

**MEMORANDUM**

**DATE:** April 13, 2023

**To:** Andrew Neff, Wood Investments Companies, Inc.

**FROM:** Samuel Bressler, Assistant Biologist, LSA

**SUBJECT:** Biological Monitoring for Cultural Resource Investigation Associated with the Apple Bear Commercial Project, Apple Valley, California

On March 30th, 2023, LSA Biologist Samuel Bressler conducted biological monitoring at the Apple Bear Commercial Project (project) site in Apple Valley, California. Mr. Bressler conducted burrowing owls (*Athene cunicularia*) and nesting birds surveys prior to the cultural resources investigation excavation to ensure compliance with applicable aspects of the Migratory Bird Treaty Act (16 United States Code §§ 703–712); California Fish and Game Code Sections 3503, 3503.5, and 3513. In addition, the biological monitoring was necessary to comply with the proposed Initial Study/Mitigated Negative Declaration (IS/MND) Mitigation Measures BIO-1 and BIO-2.

Mr. Bressler arrived on site at 6:35 a.m., where he met LSA archaeologists Rory Goodwin and Carlton Bennett. Weather conditions were conducive to observing bird nesting behavior (clear and windy, with temperatures between 35 and 49 degrees Fahrenheit). Mr. Bressler surveyed the entirety of the project area on foot and with the aid of binoculars until 7:00 a.m. Areas outside the project site but within 150 meters of construction activity were surveyed from the edge of the project site using binoculars. Subsequently, Mr. Bressler monitored the trenching by a backhoe until 1:53 p.m., when exploration activity ceased.

No burrowing owls were observed during the monitoring, and one common raven (*Corvus corax*) nest (see Photo 1) was found on a water tank west of Westmont Drive (GPS point 34.467501, -117.238924), immediately southwest of the project site. The nest was located several hundred feet from active equipment, at which distance all equipment noise was attenuated by the ambient wind. As a result, no buffers or mitigation measures were necessary. Other species observed over the course of monitoring included Canada goose (*Branta canadensis*), rock pigeon (*Columba livia*), Anna's hummingbird (*Calypte anna*), California gull (*Larus californicus*), American kestrel (*Falco sparverius*), Say's phoebe (*Sayornis saya*), black phoebe (*Sayornis nigricans*), cliff swallow (*Petrochelidon pyrrhonota*), (*Tachycineta thalassina*), barn swallow (*Hirundo rustica*), northern mockingbird (*Mimus polyglottos*), sage thrasher (*Oreoscoptes montanus*), European starling (*Sturnus vulgaris*), American pipit (*Anthus rubescens*), verdin (*Auriparus flaviceps*), and white-crowned sparrow (*Zonotrichia leucophrys*).

In ensuring that no burrowing owls were present on or adjacent to the site during cultural exploration, the monitoring and survey described above are consistent with the intent of Preliminary Mitigation Measures BIO-1 and BIO-2.

If you have any questions or comments about the survey, please contact Samuel Bressler at (949) 553-0666 or by email at [Samuel.Bressler@lsa.net](mailto:Samuel.Bressler@lsa.net).



Photo 1: Common Raven nest on water tower southeast of the project site.