



September 3, 2015

Mr. Travis Saunders
City of Mercer Island Development Services
9611 SE 36th St.
Mercer Island, Washington 98040-3732

Subject: Geotechnical Third Party Review
5637 E. Mercer Way
Mercer Island, Washington
Perrone Consulting Project #15124

Dear Mr. Saunders:

This letter summarizes our response to the Geo Group Northwest, Inc. July 30, 2015 letter that addresses our third party review comments (Perrone Consulting, Inc., P.S., June 12, 2015) for the proposed residential project at 5637 East Mercer Way, Mercer Island, Washington.

In our opinion, Geo Group NW geotechnical engineering conclusions and recommendations are based on insufficient subsurface information. A known, mapped landslide defined by a large headscarp is present on the site along with a thick sequence of loose colluvium on the lower portions of the slope. While the age of the most recent slope movement is unknown, we cannot presume that the slope will be stable during construction or during the life of the structure without further evaluation and analysis. The large thickness of loose, wet soil on the lower portions of the steep slope suggest a significant risk of landsliding that should be evaluated and quantified. The results of the landsliding analyses should be used to design the foundation/catchment walls. Accordingly we recommend that Geo Group NW provide the following information:

1. A site plan with the locations of borings B-1 and B-2 and any additional subsurface explorations necessary to evaluate subsurface conditions on the steep slope.
2. An interpreted subsurface profile through the critical slope section including the steep slope, headscarp area, and the building site. The profile should include design groundwater levels, engineering soil properties, and the location of the proposed structures.
3. The results of slope stability analyses of the critical slope section for static and seismic conditions, including the effect of liquefaction on soil strength properties.
4. Based on the results of the stability analyses, provide design parameters for the foundation/catchment wall including impact forces and an estimate of the wall height based on the volume of future landslide debris.

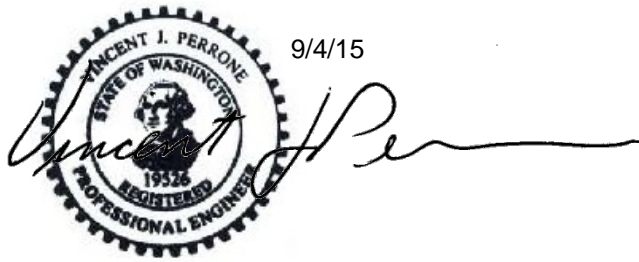
Mr. Travis Saunders - City of Mercer Island
September 4, 2015
Page 2 of 2

5. Provide an estimate of downdrag loads on the pin pile foundations due to liquefaction and settlement of 15 to 20 ft of loose soil around the pin piles.

We trust that this information suits your current needs. If you have questions or need additional information, please contact us.

Very Truly Yours,
PERRONE CONSULTING, INC., P.S.

9/4/15



Vincent J. Perrone, Ph.D., P.E.
Principal Engineer