

APPENDIX D2
PALEONTOLOGICAL RECORDS SEARCH

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20 December 2019

UltraSystems Environmental
16431 Scientific Way
Irvine, CA 92618-7443

Attn: Stephen O'Neil, Cultural Resources Manager

Re: Paleontological Records Search for the proposed Affordable Housing Project, UltraSystems Environmental Project No. 7038, in the City of Placentia, Orange County, project area

Dear Stephen:

We have conducted a thorough search of our Vertebrate Paleontology records for the proposed Affordable Housing Project, UltraSystems Environmental Project No. 7038, in the City of Placentia, Orange County, project areas outlined on the portion of the Yorba Linda USGS topographic quadrangle maps that Megan Black Doukakis sent to me via e-mail on 6 December 2019. We do not have any vertebrate fossil localities that lie directly within the proposed project boundaries, but we do have localities nearby from the same sedimentary deposits that occur within the proposed project area, either at the surface or at depth

In the northwestern portion of the proposed project area the surface deposits are composed of younger Quaternary Alluvium, whereas the southeastern portion of the proposed project area has surface deposits composed of older Quaternary Alluvium, both derived as alluvial fan deposits from the Chino Hills to the northeast broadly via Carbon Canyon Creek that currently flows to the east. The younger Quaternary deposits typically do not contain significant vertebrate fossils in the uppermost layers, but at depth there are older Quaternary deposits such as occur in the southeastern portion of the proposed project area that may well contain significant fossil vertebrate remains. Our closest fossil vertebrate locality in these older Quaternary deposits is LACM 4943, almost due south of the proposed project area in the City of Orange between the Newport Freeway (Highway 55) and the Santa Ana River near the intersection of Glassell Street

and Fletcher Avenue. Locality LACM 4943 produced specimens of fossil horse, *Equus*, at a depth of 8-10 feet below the surface.

Grading or very shallow excavations in the younger Quaternary Alluvium exposed in the northwestern portion of the proposed project area may not encounter significant vertebrate fossils. Deeper excavations there, as well as any excavations in the older Quaternary Alluvium exposed in the southeastern portion of the proposed project area, however, may well uncover significant fossil vertebrate remain. Any substantial excavations in the proposed project area, therefore, should be monitored closely to quickly and professionally recover any fossil remains discovered while not impeding construction activities. 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,

A handwritten signature in cursive script that reads "Samuel A. McLeod".

Samuel A. McLeod, Ph.D.
Vertebrate Paleontology

enclosure: invoice