

NELSON GEOTECHNICAL ASSOCIATES, INC. GEOTECHNICAL ENGINEERS & GEOLOGISTS

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MEMORANDUM

DATE:

July 10, 2018

TO:

Mr. Craig Pazarena

Mr. David Taber - Neiman Taber Architects, Inc.

FROM:

Khaled M. Shawish, PE

Carston T. Curd, GIT

RE:

Pazarena Residence Addition

8430 SE 47th Place

Mercer Island, Washington

NGA File No. 996317



This memorandum documents our prior email correspondence regarding clarification of the previous documentation of topography within the site and verification of the absence of steep slope critical areas within the site as described in the geotechnical engineering evaluation titled "Pazarena Residence Additions," dated June 16, 2017.

We understand that the City of Mercer Island has reviewed an application for a critical areas determination on the property and requested the following information:

1. The Geotech report states that the addition will be constructed on a short, steep slope of 30 degrees, which is 58%. The definition of steep slope states that a steep slope is "Any slope of 40% or greater calculated by measuring the vertical rise of any 30-foot horizontal run." Please provide the run of the slope that the Geotech refers to as steep, so the city can determine if there is a slope on-site that meets the definition of a steep slope.

Upon review of the geotechnical documentation, the slope in question is documented on Cross Section B-B' in Figure 4 of the geotechnical report. It is located to the southeast of the existing garage. Semantically, the slope does not meet the definition the city is using for steep slopes. Over a 30-foot run, the slope in question [vertical rise of 10-11 feet] is at most 20° (36%), which is less than the 40% criterion. Furthermore, slopes to the southwest of the proposed garage [vertical rise of 8 feet] have a 30-foot run gradient of less than 15° (27%).

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Geotechnically, the recommendations for the increased depth of foundations should remain since the new pool room is proposed to be constructed out on to this short slope, and foundations should be designed around localized topography. However, the slopes do not meet the technical classification of steep slope critical areas by the City of Mercer Island.

We trust that this memorandum should satisfy your needs at this time. Please do not hesitate to contact us should you require anything further.

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