



October 20, 2022

G-5742

Mr. Charlie Chen
CC Design Homes
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**Subject: GEOTECHNICAL ADDENDUM - CRITICAL AREA REVIEW #1
PROPOSED SINGLE FAMILY RESIDENCE
3705 – 77TH PL SE
MERCER ISLAND, WA**

Ref: “Geotechnical Engineering Report, Proposed Single Family Residence, 3705 – 77th Pl SE, Mercer Island, WA”, GEO Group Northwest, Aug 29, 2022.

Dear Mr. Chen:

Per your request we have prepared the following letter in order to supplement the referenced geotechnical report for the site. The following report shall serve as an addendum to the referenced geotechnical report.

We understand that the City of Mercer Island has requested that determination be made as to whether or not the proposed development is subject to the Mercer Island Code requirements as Critical Area Review 1 or Critical Area Review 2.

Records Review

GEO Group Northwest has reviewed available online records for the subject site and existing development which are provided by King County and the City of Mercer Island. From that information we see that the existing house which is to be removed and replaced with a new residence was constructed in 1958. Additionally, the subject site is part of the Mercerdale plat which was platted in 1958.

Code Review

GEO Group Northwest has reviewed the Mercer Island code sections 19.07.130 and 19.01.050. We reproduce relevant portions of these sections below:

19.01.050.A.2:

Legal nonconforming status of structures, sites and uses. All structures, sites and uses that lawfully existed prior to September 26, 1960, shall be considered legally nonconforming. Structures, sites and uses that were constructed or initiated after

September 26, 1960, that were in conformance with all applicable code provisions in effect at the time of their creation but are not in compliance with current land use codes as a result of subsequent changes in code requirements are deemed to be legally nonconforming structures, sites and uses.

19.07.130:

Activities of the following types may be authorized with approval of an application for a critical area review 1. The activities in this section are exempt from the development standards in subsequent sections within this chapter; provided, that additional measures to protect life and property or to protect environmental quality may be required.

- A. Addition to or reconstruction of an existing legally established structure or building within a critical area and/or buffer constructed on or before January 1, 2005, provided the following criteria are met:*
 - 1. The seasonal limitations on land clearing, grading, filling, and foundation work described in section 19.07.160(F)(2) shall apply.*
 - 2. Additions shall be allowed if all of the following criteria are met:*
 - a. The structure is enlarged not more than a cumulative total of 200 square feet larger than its footprint as of January 1, 2005;*
 - b. If the existing, legally established structure is located over or within a wetland or watercourse, no further expansion within the wetland or watercourse is allowed;*
 - c. If the existing legally established structure is located within a wetland or watercourse buffer, the addition may be no closer to the wetland or watercourse than a distance equal to 75 percent of the applicable standard buffer and must also be no closer to the watercourse or wetland than the existing structure;*
 - d. A critical area study approved by the city demonstrates that impacts have been avoided or minimized and mitigated consistent with section 19.07.100, mitigation sequencing;*
 - e. If the modification or addition is proposed within a geologically hazardous area or associated buffer, a qualified professional provides a statement of risk consistent with section 19.07.160(B)(3).*
 - 3. Reconstruction of legally established nonconforming structures shall meet the standards in section 19.01.050. The code official may require a critical area study and mitigation plan addressing temporary impacts to critical areas and buffers.*

4. *Demolition. Removal of structures in watercourse and wetland buffers and geologically hazardous areas, provided:*
 - a. *Site disturbance is limited to the existing access and building footprint;*
 - b. *There is no site disturbance within or to wetlands or watercourses;*
 - c. *All soils are stabilized and the area is revegetated with appropriate native vegetation; and*
 - d. *Necessary building permits are obtained.*

Conclusions and Recommendations

Based upon our records review, the existing building development at the subject site is legally nonconforming as it was constructed prior to 1960.

For the following reasons it is our opinion that the proposed development qualifies for Critical Area Review 1 with regard to the geologic hazards discussed in our referenced geotechnical report:

- The proposed development includes the re-development or ‘reconstruction’ of a legally established structure;
- The seasonal development standards noted in 19.07.160.F.2 apply to projects with the following conditions:

Land clearing, grading, filling, and foundation work within: (a) an erosion hazard area, when 2,000 square feet or more of site disturbance is proposed, and/or (b) a landslide hazard area are not permitted between October 1 and April 1.

Our referenced report indicates that there is not a significant landslide or erosion hazard at the subject site. Therefore, the proposed grading, filling and foundation work may occur during the winter period provided that standard temporary erosion control Best Management Practices (BMPs) are properly implemented and recommendations in our report are properly implemented for the proposed development configuration. The erosion control BMPs include but are not limited to filter fabric fencing installation/maintenance around the work area, silt socks at adjacent stormwater facilities and the use of plastic sheeting to cover temporary excavation slopes or soil stockpiles having slopes of steeper than 4H:1V.

GEO Group Northwest recommends that we are retained to monitor the proposed development per the recommendations in the geotechnical report section titled Additional Services (pg. 16). In this way, appropriate engineering recommendations to mitigate erosion risks can be implemented as necessary, dependent upon conditions at the time when the work is performed.

Please contact us if you have any questions or concerns.

Sincerely,
GEO GROUP NORTHWEST, INC.



Adam Gaston
Project Engineer



10-20-2022

William Chang, P.E.
Principal