



NELSON GEOTECHNICAL
ASSOCIATES, INC.

19900 144th Ave. N.E. Suite 200
Woodinville, WA 98072
(425) 486-1669
www.nelsongeotech.com

August 13, 2025

Lynne and Ben Rotholtz
Via Email: lynne@rotholtz.com

Geotechnical Plan Review and Comment Response Letter
Rotholtz SE 40th Street Residence Addition
9825 SE 40th Street
Mercer Island, Washington
NGA File No. 1549424

Dear Lynne and Ben:

This letter presents the results of our geotechnical engineering review of plans and review comment responses for the proposed Rotholtz SE 40th Street Residence Addition Development project located at **9825 SE 40th Street on Mercer Island, Washington.**

INTRODUCTION

We previously prepared a geotechnical engineering evaluation for the proposed development dated October 21, 2024. The site is currently occupied by a single-family residence within the central portion of the property. The ground surface within the property is generally gently to moderately sloping down from the west to the east and from the south to the north. We understand the proposed improvements within the property will consist of constructing a new garage addition and upper-level deck along the southeastern side of the residence in the location of an existing carport.

We understand that the City of Mercer Island has requested our updated review of the most recent set of plans along with responses to address additional geotechnical concerns provided in a letter dated May 13, 2025. We have been requested to review the most recent set of plans. For our use in preparing this letter, we were provided with the following documents:

- ***Architectural Plan Set titled "Rotholtz Garage Conversion," dated August 5, 2025 and prepared by Argyle Street Partners.***
- ***Structural plan set titled "Rotholtz Garage Addition," dated February 4, 2025, and prepared by Stoney Point Engineering.***

PLAN REVIEW AND CONCLUSIONS

We have reviewed the geotechnical aspects of the provided plans and found the plans to be in general compliance with our recommendations as presented in our previous geotechnical report. The soil parameters used in the foundation designs are consistent with the recommendations provided in our previous report.

We recommend that grading and the proposed excavations be performed in a manner that minimizes disturbance to the areas outside of the proposed residence addition areas. We also recommend that all disturbed areas be revegetated and vegetation maintained until it is established. All other recommendations provided in our previous report should be strictly followed.

CITY OF MERCER ISLAND COMMENT AND OUR RESPONSE

COMMENT 3:

“Have your Geotech update their report or provide a memo addressing mitigation sequencing. See MICC 19.07.100- Mitigation sequencing, address each measure listed specifically.”

RESPONSE 3:

19.07.100 – Mitigation Sequencing

Except as otherwise provided in this chapter, an applicant for a development proposal or activity shall implement the following sequential measures, listed below in order of preference, to avoid, minimize, and mitigate impacts to environmentally critical areas and associated buffers. Applicants shall document how each measure has been addressed before considering and incorporating the next measure in the sequence:

(A) Avoiding the impact altogether by not taking a certain action or parts of an action. The applicant shall consider reasonable, affirmative steps and make best efforts to avoid critical area impacts. However, avoidance shall not be construed to mean mandatory withdrawal or denial of the development proposal or activity if the proposal or activity is an allowed, permitted, or conditional use in this title. In determining the extent to which the proposal should be redesigned to avoid the impact, the code official may consider the purpose, effectiveness, engineering feasibility, commercial availability of technology, best management practices, safety and cost of the proposal and identified changes to the proposal. Development proposals should seek to avoid, minimize and mitigate overall impacts based on the functions and values of all of the relevant critical areas and based on the recommendations of a critical area study. If impacts cannot be avoided through redesign, use of a setback deviation pursuant to section 19.06.110(C), or because of site conditions or project requirements, the applicant shall then proceed with the sequence of steps in subsections B through E of this section;

- The location of the development cannot be moved because it is an addition onto an existing residence. The proposed work area is a short extension of the existing residence deck and carport that has been previously disturbed as a part of the previous grading activities associated with the site development. The proposed development is relatively minor and will only include localized shallow foundation excavations for the new garage foundations. Areas outside the proposed development area will remain untouched and in the existing condition. In our opinion, the proposed development will not adversely impact the mapped geologic critical areas mapped within and within the vicinity of the subject site.

(B) Minimizing impacts by limiting the degree or magnitude of the action and its implementation, using a setback deviation pursuant to section 19.06.110(C), using appropriate technology, or by taking affirmative steps to avoid or reduce impacts;

- The proposed development is minimizing any potential impact as the proposed work area is a short extension of the existing residence deck and carport that has been previously disturbed as a part of the previous grading activities associated with the site development. The proposed development is relatively minor and will only include localized shallow foundation excavations for the new garage foundations. Areas outside the proposed development area will remain untouched and in the existing condition. In our opinion, the proposed development will not adversely impact the mapped geologic critical areas mapped within and within the vicinity of the subject site.

(C) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;

- Recommendations in our original report outline erosion control measures to be implemented within the site. The proposed development is relatively minor and will only include localized shallow foundation excavations for the new garage foundations within an existing asphalt paved area. Any areas disturbed as a part of the proposed development will be restored. In our opinion, the proposed development will not adversely impact the mapped geologic critical areas mapped within and within the vicinity of the subject site.

(D) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action;

- The proposed development is relatively minor and will only include localized shallow foundation excavations for the new garage foundations within an existing asphalt paved area. Any areas disturbed as a part of the proposed development will be restored in the final condition. Areas outside the proposed development area will remain untouched and in the existing condition to eliminate any potential adverse impacts to the mapped geologic critical areas mapped within and within the vicinity of the subject site as a result of the proposed development activities.

(E) Compensating for the impact by replacing, enhancing, or providing substitute resources or environments; and/or

- The proposed development is relatively minor and will only include localized shallow foundation excavations for the new garage foundations within an existing asphalt paved area. Any areas disturbed as a part of the proposed development will be restored. In our opinion, the proposed development will not adversely impact the mapped geologic critical areas mapped within and within the vicinity of the subject site and as a result no additional compensation is necessary from a geotechnical standpoint.

(F) Monitoring the impact and taking appropriate corrective measures to maintain the integrity of compensating measures.

- We recommend NGA is retained to observe the proposed development activities during construction and provide recommendations as necessary to confirm no adverse impacts to the critical areas. In our opinion, post-construction monitoring is not necessary for this project.

MINIMUM RISK STATEMENT

Based on our understanding of the proposed plans, and provided that the recommendations in our previous report and this letter are strictly followed during construction, the areas disturbed by construction should remain stable meeting the criteria stated in **Mercer Island City Code 19.07.160.B.2.a-d**. In addition, the development has been designed so that the risk to the lot and adjacent properties is eliminated or mitigated such that the site is determined to be safe, meeting the requirements stated in **Mercer Island City Code 19.07.160.B.3.b**.

CLOSURE

We recommend that NGA be retained to provide monitoring and consultation services during construction to confirm that the conditions encountered are consistent with those indicated by the explorations, to provide recommendations for design changes should the conditions revealed during the work differ from those anticipated, and to evaluate whether or not earthwork activities comply with contract plans and specifications.

We appreciate the opportunity to provide service to you on this project. Please contact us if you have any questions regarding this letter or require further information.

Sincerely,

NELSON GEOTECHNICAL ASSOCIATES, INC.



LEE S. BELLAH

Lee S. Bellah, LG
Senior Geologist



Khaled M. Shawish, PE
Principal

LSB:KMS:mm