



June 1, 2022

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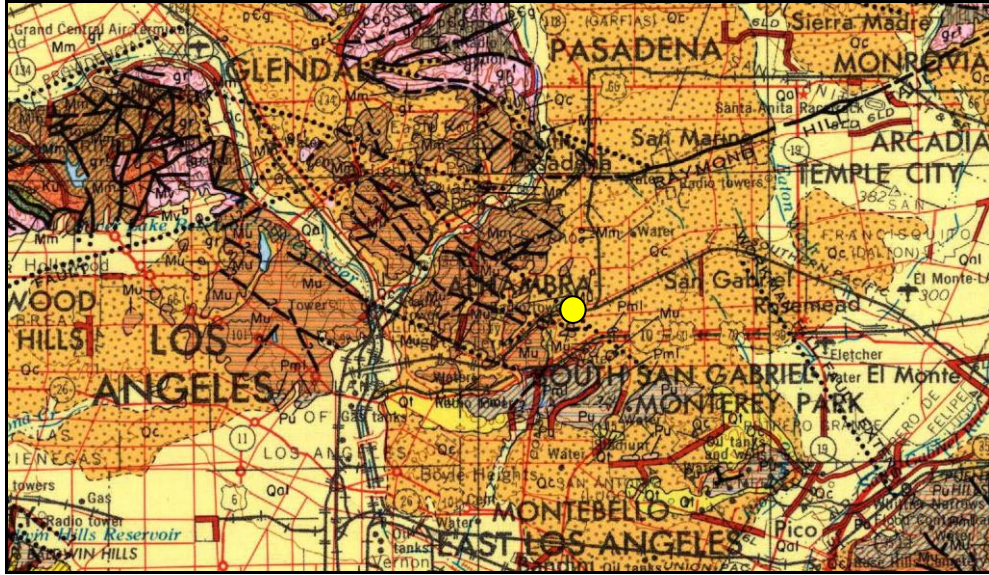
**RE: *Paleontological Assessment Memorandum for the Saxon Reservoir and Booster Station Project, Los Angeles County, California***

Dear Mr. Chakmak:

I have completed a thorough investigation on the potential to directly impact paleontological resources during the construction of the Saxon Reservoir and Booster Station Project (Project). This investigation included a formal paleontological record search through the Natural History Museum of Los Angeles County (LACM), a paleontological search through the University of California Museum of Paleontology (UCMP) database, and a desktop study of the geology and paleontology of the Project area. The project site is located north of Interstate 10 and west of Highway 164, and southwest of Rosemead, CA in a well-developed residential neighborhood. The site can be located on the Unsectioned Portion of the Potrero Grande Land Grant at Sec. 13, 14, 24, 25, 26, T1S, R12W, El Monte quadrangle (USGS 7.5-minute topographic map).

## **GEOLOGIC UNITS**

The surficial geology of the project site is composed of Pleistocene non marine sediments (Qc) (Jenning and Strand 1969) consisting of alluvial deposits (Figure 1). In San Gabriel, north of the Project site, the Quaternary (Pleistocene and Holocene in age) alluvial deposits are comprised of coarse-grained, brown sand with varying amounts of silt overlain by artificial fill materials (ESA 2019). Occasional fine-grained layers consisting of light brown and reddish-brown sandy silt, silty clay, and clayey silt are found in varying thickness with depth. Bore samples from San Gabriel indicate that the coarser alluvium deposits reach a depth of 51.5 feet below the ground surface (bgs) with fine-grained layers encountered at depths of 20 to 30 feet bgs (ESA 2019).



**Figure 1. Geologic map showing project location (yellow dot) and surficial geology of project site (Qc = Pleistocene non marine alluvial deposits) (Jennings and Strand 1969).**

## LACM RECORDS SEARCH RESULTS

The Natural History Museum of Los Angeles County conducted a thorough search of their paleontology collection and data for the Project area and found no fossil localities directly within the project area, but fossil localities did exist nearby from the same sedimentary deposits as those that occur at the project site (Table 1).

<b>Table 1. Closest Known Fossil Localities</b>				
<b>Locality Number</b>	<b>Location</b>	<b>Formation</b>	<b>Taxa</b>	<b>Depth</b>
LACM VP 7701-7702	Intersection of 26th St and Atlantic Blvd, Bell Gardens	Unknown formation (Pleistocene; silt)	Fish ( <i>Gasterosteus</i> ); Snake (Colubridae), Rodents ( <i>Thomomys</i> , <i>Microtus</i> , <i>Reithrodontomys</i> ); Rabbit ( <i>Sylvilagus</i> )	30 feet bgs
LACM VP 3363	W of Monterey Pass Road in Coyote Pass; E of the Long Beach Freeway & S of the N boundary of Section 32; Monterey Park	Unknown formation (Pleistocene; sand and silt)	Horse ( <i>Equus</i> )	Unknown
LACM VP 1023	Workman & Alhambra St, downtown LA	Unknown formation (Pleistocene)	sabertooth cat ( <i>Smilodon</i> ), horse ( <i>Equus</i> ), deer ( <i>Odocoileus</i> ), Turkey ( <i>Meleagris</i> )	Unknown (excavations for storm drains)
LACM VP 2032	Los Angeles Brickyard Mission Rd. & Daly St.	Unknown Formation (Pleistocene, silt & clay)	Mastodon ( <i>Mammuth</i> )	20-35 feet bgs

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<b>Locality Number</b>	<b>Location</b>	<b>Formation</b>	<b>Taxa</b>	<b>Depth</b>
LACM VP 2027	1600 block, Bridgen Rd., Pasadena	Unknown formation (Pleistocene)	Mammoth ( <i>Mammuthus</i> )	Unknown

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

A detailed record search was also conducted through the University of California Museum of Paleontology database where nearly 12,500 specimen localities have been recorded. Most of these are Pleistocene vertebrate fossils derived from the Rancho La Brea tar pits in Los Angeles.

## RECOMMENDATIONS

Given that the Project site is in a well-developed area, a pedestrian survey is not recommended. Once construction activities begin excavating in the older Pleistocene alluvial deposits below any fill material, full-time monitoring is recommended for all ground disturbances. Should any paleontological resources be encountered, the paleontologist has the authority to divert heavy machinery away from the find(s) until the scientific value of the fossil(s) can be assessed. If of scientific significance, all pertinent field data will be collected and the fossil(s) salvaged. The fossil(s) will be transported to a laboratory facility for cleaning and preparation prior to being transported and deposited in an accredited repository, such as the LACM, where they will be curated and made available for scientific study.

Sincerely,



## REFERENCES

ESA 2019. Appendix D: Geology and Soils. In: Preliminary Geotechnical Investigation, Proposed Mixed Use Development, 700 and 800 San Gabriel Boulevard, CA, 91776.

Jennings, O.P. and Strand, R.G. 1969. Geologic Map of California: Los Angeles Sheet, 1:250,000.

Bell, A. 2022. Paleontological resources for the Saxon Reservoir and Booster Station Project. Natural History Museum of Los Angeles County: record search results.

University of California Museum of Paleontology, Berkeley 2022. Database search:  
<https://ucmpdb.berkeley.edu/>.