

September 23, 2019  
File No. 17-405.200

Mr. Hu Wen  
125 - 152nd Place Northeast  
Bellevue, Washington 98007

**Subject: Geotechnical Plan Review and Statement of Risk  
Proposed Residence: 8251 West Mercer Way, Mercer Island, Washington**

Dear Mr. Wen:

As requested, PanGEO, Inc. is pleased to present this plan review and statement of risk for the proposed residence at 8251 West Mercer Way, Mercer Island, Washington. We previously prepared a geotechnical report for this project dated February 8, 2018. The purpose of this review is to verify the geotechnical recommendations presented in our report were incorporated into the plans. This letter also provides a statement of risk in accordance with Mercer Island Code 19.07.060.D.2.

**PLAN REVIEW**

In preparing this letter, we reviewed the following documents:

- PB Architects, P.S., Architectural Plan Set, Sheets A-1.000 through A-7.04, dated November 14, 2018
- Phillips Structural Engineers, Structural Plan Set, Sheets S-0 through SD-3, dated January 11, 2018
- CT Engineering, Shoring Plan Set, Sheets SS1.0 through SS4.0, dated September 17, 2019
- Nick Bossoff Engineering, Inc., Civil Plan Set, Sheets C-1 through C-5, dated September 20, 2018

Based on the results of our review, the plans appear to have been prepared in accordance the recommendations included in our geotechnical report.

#### **STATEMENT OF RISK**

The site is mapped as a geologic hazard area by the City of Mercer Island due to 1) Potential Landslide Hazards, 2) Seismic Hazards, and 3) Erosion Hazards. Development within geologic hazard areas may occur if the geotechnical engineer provides a statement of risk with supporting documentation indicating that one of the following criteria can be met:

- a. The geologic hazard area will be modified, or the development has been designed so that the risk to the lot and adjacent property is eliminated or mitigated such that the site is determined to be safe; or
- b. An evaluation of site-specific subsurface conditions demonstrates that the proposed development is not located in a geologic hazard area; or
- c. Development practices are proposed for the alteration that would render the development as safe as if it were not located in a geologic hazard area; or
- d. The alteration is so minor as not to pose a threat to the public health, safety, and welfare.

The proposed residence construction will incorporate the use of temporary and permanent shoring walls to support cuts up to about 21½ feet deep along the north side of the proposed residence. Recommendations for the shoring wall were provided in our February 8, 2018 geotechnical report.

The excavation will be permanently supported by the foundation and basement walls constructed as part of the future residence.

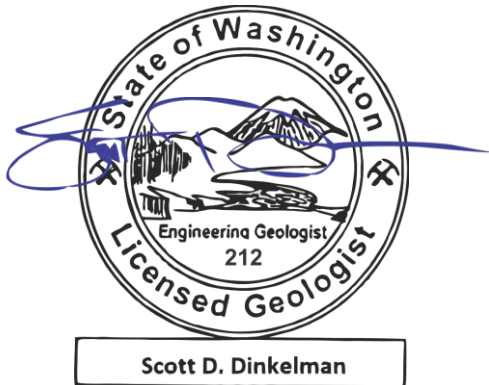
Seismic design recommendations were also provided in our February 8, 2018 geotechnical report.

During construction, best management practices will be utilized, such as installing silt fences and erosion control measures, minimizing earthwork activities during periods of heavy precipitation, Wet weather construction recommendations were included in our February 8, 2018 geotechnical report. Permanent erosion control measures including landscape and hardscaping are planned that will mitigate the risk of erosion post-construction.

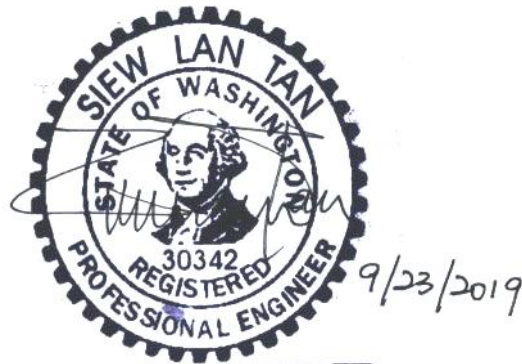
In summary, it is our opinion that criteria a and c are met.

We appreciate the opportunity to be of service. If you have any questions, please let us know.

Sincerely,



Scott Dinkelman, LEG  
Senior Engineering Geologist



Siew L. Tan, P.E.  
Principal Geotechnical Engineer