



Group Northwest, Inc.

Geotechnical Engineers, Geologists
& Environmental Specialists

December 12, 2017

G-3837

Mr. William Summers
MI Treehouse LLC
P. O. Box 261
Medina, WA 98039
Email: bill@summersdevelopment.com

Subject: Geotechnical Evaluation for Alternative Locations
Proposed Residence
5637 East Mercer Way, Mercer Island, WA 98040

Reference: GEO Group Northwest, Inc. Letter dated May 3, 2017
Geotechnical Report Addendum

City of Mercer Island, Letter Dated 3/20/2017
Re: CA015-001

GEO Group Northwest, Inc. Geotechnical Engineering Report
Report dated 3/13/2015, G3837 for the Proposed Residence

Dear Mr. Summers:

We had previously responded to the referenced City of Mercer Island letter dated 3/20/2017, with respect to item 2b – Address potential adverse impacts to adjacent and downhill properties in our Report Addendum dated May 3, 2017.

At your request, we are presenting our geotechnical evaluation for the alternative locations suggested by the City of Mercer Island for the proposed residence in order to minimize wetland intrusion.

Accordingly, we have looked at the impacts of locating the house closer to East Mercer Way, and closer to the steep slope to the south as suggested by Mr. Evan Maxim from the City of Mercer Island.

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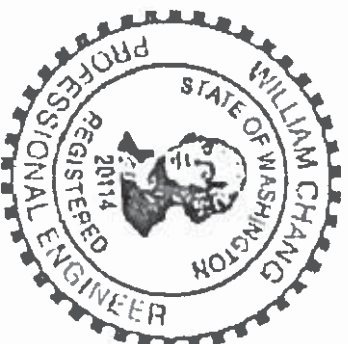
Mr. William Summers

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The locations suggested by Mr. Evan Maxim do not work well from a geotechnical engineering perspective. They would intrude into the steep slope area, requiring the addition of a \$100,000 steel soldier pile shoring wall to retain the excavation, and the house would not have any windows at the west side, due to the shoring wall and the need for a catchment wall above it. The current location is preferable from a geotechnical perspective as it minimizes the adverse impact to the steep slope, improves the stability of the site and provides better access.

The use of pin piles to support the house should not have any adverse impacts to the property of Dr. John Stivelman located to the south and uphill from the property. The pipe pile equipment has a low energy impact hammer and Dr. Stivelman's house and property is located on dense Advance Outwash sands.

Sincerely,
GEO Group Northwest, Inc.



William Chang, P.E.
Principal

Attachments: Site Plans for Existing House Location (Black) vs Alternate Locations (Red)

GEO Group Northwest, Inc.