

Appendix O

Paleontological Resources Records Search

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24 July 2018

Eyestone Environmental
2121 Rosecrans Avenue, Suite 3355
El Segundo, CA 90245

Attn: Stephanie Eyestone-Jones, President

re: Paleontological resources for the proposed Angels Landing Project, in the City of Los Angeles, Los Angeles County, project area

Dear Stephanie:

I have conducted a thorough check of our paleontology collection records for the locality and specimen data for the proposed Angels Landing Project, in the City of Los Angeles, Los Angeles County, project area as outlined on the portions of the Hollywood and Los Angeles USGS topographic quadrangle maps that Frankie Tong sent to me via e-mail on 10 July 2018. We do not have any vertebrate fossil localities that lie directly within the proposed project area boundaries, but we do have localities nearby from the same sedimentary deposits that occur in the proposed project area.

According to geologic mapping the eastern portion of the proposed project site area has surficial deposits of younger Quaternary Alluvium, derived as fluvial deposits from the flood plain of the Los Angeles River that currently flows in a concrete channel just to the east. These younger Quaternary deposits usually do not contain significant fossil vertebrates, at least in the uppermost layers, but the underlying older sedimentary deposits found at varying depths may well contain significant vertebrate fossils.

According to geologic mapping the western portion of the proposed project site area has exposures of the marine Pliocene Fernando Formation that also may occur at shallow depth in the eastern portion of the proposed project area. We have a series of vertebrate fossil localities from the Fernando Formation nearby including LACM 4726, nearly adjacent to the southeast of the proposed project area near the corner of 4th and Hill Streets; LACM 7730, east-northeast of the

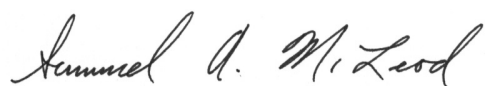
proposed project area near the intersection of Main Street and 2nd Street; LACM 6971, west of the proposed project area near the corner of 6th and Flower Streets; and LACM 3868, further west-northwest of the proposed project area north of 6th Street between Lucas Avenue and South Bixel Street. These nearby Fernando Formation localities have produced a composite fauna including fossil specimens of stingray, *Dasyatis*, eagle ray, *Myliobatis*, skate, *Raja*, chimaerid, Chimaeriformes, bull shark, *Carcharhinus leucas*, dusky shark, *Carcharhinus obscurus*, hammerhead shark, *Sphyrna*, sixgill shark, Hexanchiformes, bonito shark, *Isurus oxyrinchus*, salmon shark, *Lamna ditropis*, white sharks, *Carcharodon sulcidens* and *Carcharodon carcharias*, herring, Clupeidae, hake, *Merluccius*, sheepshead, *Semicossyphus*, mackerel, *Scomber*, bird, Aves, rorqual baleen whale, Balaenopteridae, and toothed whale, Odontoceti.

Just north of the proposed project area between 2nd Street and 1st Street there are exposures of the marine late Miocene Yorba Member of the Puente Formation (also referred to as an Unnamed Shale in this area), that also may occur at depth in the proposed project area. Our Puente Formation locality LACM 5961 occurs northeast of the proposed project area just north of the intersection of Hill Street and 1st Street. Locality LACM 5961, discovered during excavation for the Metrorail station at unknown depth, produced a specimen of the fossil bristlemouth fish, *Cyclothone*. Our next closest vertebrate fossil locality from the Puente Formation is LACM 7990, northeast of the proposed project area north of Temple Street between Broadway and Spring Street, that produced fossil fish including slickheads, Alepocephalidae, argentinas, Argentinidae, deep sea smelts, Bathylagidae, viperfish, *Chauliodus*, herring, Clupeidae, cod, Gadiformes, bristlemouths, Gonostomidae, mackerel, Scombridae, and dragonfish, Stomiidae.

Shallow excavations in the younger Quaternary Alluvium exposed in the eastern portion of the proposed project area are unlikely to uncover significant fossil vertebrate remains. Deeper excavations there that extend down into the older sedimentary deposits, and any excavations in Puente Formation exposures in the western portion of the proposed project area, however, may well encounter significant vertebrate fossils. Any substantial excavations in the proposed project area, therefore, should be closely monitored to quickly and professionally recover any potential vertebrate fossils without impeding development. Also, sediment samples should be collected and processed to determine the small fossil potential in the proposed project area. Any fossils recovered during mitigation should be deposited in an accredited and permanent 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,



Samuel A. McLeod, Ph.D.
Vertebrate Paleontology

enclosure: invoice