

## MEMORANDUM

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**To:** Greg Waite, Integral Partners Funding, LLC  
**From:** Sarah Siren, M.S., GISP, Senior Paleontologist  
**Subject:** Paleontological Resources Desktop Review: Orix-Sunrise Due Diligence Project  
**Date:** 8/7/17  
**cc:** Anita Hayworth and Brian Grover, Dudek  
**Attachment(s):** Geology Map

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Dudek is providing this memo after completing a desktop review of the potential for impacts to paleontological resources during construction of the Orix-Sunrise Project, an approximately 14-acre property located in the cities of San Marcos and Escondido and the County of San Diego, California. The project site is relatively undeveloped and is underlain by Cretaceous age tonalite (Kt) and Mesozoic undifferentiated metasedimentary and metavolcanic bedrock (Mzu) according to published geological mapping (Kennedy et al., 2007; see attached Geology Map). A dirt access road extends south from Barham Drive through mapped metamorphic bedrock, and the two rectangular portions of the project area are underlain by igneous bedrock (Kennedy et al., 2007). According to the San Diego County Guidelines for Paleontology (2007), the Cretaceous age igneous bedrock underlying the majority of the project area has no potential (or no sensitivity), and the metamorphic bedrock mapped along the access road has marginal potential (or marginal sensitivity).

According to records searches conducted for nearby properties at the San Diego Natural History Museum (SDNHM), no paleontological localities are documented in this area (Siren, 2016). While it is unknown the full extent of the planned ground disturbance related to the project, based on the mapped geological units within the project area, a paleontological resources mitigation program is not recommended at this time. However, in the unlikely event that paleontological resources are encountered or impacted, a qualified paleontologist should be retained to evaluate any inadvertent discoveries.

*Memorandum*

*Subject: Paleontological Resources Desktop Review: Orix-Sunrise Due Diligence Project*

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If you have any questions regarding this memo, please feel free to contact me (760.846.9326 or ssiren@dudek.com).

Sincerely,



Sarah A. Siren, M.S., GISP  
Senior Paleontologist, Dudek

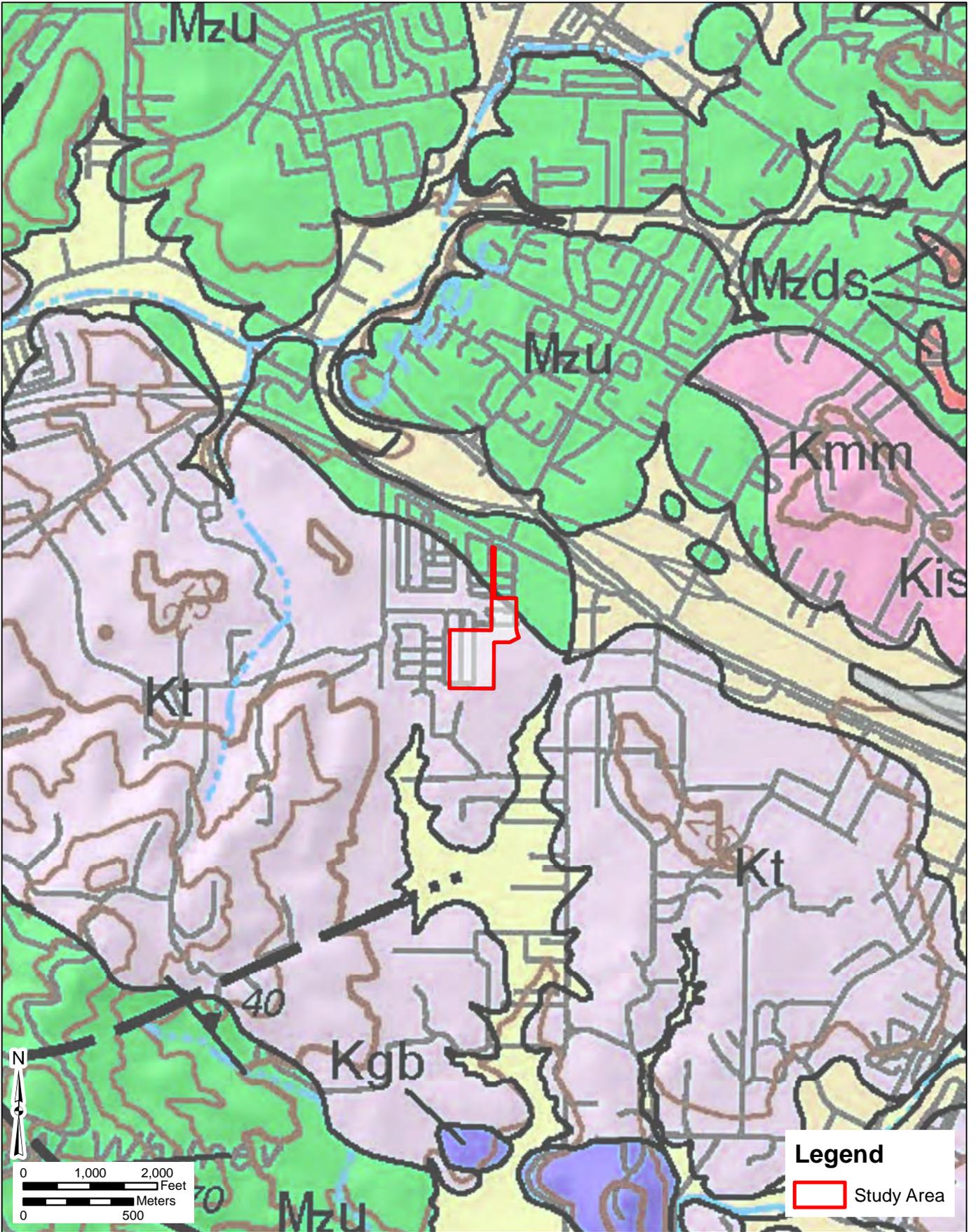
Enc. Geology Map

References Cited:

County of San Diego, 2007. Guidelines for Determining Significance, Paleontological Resources. Department of Planning and Land Use, Department of Public Works. March 19, Modified January 15, 2009.

Kennedy, M.P., Tan, S.S., Bovard, K.R., Alvarez, R.M., Watson, M.J., and Gutierrez, C.I., 2007. Geologic map of the Oceanside 30x60-minute quadrangle, California: California Geological Survey, Regional Geologic Map No. 2, scale 1:100,000.

Siren, S.A., 2016. Paleontological Resources – Rincon del Diablo Sewer Master Plan Project. Unpublished letter report by the Dudek.



SOURCE: USGS 7.5-Minute Series Valley Center, San Marcos, Escondido, Rancho Santa Fe Quadrangles  
 Township 12S; Range 2W, 3W; Sections 7, 8, 12, 13, 17, 18, 19, 20, 24

## Geology Map

Orix-Sunrise