SAN MATEO RESOURCE CONSERVATION DISTRICT

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Memorandum

Date: March 19, 2020

To: Board of Directors

From: Kellyx Nelson

Re: Recommendation to contract with Haro, Kasunich & Associates, Inc. for geotechnical monitoring and testing during construction of Old Haul Road: Dark Gulch Crossing Stabilization Project, Pescadero Creek County Park, Loma Mar, CA.

RCD staff recommends contracting with Haro, Kasunich & Associates, Inc., for an amount not to exceed $90,000 to provide geotechnical monitoring and testing during construction of a project on Old Haul Road to stabilize a large failing creek crossing and install a culvert at Dark Gulch. The project is located in Pescadero Creek County Park in Loma Mar.

This project will prevent chronic and future soil erosion and sedimentation, and will improve habitat conditions and water quality in the Pescadero-Butano watershed for the benefit of native fish and other riparian species. Stabilizing the crossing will also significantly reduce the current risk of a catastrophic road failure, resulting in safer access for recreation, administrative and emergency purposes for San Mateo County Parks Department (Parks) and CAL FIRE. This project will be funded by Parks (75%) and the State Water Resources Control Board through a U.S. EPA Clean Water Act section 319 grant for the 2019 Nonpoint Source Grant Program (25%).

Development of the engineering approach for stabilizing the Dark Gulch crossing was uniquely challenging due to the size and characteristics of the creek crossing: 70 feet deep with very steep slopes and more than 37,000 cubic yards (enough to bury a football field six feet deep) of unstable material including large decaying logs. Under the direction of the Project Engineer, the Haro, Kasunic & Associates, Inc. served as the geotechnical engineer. They tested and analyzed bore-hole drillings of the existing crossing and assisted the Project Engineer to develop and evaluate multiple design alternatives and construction approaches for reconstructing the crossing in a manner that would meet safety, environmental, and access requirements. The geotechnical engineer also determined the required specifications for excavation (e.g. steepness of cuts) and fill placement (e.g. compaction requirements) which the Project Engineer incorporated into the detailed designs, plan sets, and technical specifications for the preferred alternative: removing the unstable crossing material, installing a large-capacity culvert and reconstructing a smaller, more stable crossing.

Careful monitoring of soil stability during excavation, and testing of soil compaction during the crossing reconstruction are essential to ensure safety during construction and ensure that technical specifications of the crossing design are met. Note that technical aspects of the geotechnical engineer's role in the project will be directed by the Project Engineer.

The Public Contract Bidding, Vendor and Professional Consultant Selection, and Purchasing Policy adopted by this Board of Directors on March 20, 2014 requires solicitation of formal advertised bids for expenditures exceeding $50,000. The policy allows exceptions to standard purchasing procedures in some circumstances, including when "services are of a unique type, are of a proprietary nature, or are otherwise of such a required and specific design or construction, or are specifically necessary for purposes of maintaining cost effective system consistency, so as to be available from only one source."

The work proposed meets this criterion because:

- Haro, Kasunich & Associates, Inc. is uniquely qualified to provide the services of the type required, having provided all geotechnical engineering services for the planning and design of this project.
- In 2018, Haro, Kasunich & Associates, Inc. provided the construction geotechnical monitoring and testing services for the RCD's recent successfully completed upgrades of two other crossings on Old Haul Road at Harwood and Keystone Creeks. The Dark Gulch project will benefit from Haro, Kasunich & Associates' experience gained in these smaller but similar projects at different sites in the same location.