

**Work Plan No. A.04-03 – Updated Retrofit Design Ground Motions for the Transbay Tube (TBT)**

**2. SCOPE OF SERVICES**

We propose to divide the scope of these additional geotechnical analyses in three phases. The phased approach serves the dual purpose of obtaining preliminary results early, to allow an initial understanding of the anticipated effect of the revised set of ground motions, and performing a comprehensive set of refined analyses based on the current state of practice including assessing the sensitivity of the TBT vulnerability to a number of reasonable uncertainties associated with the earthquake phenomenon and ground conditions. The three proposed phases are as follows:

Phase 1: Re-analyses with revised set of ground motions and original methodologies

Phase 2A: Re-analyses with revised set of ground motions and updated methodologies

Phase 2B (Optional): Three-dimensional slope stability analyses

The scope of work presented in this work plan reflects the discussions during a scope review meeting held on April 24, 2020 between the project team and Dr. Norm Abrahamson and Dr. Jonathan Bray and a follow up scope review meeting on May 5<sup>th</sup>, 2020 between Fugro, Mark Salmon and Dr. Jonathan Bray. Additional recommendations from the review panel members provided by email through May 15<sup>th</sup>, 2020 have been incorporated in this proposal. Finally, the scope of work related to the slope stability analyses was discussed with Mr. Mark Salmon in a series of meetings, phone calls and emails in June 2020.

**Prime: Jacobs**

<b>Subconsultant</b>	<b>Amount</b>	<b>DBE (Y/N)</b>	<b>SBE (Y/N)</b>
SC Solutions Inc	\$ 17,650	N	N
Fugro	\$ 785,904	N	N
M Lee	\$ 127,858	Y	Y

**Total Work Plan Value: \$ 974,782**