

Chris Luthi Architect
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RE: **CAO25-003** Review Letter 1; 5818 W Mercer Way, Mercer Island, WA 98040

To: Tony Newton, Assistant Planner

City of Mercer Island Community Planning and Development

Dear Tony,

Please see below responses to your questions. The responses have been created or reviewed by the Structural and Geotechnical engineers.

Planning:

1. EASEMENT: 198412209004 is shown here. Per MICC 19.02.020(H)(2), "Utility and other easements. No structure shall be constructed on or over any easement for water, sewer, storm drainage, utilities, trail or other public purposes unless it is permitted within the language of the easement or is mutually agreed in writing between the grantee and grantor of the easement."
See attached Short Plat and Easement. This flag lot was created assuming a driveway in this location.
2. Per MICC 19.02.020(C)(3)(a)(i), Please show that the deck does not project more than three feet into any required yard
Noted as 2.88' on drawing.
3. Per MICC 19.02.050(D)(5), Please clarify if the rockery in the yard setback is under the maximum allowed 72 inches.
Any retaining walls in the setback are 72" or less
4. Please provide a Disclosure and Notice on Title recorded with the King County Recorder's Office consistent with MICC 19.07.070 disclosing the presence of critical areas on the development proposal site and any mapped or identifiable critical areas within the distance equal to the largest potential required buffer applicable to the development proposal on the development proposal site.
OK - Do you have a form or example of the wording you are looking for in this document?

Tree

1. Please correct and update the tree inventory worksheet. Tree #10 is listed as an exceptional tree as a Western Red Cedar at 32" DBH. Replacement trees for exceptional trees require at least 6 replacement trees.
Form updated.
2. Per MICC 19.10.090(A)(3), Please show the replanting plan for the proposed location and number of any required replacement trees.
See site plan.

3. Please ensure that the arborist report addresses all of MICC 19.10.090(C)(2)(b), including:
For development applications, a discussion of timing and installation of tree protection measures. Such measures must include fencing and be in accordance with the tree protection standards as outlined in this chapter; and The suggested location and species of supplemental trees to be used when required. The report shall include planting and maintenance specifications to ensure long-term survival.
See new note on site plan

Geotechnical Review:

1. When the plan site receives final approval, please have the geotechnical engineer of record review the plan set and provide a letter indicating whether the proposed design conforms to their geotechnical design and construction recommendations. In addition please include an updated statement of risk in accordance with MICC 19.07.160.B.3.

ok

2. Please provide shoring wall structural calculations for review. Please clearly indicate what lateral earth pressures were used in the design of the shoring wall. Please coordinate with the geotechnical engineer to verify that the pressures used are what is recommended for the existing sloping ground conditions above the wall.
Structural calculations for the previous shoring scheme were provided and should have been submitted. Updated structural calculation packet has been provided and shows lateral earth pressure used in design. Additionally, please refer to soil pressure diagrams on SH0.1 and pile schedule showing retained slope for each pile.
3. The top of pile elevation does not correspond to existing ground elevations, please revise table and provide temporary grading plan to clarify how proposed shoring wall works with the grading to achieve the basement excavation.
SH1.1 has been updated to reflect temporary grading plan; shoring scheme has been updated to utilize tiebacks and eliminate temporary excavation at the east.
4. The basement top of slab is at el. 186. The top of the shoring wall is at 210 and is 13 ft high. This means the excavation in front of the wall is at 197. Please indicate how this basement excavation will be achieved in front of the shoring wall that conforms to the geotechnical engineer's recommendation for temporary open cuts. The proximity of this basement excavation will reduce passive resistance used in the design of the shoring wall. Please coordinate with the geotechnical engineer to provide a reduced passive pressure recommendation. Please indicate which piles are designed using this reduced passive pressure and provide revised structural calculations and shoring design.
Previous shoring scheme relied on excavation to limit height of shoring. After further coordination with the geotechnical engineer, general contractor, and shoring contractor, the shoring scheme has been updated to eliminate temporary excavation at the east and instead use tiebacks at the soldier piles as reflected in the updated drawings.
5. Please coordinate with civil engineer to provide temporary and permanent grading plans. Please clearly show top and bottom of proposed temporary cuts with associated elevations. Please clearly show permanent grading elevation contours on the permanent grading plan.
SH1.1 has been updated to reflect temporary grading plan; shoring scheme has

been updated to utilize tiebacks and eliminate temporary excavation at the east

6. Does this mean an excavation on the designated steep slope is proposed above the shoring wall? The 1.5H:1V slope angle is a temporary cut slope recommendation from the geotechnical engineer of record not a permanent cut slope recommendation. Proposing an extensive permanent cut in the steep slope area would not be considered mitigating the potential impact to a geologic hazard (Ref. MICC 19.07.160). Please revise proposed grading to reduce impact on the geologic hazard at this site.

After further coordination with the geotechnical engineer, general contractor, and shoring contractor, the shoring scheme has been updated to eliminate temporary excavation at the east and instead use tiebacks at the soldier piles as reflected in the updated drawings.

7. Please provide wall type proposed and include design calculations to verify that both static, seismic and surcharge loadings are included in the wall design. Please include assessment of potential impact of proposed wall imposing surcharge loading on the adjacent rockery and provide mitigation recommendations.

Rockery eliminated.

8. This indicates a second shoring wall. Please coordinate with structural engineer to provide temporary and permanent grading plans.

Second soldier pile wall eliminated.