite 100
Irvine, California 92602

Subject: Paleontological Resource Assessment for the Proposed Merrill Commerce Center
Specific Plan Project, City of Ontario, Southern San Bernardino County, California

Dear Ms. Zinn:

Site Location: A Paleontological Resource Assessment has been completed for the site of the proposed Merrill Commerce Center Specific Plan project located mostly within the city of Ontario, with lesser areas of proposed improvements taking place within the city of Chino, immediately northeast of the Chino Airport in San Bernardino County, California (Attachments 1, 2a, and 2b). The proposed 376.3-acre development is bounded on the south by Merrill Avenue, on the east by Carpenter Street, on the west by Grove Avenue, and on the north by Eucalyptus Avenue. Currently, the project site is mainly occupied by open fields and agricultural (dairy) operations, along with residential buildings. Additionally, there is a trucking operation located in the southeastern quarter of the project site. The project proposes the development of industrial and business park land uses totaling up to approximately 8,455,000 square feet of building space. The project also includes up to 113.3 acres of off-site road and utility improvements. South of Merrill Avenue, the alignments of the utility improvements and some off-site parcels extend into the city limits of Chino, along Euclid, Grove, and Carpenter Avenues. The project encompasses parts of U.S. Geological Survey 7.5-minute, 1:24,000-scale *Prado Dam, Corona North, and Ontario, California* topographic quadrangle maps (Attachments 2a and 2b).

Geology: On the geologic map of the 1:100,000-scale San Bernardino-Santa Ana 30' x 60' quadrangles (Attachments 3a and 3b, after Morton and Miller, 2006), the project site is located on the distal margins of the broad alluvial floodplain of the ancestral Santa Ana River. Most of the project area is mapped as being underlain by late Quaternary (middle Holocene) young sandy alluvial fan deposits (pale gray areas labeled Qyf_{3a} on Attachments 3a and 3b). These overlie at shallow depths middle to late Quaternary (middle to late Pleistocene) very old sandy alluvial fan deposits (brown, Qvof_a, on Attachment 3b). South of the planned Grove Avenue road improvements in Chino, the very old sandy alluvial fan deposits are mapped at the surface (Attachment 3b). In addition, late Pleistocene to early Holocene young sandy axial channel deposits occur in stream channels occupying the southern-most areas of the project (Qya_a, on

Attachment 3b), and late Pleistocene to early Holocene young alluvial fan deposits occur east of the northern off-site alignments (Qyf₁, on Attachment 3a).

Field Survey: A field survey was performed at the Merrill Commerce Center Specific Plan project area by several BFSA staff members on February 6 and 7, 2019. The surveyed areas consisted of mostly dairy farms and associated structures. Various portions of the dairies have been paved, such as cattle runs and driveways. Also present are parking areas covered by gravel and accessed by dirt roads. The presence of cattle limited the areas that could be surveyed. Trucking facilities and mulching and grading areas are located on the east side of the project site. There are two open fields. One is located at the southwest quarter of the project area and appears to have been plowed or disked, and was overgrown with weeds and grasses. As a result, visibility in this area was limited. The second field is located south of the 8643 Eucalyptus Avenue address. This field was overgrown with weeds and flooded at the time of the survey. Houses and milk barns occupied street-side properties along Eucalyptus, Merrill, and Grove Avenues. No paleontological resources were observed during the field survey.

Records Search: Three previous museum collections and records searches associated for properties nearby the project site were conducted by the Section of Vertebrate Paleontology at the Natural History Museum of Los Angeles County (LACM) in Los Angeles (McLeod, 2016 and 2006; copies attached), and the Division of Geological Sciences at the San Bernardino County Museum (SBCM) in Redlands (Scott, 2006; copy attached). The report by McLeod (2016) was drafted for the Chino Parcel Delivery site, located south of the Merrill Commerce Center Specific Plan project site right across Merrill Avenue. The two other reports (McLeod, 2006; Scott, 2006) were drafted for the Ranch at Eastvale subdivision project, located west of the Chino Airport and just across the San Bernardino/Riverside County line. None of these reports revealed any previously recorded fossil localities from within the boundaries of the Merrill Commerce Center Specific Plan project site and associated off-site alignments. However, McLeod (2016; copy attached) reported a fossil whipsnake (*Masticophis* sp.) from a Pleistocene locality (LACM loc. 7811) approximately 2.5 miles east of the project site. This report encompassed both the current project site and several miles surrounding it in all directions. In the report for the nearby Ranch at Eastvale subdivision site, McLeod (2006; copy attached) reported a single locality to the south-southeast between Norco and Corona, in Riverside County, that yielded a Pleistocene fossil specimen of deer (*Odocoileus* sp.) from LACM loc. 1207. In a third record search report, also generated for the Ranch at Eastvale project site, Scott (2006; copy attached) did not report any nearby fossil localities held by the SBCM.

Professional Standards: The Society of Vertebrate Paleontology (SVP) drafted guidelines outlining procedures for “evaluating the potential for impacts of a proposed action on paleontological resources and for mitigating those impacts. Impact mitigation includes pre-project survey and salvage, monitoring and screen washing during excavation to salvage fossils, conservation and inventory, and final reports and specimen curation. The objective of these procedures is to offer standard methods for assessing potential impacts to fossils and mitigating these impacts” (SVP, 2010). The guidelines included 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, 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 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.

Paleontological Sensitivity: Late Quaternary (middle Holocene) alluvial fan deposits cover the entire project alignment. Generally, Holocene (<11,700 years old) sedimentary deposits are considered to be geologically too young to contain significant nonrenewable paleontological resources (*i.e.*, fossils) and are thus typically assigned a “Low” paleontological sensitivity. Pleistocene (> 11,700 years old) alluvium 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 other animals (Jefferson, 1991; and attached record searches). These Pleistocene sediments are thus accorded a “High” paleontological resource sensitivity. The middle to late Quaternary (middle to late Pleistocene) very old sandy alluvial fan deposits that are exposed just south of the project alignments, as well as underlying the Holocene deposits throughout the remainder of the project area, are thus assigned a High paleontological sensitivity ranking (brown areas labeled Qvof_a on Attachment 3b). When covered by the young alluvial fan deposits, these very old sandy alluvial fan deposits likely occur at relatively shallow, but unknown depths, within the project area.

Regional Regulatory Guidelines – County of San Bernardino: The County of San Bernardino 2007 Development Code (2018) has developed criteria for applying guidelines to preserve and protect non-renewable paleontological resources. In Chapter 82.20, “Paleontologic Resources (PR) Overlay,” of the Development Code, “Purpose,” “Location Requirements,” “Development Standards,” and “Paleontologist Qualifications” are described in Sections 82.20.010 through 82.20.010, respectively (County of San Bernardino 2018).

Local Regulatory Guidelines – Ontario: The Ontario Plan Final Environmental Impact Report (The Planning Center, 2009) sets forth goals and policies for the City to manage future growth and land uses. According to Impact 5.5-2 of the Ontario Plan Final Environmental Impact Report,

The City of Ontario is underlain by deposits of Quaternary and upper-Pleistocene sediments deposited during Pliocene and early Pleistocene time. Quaternary Older Alluvial sediments may contain significant, nonrenewable, paleontological resources and are therefore considered to have high sensitivity. Older Pleistocene alluvial sediments can yield fossil remains, often found at depths of 10 feet or more below existing ground surface. In addition, there has been one paleontological resource (SBCM 5.1.8) discovered within the City’s boundaries [mammoth remains approx. 20 feet below the surface]. As a result, the possibility of finding additional paleontological resources within City boundaries is moderate to high at depths of 10 feet or more below ground surface.

Local Regulatory Guidelines – Chino: The City General Plan (City of Chino, 2010) sets forth the goals and policies for the City to manage future growth and land uses. Chapter 9, Open Space and Conservation Element, of the General Plan contains the following policies designed to protect paleontological resources within the City:

Goal OCS-7: Preserve Chino's connection to its history.

Policy P3: In the event that unknown archaeological or paleontological resources are discovered during construction, the Planning Division shall be notified immediately. All construction shall stop and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology should be retained to evaluate the discovered resources and recommend appropriate action.

Recommendations: The research conducted on the local fossil record and the geology of the project area has provided the basis for the determination that the subject property is underlain by fossil-rich Pleistocene very old alluvial fan sediments. These sediments are illustrated on Attachment 3B as Qvof_a. Across the project, the Pleistocene deposits are covered by younger Holocene (Qyf_{3a}) deposits that are less likely to contain fossils. The depth at which the interface between the Pleistocene and Holocene deposits would be encountered cannot be provided because that interface depth fluctuates across the area. Furthermore, site-specific geological profiles for the Merrill Commerce Center Specific Plan Project have not been conducted. The geological data that is available indicates that the Pleistocene deposits are likely to be more shallow in the southern portion of the project and deeper in the northern area; however, this is a very generalized observation and further geological data could alter this observation. Given that potentially significant fossils could be encountered in the Pleistocene deposits, paleontological monitoring is recommended. The following measures have been provided to mitigate potential impacts of significant fossil deposits:

1. Paleontological monitoring will be recommended during all grading and trenching operations. Monitoring will be conducted intermittently during initial cuts until the Quaternary deposits are encountered. Once Quaternary deposits are identified, paleontological monitoring should be conducted on a full-time basis.
2. Paleontological monitors will be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediment that are likely to contain the remains of small fossil invertebrates and vertebrates. The monitor must be empowered to temporarily halt or divert equipment to allow for the 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 they are present, are determined upon exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources.
3. Preparation of recovered specimens to a point of identification and permanent preservation, including screen-washing sediments to recover small invertebrates and vertebrates if indicated by the results of test sampling. Preparation of individual vertebrate fossils is often more time-consuming than for accumulations of invertebrate fossils.
4. All fossils must be deposited in an accredited institution (university or museum) that maintains collections of paleontological materials. All costs of the paleontological monitoring

and mitigation program, including any one-time charges by the receiving institution, are the responsibility of the developer.

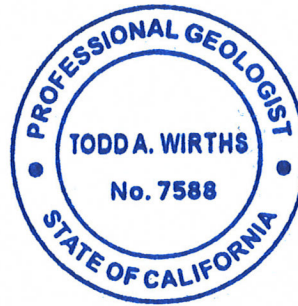
5. Preparation of a final monitoring and mitigation report of findings and significance, including lists of all fossils recovered and necessary maps and graphics to accurately record their original location(s). A letter documenting receipt and acceptance of all fossil collections by the receiving institution must be included in the final report. The report, when submitted to (and accepted by) the appropriate lead agency (*e.g.*, the City of Ontario), will signify satisfactory completion of the project program to mitigate impacts to any nonrenewable paleontological resources.

If you have any questions concerning this evaluation, please feel free to contact me at our Poway office. Thank you for your time and consideration.

Sincerely,



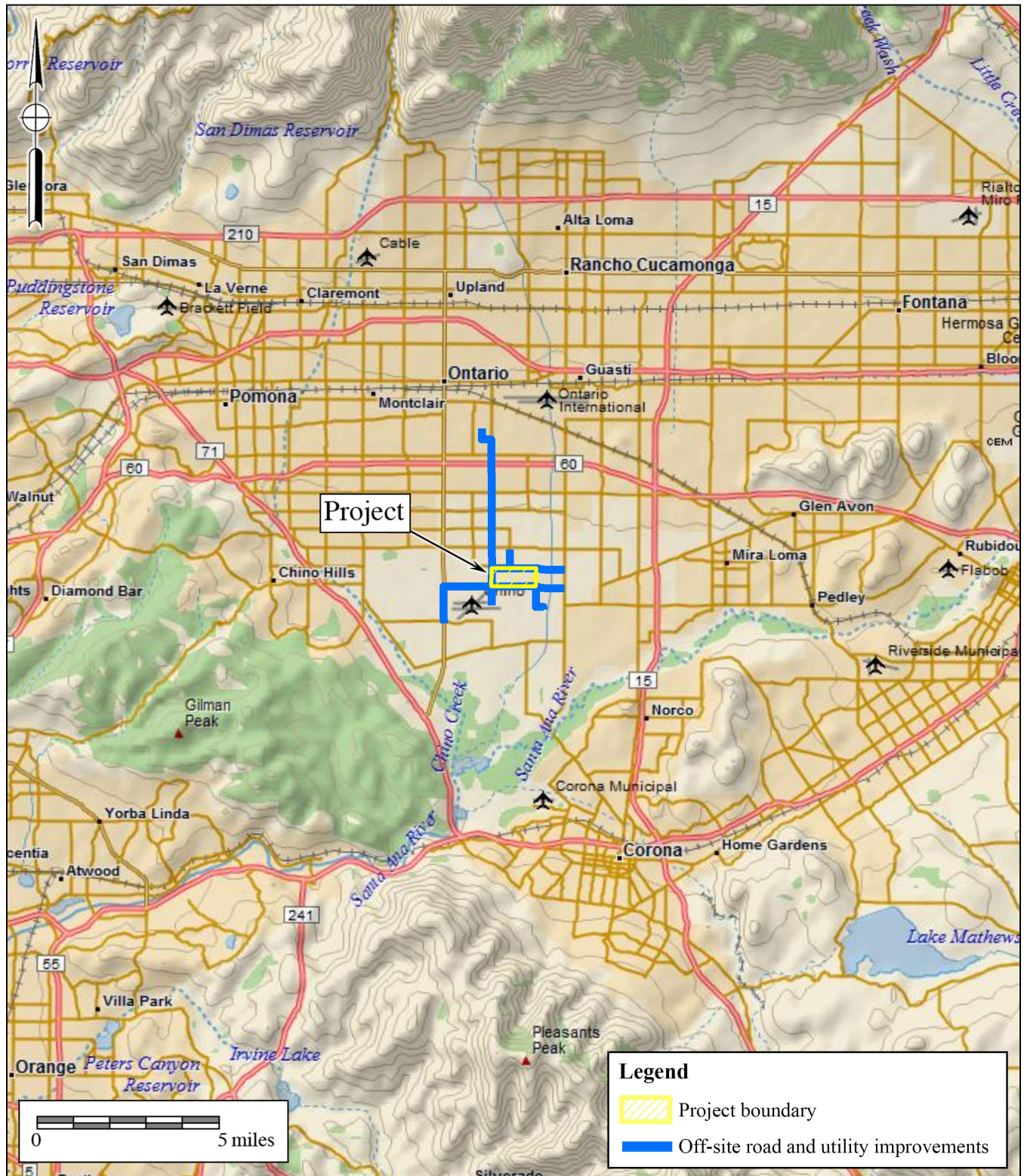
Todd A. Wirths, M.S., P.G. 7588
Senior Paleontologist, California Professional Geologist



Attachments: Index maps, geologic map, LACM and SBCM records search reports

References:

- City of Chino. 2010. Envision Chino General Plan 2025 – Chapter 9: Open Space and Conservation Element. Adopted July 2010.
- County of San Bernardino. 2018. County of San Bernardino 2007 Development Code. Prepared for the County of San Bernardino Land Use Services Division, by several consultants. Adopted March 13, 2007; effective April 12, 2007; amended April 20, 2018. <http://www.sbcounty.gov/Uploads/lus/DevelopmentCode/DCWebsite.pdf>.
- Jefferson, G. T. 1991. A catalogue of late Quaternary vertebrates from California: Part two, mammals. Natural History Museum of Los Angeles County, Technical Reports, no. 7: i-v + 1-129.
- McLeod, S. A. 2006. Paleontological resources for the proposed The Ranch at Eastvale, CRM Tech # 1884-P, in the City of Eastvale, Riverside County, Paleo, project area. Museum collections and records search report prepared for CRM Tech, Riverside, by the Vertebrate Paleontology Section, Natural History Museum of Los Angeles County, Los Angeles; attached.
- McLeod, S. A. 2016. Paleontological resources records search for the proposed Chino Parcel Delivery project, BFSa project # 16-018, in the City of Chino, San Bernardino County. Museum collections and records search report prepared for Brian F. Smith and Associates, Inc., Poway, by the Vertebrate Paleontology Section, Natural History Museum of Los Angeles County, Los Angeles; attached.
- Morton, D. M., and Miller, F.K. 2006. Geologic Map of the San Bernardino and Santa Ana 30' x 60' Quadrangles, California, version 1.0. U. S. Geological Survey, Open-File Report 2006-1217 (map scale 1:100,000).
- Scott, E. G. 2006. Paleontology literature and records review, The Ranch at Eastvale, Riverside County, California. Museum collections and records search report prepared for CRM Tech, Riverside, by the Division of Geological Sciences, San Bernardino County Museum, Redlands; attached.
- 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. http://vertpaleo.org/Membership/Member-Ethics/SVP_Impact_Mitigation_Guidelines.aspx.
- The Planning Center. 2009. The Ontario Plan Final Environmental Impact Report, SCH NO. 2008101140. Prepared for the City of Ontario by The Planning Center, Costa Mesa, CA. <http://www.ontarioplan.org/environmental-impact-report/>.



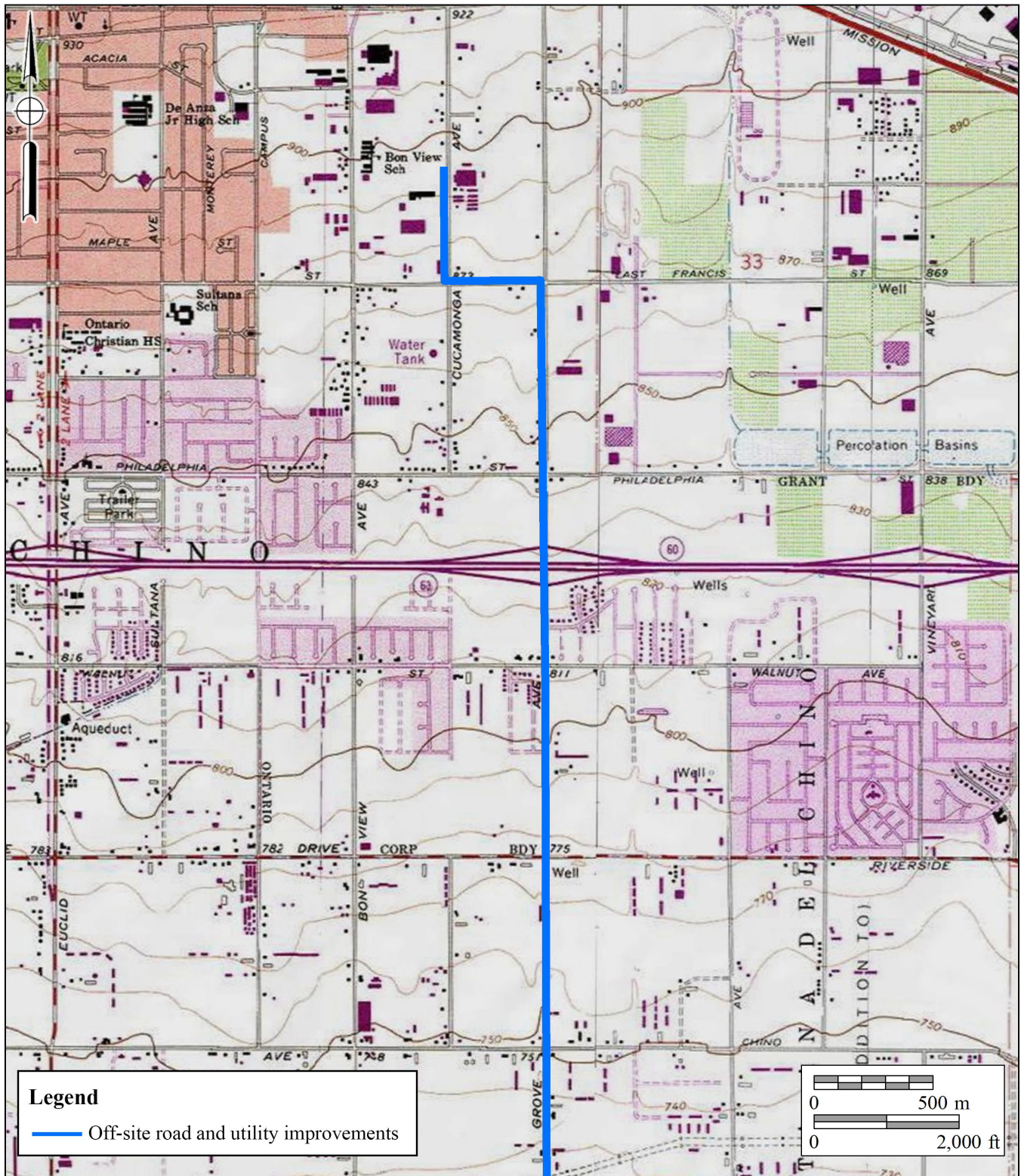
Attachment 1

General Location Map

The Merrill Commerce Center Specific Plan Project

DeLorme (1:250,000)





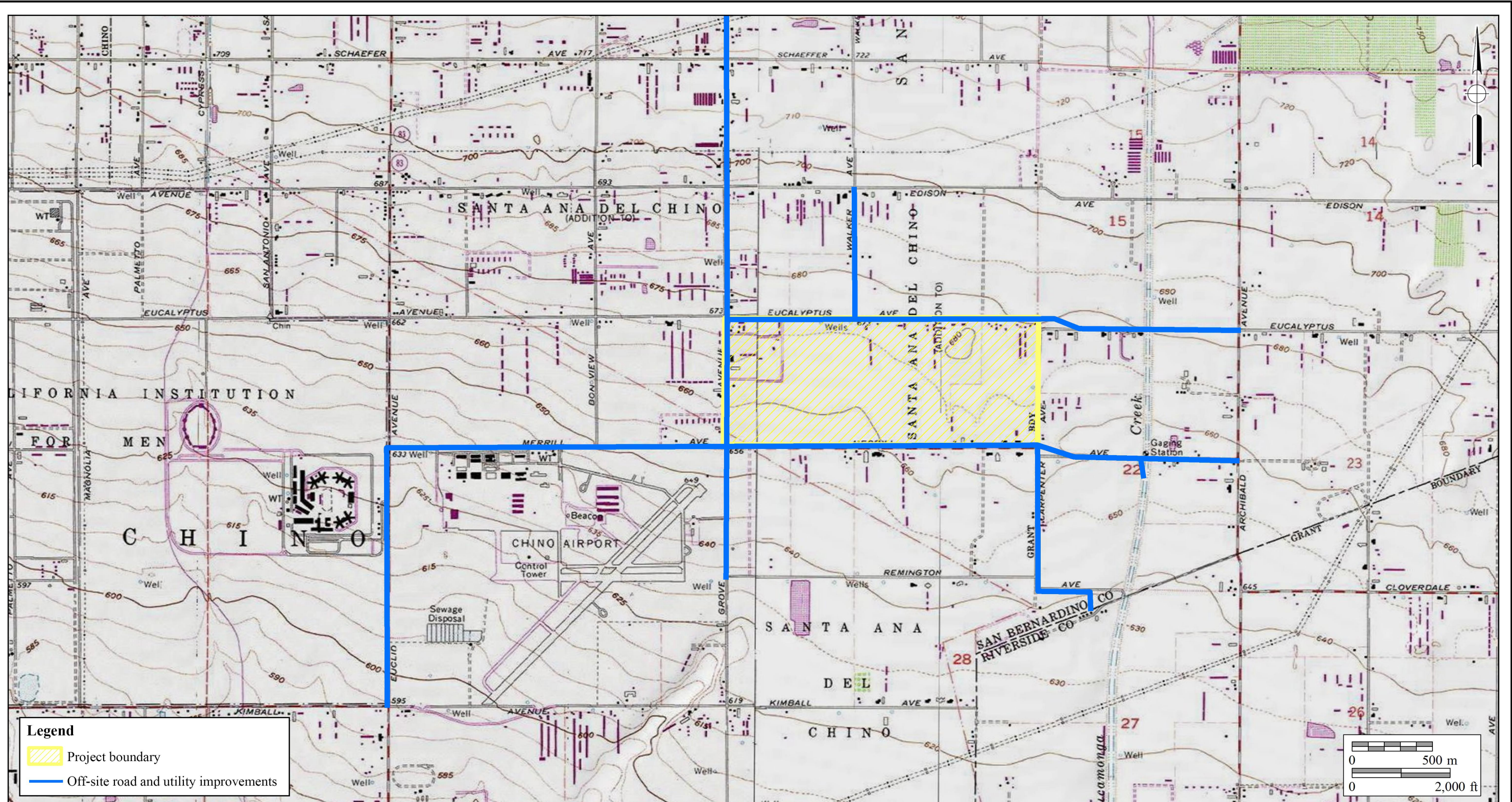
Attachment 2a

Northern Project Location Map

The Merrill Commerce Center Specific Plan Project

USGS Ontario and Guasti Quadrangles (7.5-minute series)



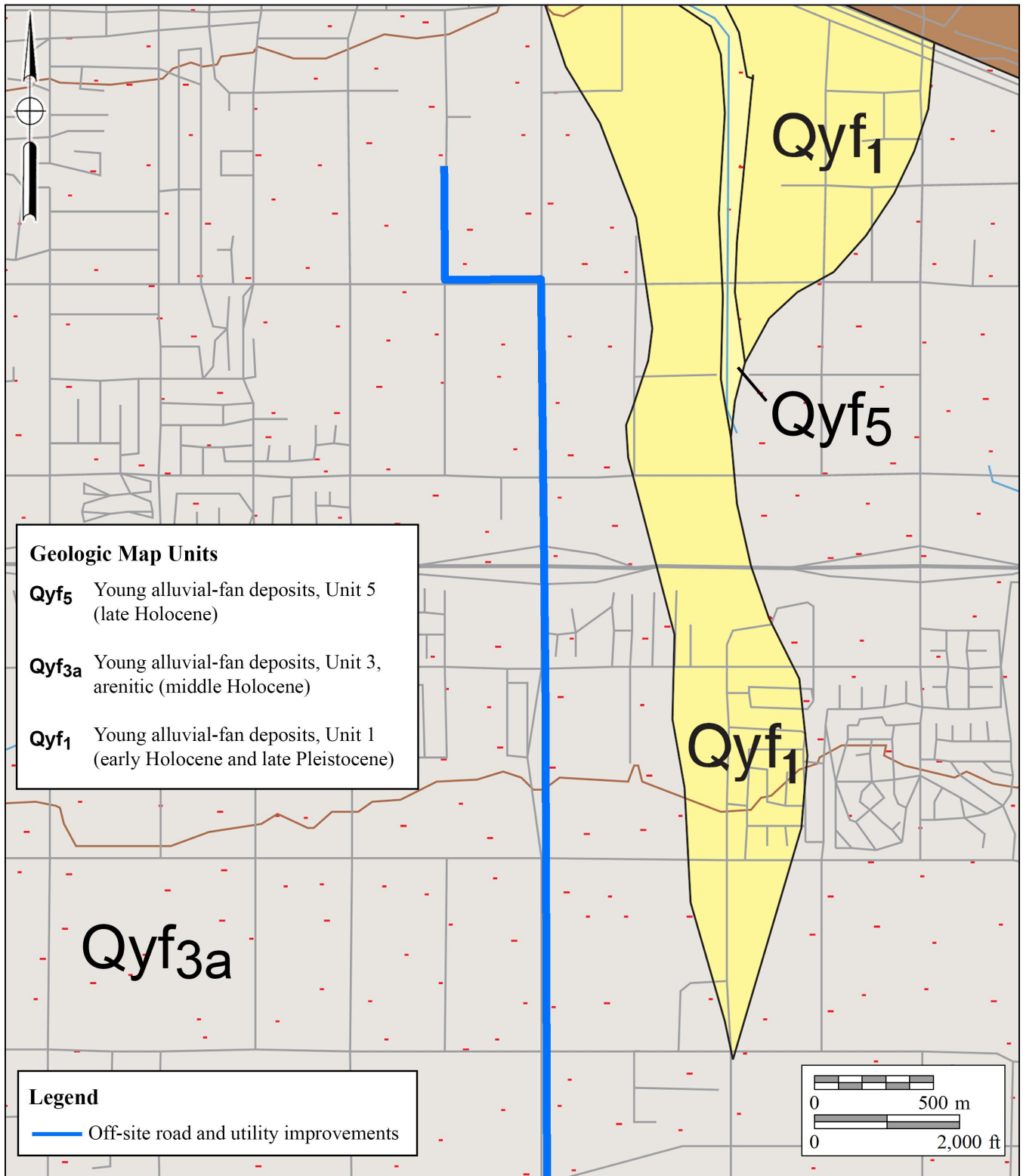


Attachment 2b

Southern Project Location Map

The Merrill Commerce Center Specific Plan Project

USGS Ontario, Guasti, Prado Dam, and Corona North Quadrangles (7.5-minute series)

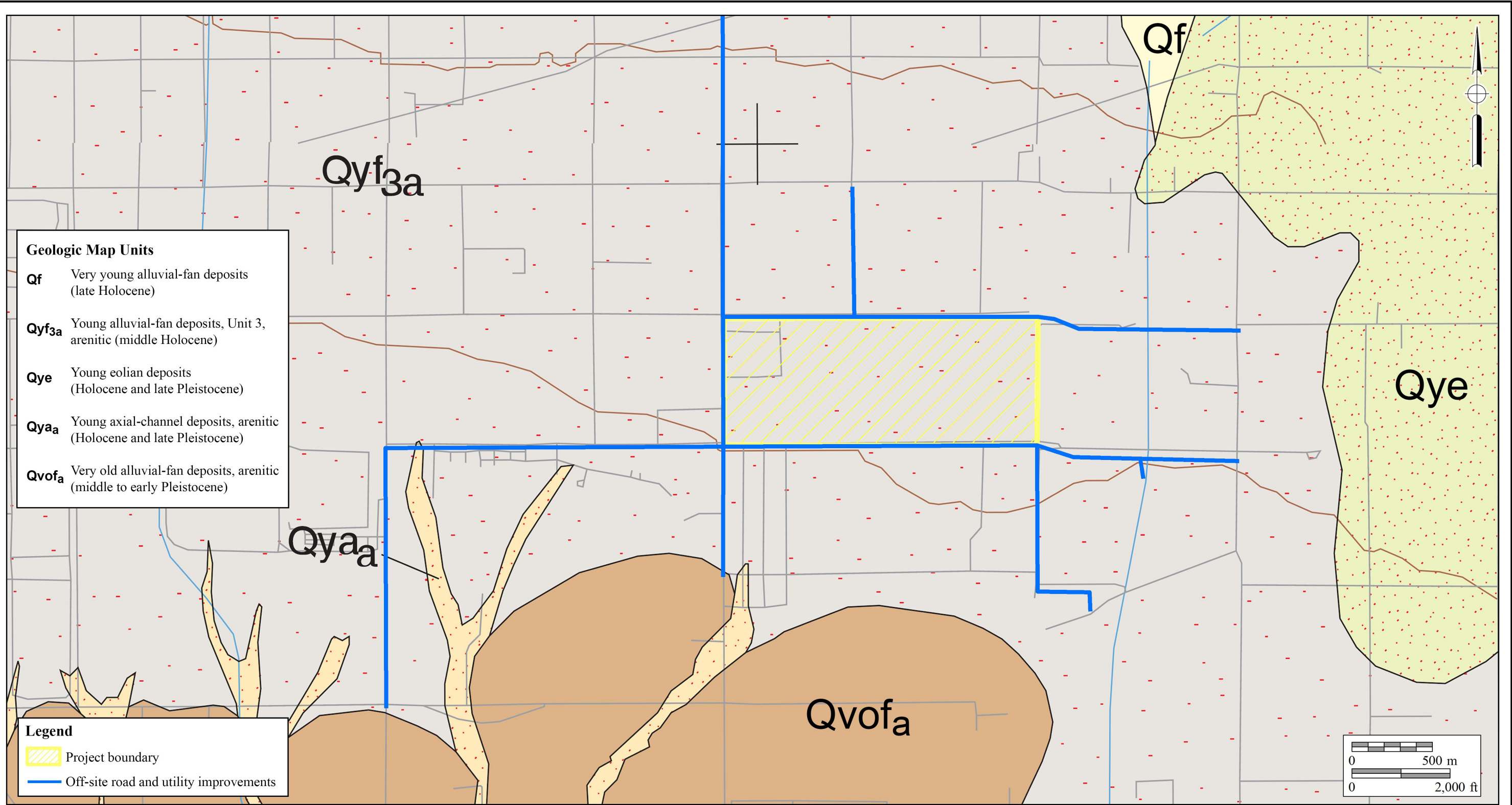


Attachment 3a

Northern Geologic Map

The Merrill Commerce Center Specific Plan Project

Geology after Morton and Miller (2006)



Attachment 3b
Southern Geologic Map
 The Merrill Commerce Center Specific Plan Project
 Geology after Morton and Miller (2006)

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

Vertebrate Paleontology Section
Telephone: (213) 763-3325
FAX: (213) 746-7431
e-mail: smcleod@nhm.org

24 May 2006

CRM Tech
4472 Orange Street
Riverside, CA 92501

Attn: Laura Hensley Shaker

re: Paleontological resources for the proposed The Ranch at Eastvale, CRM Tech # 1884-P, in the City of Eastvale, Riverside County, Paleo, project area

Dear Laura:

I have conducted a thorough search of our paleontology collection records for the locality and specimen data for the proposed The Ranch at Eastvale, CRM Tech # 1884-P, in the City of Eastvale, Riverside County, Paleo, project area as outlined on the section of the Corona North USGS topographic quadrangle map that you faxed to me on 23 May 2006. We do not have any vertebrate fossil localities that lie directly within the proposed project boundaries, but we do have a fossil vertebrate locality nearby from sedimentary deposits similar to those that probably occur subsurface in the proposed project area.

The surficial deposits in approximately the entire eastern one-half of the proposed project area consist of younger Quaternary Alluvium, either as fluvial deposits from Cucamonga Creek that forms the eastern border of the proposed project area or as fan deposits from the mountains to the north and east. These deposits typically do not contain significant vertebrate fossils, at least in the uppermost layers, and we do not have any localities nearby from these deposits. In approximately the western one-half of the proposed project area older Quaternary fan deposits derived from the Puente Hills to that west occur at the surface. Our closest fossil vertebrate locality from similar older Quaternary deposits is LACM 1207, south-southeast of the proposed project area between Corona and Norco, that produced a fossil specimen of deer, *Odocoileus*.

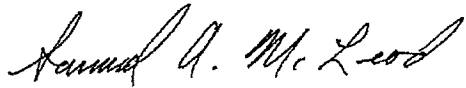
Surface grading or shallow excavations in the uppermost layers of soil and younger Quaternary Alluvium in the eastern portion of the proposed project area are unlikely to uncover significant fossil vertebrate remains. Deeper excavations in the eastern portion of the proposed project area that extend down into the older Quaternary sediments, however, as well as any

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excavations in the western portion with surficial older Quaternary deposits, may well encounter significant vertebrate fossils. Any substantial excavations in the proposed project area, therefore, should be monitored closely to quickly and professionally recover any fossil remains while not impeding development. Additional fossil vertebrate locality information for this area may be contained in the records of the University of California at Riverside Department of Geology (records and collections now at the University of California at Berkeley Museum of Paleontology). Any fossils collected should be placed in an accredited scientific institution for the benefit of current and future generations.

This records search covers only the vertebrate paleontology records of the Natural History Museum of Los Angeles County. It is not intended to be a thorough paleontological survey of the proposed project area covering other institutional records, a literature survey, or any potential on-site survey.

Sincerely,

A handwritten signature in cursive script, reading "Samuel A. McLeod".

Samuel A. McLeod, Ph.D.
Vertebrate Paleontology

enclosure: invoice



SAN BERNARDINO COUNTY MUSEUM

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(909) 307-2669 • Fax (909) 307-0539 • www.sbcountymuseum.org



COUNTY OF SAN BERNARDINO
PUBLIC AND SUPPORT
SERVICES GROUP

ROBERT L. McKERNAN
Director

6 July 2006

CRM Tech
attn: Laura Shaker
4472 Orange Street
Riverside, CA 92501

re: **PALEONTOLOGY LITERATURE AND RECORDS REVIEW, THE RANCH AT
EASTVALE, RIVERSIDE COUNTY, CALIFORNIA**

Dear Dr. Laura,

The Division of Geological Sciences of the San Bernardino County Museum (SBCM) has completed a literature and records search for the above-referenced ~120-acre project in Eastvale, Riverside County, California. The proposed study area is located in the northwestern quadrant of section 27, Township 2 South, Range 7 West, San Bernardino Base and Meridian, as seen on the Corona North, California 7.5' United States Geological Survey topographic quadrangle map (1967 edition, photorevised 1981).

Previous mapping of the Eastvale region (Rogers, 1965; Morton and Gray, 2002) indicates that the proposed project property is situated upon surface exposures of very old alluvial fan deposits of early Pleistocene age (= unit **Qvof**), overlain in the eastern portion of the property by Holocene fan sediments (= **Qyf**). The Holocene alluvium has low potential to contain nonrenewable paleontologic resources, and so is assigned low paleontologic sensitivity. However, the Pleistocene alluvial fan deposits have high potential to contain significant nonrenewable paleontologic resources. Similar Pleistocene alluvial sediments elsewhere throughout Riverside County and the Inland Empire have been reported to yield significant fossils of extinct animals from the Ice Ages (Jefferson, 1991; Reynolds and Reynolds, 1991; Woodburne, 1991; Springer and Scott, 1994; Pajak and others, 1996; Scott, 1997; Springer and others, 1998, 1999). Fossils recovered from these Pleistocene sediments represent extinct taxa including mammoths, mastodons, ground sloths, dire wolves, sabre-toothed cats, large and small horses, large and small camels, and bison, as well as plant macro- and microfossils (Jefferson, 1991; Reynolds and Reynolds, 1991; Woodburne, 1991; Springer and Scott, 1994; Scott, 1997; Springer and others, 1998, 1999; Anderson and others, 2002). These Pleistocene sediments are therefore assigned high paleontologic sensitivity.

For this review, I conducted a search of the Regional Paleontologic Locality Inventory (RPLI) at the SBCM. The results of this search indicate that no previously recorded paleontologic resource localities are present within the boundaries of the proposed development property, nor from within at least one mile in any direction.

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2014. 2015. 2016. 2017. 2018. 2019. 2020. 2021. 2022. 2023. 2024. 2025. 2026. 2027. 2028. 2029. 203

Recommendations

The results of the literature review and the check of the RPLI at the SBCM demonstrate that excavation in conjunction with development has high potential to adversely impact significant nonrenewable paleontologic resources present within the boundaries of the proposed Ranch at Eastvale property. A qualified vertebrate paleontologist must be retained to develop a program to mitigate impacts to such resources. This mitigation program should be consistent with the provisions of the California Environmental Quality Act (Scott and Springer, 2003), as well as with regulations currently implemented by the County of Riverside and the proposed guidelines of the Society of Vertebrate Paleontology. This program should include, but not be limited to:

1. Monitoring of excavation in areas identified as likely to contain paleontologic resources by a qualified paleontologic monitor. Areas requiring monitoring include all previously-undisturbed Pleistocene older alluvial sediments present within the boundaries of the property, both at the surface and at depth. Paleontologic monitors should be equipped to salvage fossils as they are unearthed, to avoid construction delays, and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. Monitors must be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. If the potentially-fossiliferous units described herein are determined upon exposure and examination by qualified paleontologic personnel to have low potential to contain fossil resources, monitoring may be reduced or eliminated.
2. Preparation of all recovered specimens to a point of identification and permanent preservation, including washing of sediments to recover small invertebrates and vertebrates. Preparation and stabilization of all recovered fossils are essential in order to fully mitigate adverse impacts to the resources (Scott and others, 2004).
3. Identification and curation of specimens into an established, accredited museum repository with permanent retrievable paleontologic storage (e.g., SBCM). These procedures are also essential steps in effective paleontologic mitigation (Scott and others, 2004) and CEQA compliance (Scott and Springer, 2003). The paleontologist must have a written repository agreement in hand prior to the initiation of mitigation activities. Mitigation of adverse impacts to significant paleontologic resources is not considered complete until such curation into an established museum repository has been fully completed and documented.
4. Preparation of a report of findings with an appended itemized inventory of specimens. The report and inventory, when submitted to the appropriate Lead Agency along with confirmation of the curation of recovered specimens into an established, accredited museum repository, will signify completion of the program to mitigate impacts to paleontologic resources.

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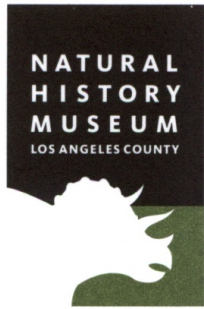
Please do not hesitate to contact us with any further questions you may have.

Sincerely,

Eric Scott, Curator of Paleontology
Division of Geological Sciences
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8 March 2016

Brian F. Smith & Associates, Inc.
14010 Poway Road, Suite A
Poway, CA 92064

Attn: George L. Kennedy, Ph.D., Senior Paleontologist

re: Paleontological Resources Records Search for the proposed Chino Parcel Delivery Project,
BFSA project # 16-018, in the City of Chino, San Bernardino County

Dear Dr. Kennedy:

I have thoroughly searched our paleontology collection records for the locality and specimen data for the proposed Chino Parcel Delivery Project, BFSA project # 16-018, in the City of Chino, San Bernardino County as outlined on the portions of the Prado Dam and Corona North USGS topographic quadrangle maps that you sent to me via e-mail on 24 February 2016. We do not have any vertebrate fossil localities that lie directly within the proposed project boundaries, but we do have fossil vertebrate localities nearby from the same sedimentary deposits that occur in the proposed project area.

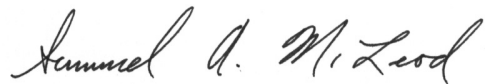
Most of the proposed project area has surface deposits that consist of younger Quaternary Alluvium, derived broadly as alluvial fan deposits from the San Bernardino Mountains to the north. These deposits typically do not contain significant vertebrate fossils, at least in the uppermost layers, and we do not have any localities nearby from these deposits. In the southwestern portion of the proposed project area though, on both sides of the drainage, there are surface exposures of older Quaternary Alluvium, likewise derived predominately of alluvial fan deposits from the San Bernardino Mountains to the north, and these deposits underlie the younger Quaternary Alluvium in the drainage and elsewhere in the proposed project area. Our closest fossil vertebrate locality from similar older Quaternary deposits is LACM 7811, due east of the northern portion of the proposed project area west of Mira Loma east of Archibald Avenue

along Sumner Road north of Cloverdale Road, that produced a fossil specimen of whipsnake, *Masticophis*, at a depth of 9 to 11 feet below the surface. Further to the south-southeast of the proposed project area, on the northwestern side of Corona west of Cota Street between Railroad Street and Harrington Street, our vertebrate fossil locality LACM 1207 produced a fossil specimen of deer, *Odocoileus*.

Shallow excavations in the younger Quaternary Alluvium exposed in most of the proposed project area are unlikely to uncover significant fossil vertebrate remains. Deeper excavations there that extend down into the older Quaternary sediments, however, as well as any excavations in the older Quaternary Alluvium exposed in the southwestern portion of the proposed project area, may well encounter significant vertebrate fossils. Any substantial excavations in the proposed project area, therefore, should be monitored closely to quickly and professionally recover any fossil remains while not impeding development. Sediment samples should also be collected from the finer-grained deposits in the proposed project area and processed to determine their small fossil potential. Any fossils collected should be placed in an accredited scientific institution for the benefit of current and future generations.

This records search covers only the vertebrate paleontology records of the Natural History Museum of Los Angeles County. It is not intended to be a thorough paleontological survey of the proposed project area covering other institutional records, a literature survey, or any potential on-site survey.

Sincerely,

A handwritten signature in cursive script that reads "Samuel A. McLeod". The signature is written in dark ink and is positioned above the printed name.

Samuel A. McLeod, Ph.D.
Vertebrate Paleontology

enclosure: invoice