

Code Compliance for Geologic Hazard Review 7615 E Mercer Way

Preface

Per PRE24-078, project is required to complete Critical Areas 2 review for Geologically Hazardous Areas. Project team is requesting that Critical Areas 2 review be consolidated with building permit review for the project. The building pad was established under 2017 Mercer Island Land Use code. New residence proposed has been designed to fit within the approved building pad. Related site work will substantially fit within the existing home's yard and driveway footprint.

Building pad and setbacks for project were previously approved under Final Short Plat (SUB20-002), with mitigation for all work within Wetland and Watercourse Critical Area buffers on-site completed under CAO16-003, including meeting mitigation requirements for this new proposal's landscaping and hardscaping. Project and construction impacts to Wetland and Watercourse beyond what was already mitigated under CAO16-003 are not proposed for this project.

Code Compliance Narrative for Geologic Hazard Review

MICC 19.07.090.B.2.ii: Requesting consolidation of the review of geologically hazardous areas together with construction permit review.

Answer: Per PRE24-078, project is required to complete Critical Areas 2 review for Geologically Hazardous Areas. Project team is requesting that Critical Areas 2 review be consolidated with building permit review for the project. Wetlands/Watercourses on-site were already reviewed through CAO16-003.

MICC 19.07.090.B.3: Requirements for a complete application include:

- a. A completed development application coversheet;

Answer: This document has been completed and uploaded with intake.

- b. A critical area study, meeting the requirements of section 19.07.110, critical area study;

Answer: A written geotechnical report prepared by a qualified professional addressing geologically hazardous areas on site has been uploaded with intake. Report meets requirements of MICC 19.07.110, including disclosure and delineation of geologically hazardous critical areas and an assessment of the probable effects to critical areas and mitigation (if needed). A minimum risk statement per MICC 19.07.160(B)(3)d will be provided prior to issuance.

MICC 19.07.160.B.1: When an alteration within a landslide hazard area, seismic hazard area or buffer associated with those hazards is proposed, the applicant must submit a critical area study concluding that the proposal can effectively mitigate risks of the hazard. The study shall recommend appropriate design and development measures to mitigate such hazards. The code official may waive the requirement for a critical area study and the requirements of subsections (B)(2) and (B)(3) of this section when he or she determines that the proposed development is minor in nature and will not increase the risk of landslide, erosion, or harm from seismic activity, or that the development site does not meet the definition of a geologically hazardous area.

Answer: Geotechnical Engineer has completed report, noting proposed project has “no significant increase in loading expected” for ECA Steep Slope. Analysis also shows the subject site is not classified as Erosion Hazard, based on generally exceeded 15% gradient and native Kitsap silt loam characterized by USDA with slight to moderate erosion hazard.

MICC 19.07.160.B.2: Alteration of landslide hazard areas and seismic hazard areas and associated buffers may occur if the critical area study documents find that the proposed alteration:

a. Will not adversely impact other critical areas;

Answer: ECA Steep Slopes exist on site. These will be avoided but for small sections of new hardscape, property line fencing, and low retaining wall at SE corner of proposed new home. These areas are all within a Building Pad approved under Final Short Plat (SUB20-002). Some Civil related work will be just outside of said building pad to accommodate construction.

b. Will not adversely impact the subject property or adjacent properties;

Answer: Proposed work will be occurring within substantively the same footprint as the existing house, yard, and driveway areas.

c. Will mitigate impacts to the geologically hazardous area consistent with best available science to the maximum extent reasonably possible such that the site is determined to be safe; and

Answer: In the opinion of our Geotechnical engineer, the proposed development and positioning of the new residential structure is considered feasible from a geotechnical standpoint and the analysis indicates no additional mitigation is required to provide an adequate level of safety. During construction, Temporary Erosion Control will be implemented. A maximum allowable temporary slope inclination has been provided by the Geotechnical Engineer in their report.

d. Includes the landscaping of all disturbed areas outside of building footprints and installation of hardscape prior to final inspection.

Answer: Landscaping and hardscaping are shown for areas outside of the building footprint. These will be installed prior to final inspection.

MICC 19.07.160.B.3: Alteration of landslide hazard areas, seismic hazard areas and associated buffers may occur if the conditions listed in subsection (B)(2) of this section are satisfied and the geotechnical professional provides a statement of risk matching one of the following:

- d. The development is so minor as not to pose a threat to the public health, safety and welfare.
Answer: In the opinion of the project's Geotechnical Engineer, "The development is so minor as not to pose a threat to the public health, safety and welfare".

MICC 19.07.160.C & D:

- c. A critical area study shall be required for any alteration of a landslide hazard area or associated buffer...
- d. A critical area study shall be required and shall include an evaluation by a qualified professional for seismic engineering and design, a determination of the magnitude of seismic settling that could occur during a seismic event, and a demonstration that the risk associated with the proposed alteration is within acceptable limits or that appropriate construction methods are provided to mitigate the risk of seismic settlement such that there will be no significant impact to life, health, safety, and property.

Answer: As noted above, a Critical Areas Study has been provided for the project addressing both Steep Slope and Seismic. The report includes evaluation that "the output is included in Appendix C which demonstrates that the site will maintain an adequate minimum FOS value for shallow and deep-seated rotational failure under the maximum design earthquake acceleration of 0.35g."

MICC 19.07.160.E: Development standards—Erosion hazard areas

Answer: The project's Geotechnical Engineer's analysis shows the subject site is not classified as Erosion Hazard, based on generally exceeded 15% gradient and native Kitsap silt loam characterized by USDA with slight to moderate erosion hazard.

MICC 19.07.160.F.2: 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.

Answer: Project is not currently planning on performing clearing, grading, filling, and foundation work within landslide hazard areas between October 1 and April 2.