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

Attn: Stephanie Eyestone-Jones, President  

re: Paleontological resources for the proposed 100 East Ocean Boulevard Project, in the City of Long Beach, 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 100 East Ocean Boulevard Project, in the City of Long Beach, Los Angeles County, project area as outlined on the portion of the Long Beach USGS topographic quadrangle map that Brad J. Napientek sent to me via e-mail on 15 May 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, either at the surface or at depth.  

The surficial sediments in the proposed project area consist of older Quaternary Alluvium, derived primarily as fluvial deposits from the Los Angeles River that flows immediately to the west, but possibly including estuarine or beach deposits. These deposits may well contain significant vertebrate fossils, as they are known in the area to be fossiliferous.  

Our closest vertebrate fossil locality from older Quaternary deposits is LACM 6896, almost due west of the northern border of the proposed project area near the intersection of Magnolia Avenue and Ocean Boulevard, that produced a specimen of fossil whale, Cetacea, from pile driving activities at a depth of less than 100 feet. To the east of the proposed project area, south of Ocean Boulevard across from Bixby Park at approximately 17th Place, our older
Quaternary locality LACM 1005 produced fossil specimens of mammoth, *Mammuthus columbi*, and ground sloth, *Nothrotheriops shastensis*, at approximately 60 feet from the surface. Just southeast of locality LACM 1005, situated along the beach between the parking lot of Bluff Park and the shoreline, our vertebrate fossil locality LACM 7739, at a depth of 25 feet produced a rich suite of fossil marine vertebrates (see appendix for faunal list) in addition to associated fossil invertebrates including snails, clams, tusk shells, barnacles, crabs, and sea urchins, probably from the marine older Quaternary San Pedro Sand.

Very shallow excavations in the Quaternary Alluvium exposed throughout the proposed project area probably will not uncover any significant vertebrate fossils. Deeper excavations, however, may well encounter significant fossil vertebrate remains. Any substantial excavations below the uppermost layers in the proposed project area, therefore, should be monitored closely to quickly and professionally recover any fossil remains discovered. 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