

Sheet-LA1.1 (page 1 of 6)

1. Provide written documentation from the owner of 5001 E Mercer Way describing the extent and duration of the access.
Written documentation from the owner of 5001 E. Mercer Way has been included with this submittal, see Authorization letters.
2. Where are erosion control measures?
Erosion control measures are demonstrated on the Wall Excavation Plan, Sheet LA2.2
3. The hardscape numbers do not match the Site Development Worksheet. Please double check and update and resubmit the plans and Site Development Worksheet as necessary. Please remember that decks count as hardscape.
The site development worksheet has been updated to the current format released by the City of Mercer Island in January of 2020. Changes are reflected on Sheet LA1.1

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4. The temporary access road on adjacent property appears to go over tree DF2 and two MP trees. These trees most likely be damaged and removed for this access. Provide written permission from adjacent property owner for the easement/access road and tree removal. Replacements for these trees and all replacement trees, locations must be shown on the plans.
The proposed location for the temporary access road has changed on the plans for reasons of construction cost. Please note that DF2 will be unaffected. One existing Japanese Maple will be removed for the access road. This maple has a caliper less than 10" so it is not subject to regulation. The owner plans to replace this Tree with a new Maple, subject to current nursery stock availability, that is alike in size and kind.

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5. Draining through wall should not be allowed onto slope. Provide means to collect and discharge drainage away from slope.
Drainage for the wall will be collected by footing drain and tight lined to the nearest storm catch basin. Please see Wall Drain Plan and Details on Sheets LA2.3 - LA2.5
6. Verify that the anchors do not adversely impact existing structural or utility elements on site.
Helical tieback anchors have been removed from the plan and replaced with vertically driven W piles. Note 3, paragraph 2 instructs the contractor to locate all underground utilities and maintain clearance from them. Little to no ground movement is expected with the installation of the piles and tiebacks.
7. Tieback loads and wall moments for wall 3 are calculated on page 2 of calcs. Please annotate the calculation on this sheet starting with "calculate x." Is this finding the value and location of max moment? I'm not familiar with the max moment formula for a double cantilever with varying load, and I can't find a wall reinforcement design that corresponds to the $M=8.83$
Tiebacks have been removed and replaced with a cantilever soldier pile wall. See attached calculations.
8. This wall design did not include the surcharge loading from the steel planter boxes.
The steel planter boxes have been removed from the design.
9. You are proposing 12 feet of fill on a slope. Geotechnical engineer to provide site preparation and structural fill placement recommendations for this sloped condition. Are you notching the fill into the slope? Provide a detail.

The 12-foot section of the wall has been removed and the tallest portion of the wall is now only 6-feet high. Please see revised geotechnical report for structural fill information and revised plans for updated wall layout.

10. Calculations indicate W4 is intended to span horizontally between adjacent walls. Clarify the impact of these loads on the tiebacks as the spacing is no longer the 6' assumed in calculations. Clarify the extent of the horizontal reinforcement necessary (this bar would need to continue to and develop beyond the restraint at the tieback location to span between these anchors, not stop at the wall corner or develop beyond the corner).

This condition has been eliminated with a revision of a cantilever soldier pile wall.

11. Provide an overall static and seismic slope stability analyses of the final slope configuration with the new 12-ft high wall. Provide cross-section and stability results in geotechnical addendum letter to design report. Include minimum risk statement following review of revised plans.

The SSSA report and statement of risk have been provided in this submittal, however, the 12-foot high section has been removed per #9 above.

12. How do you intend to install the helical anchors? Are you proposing temporary grading on the outboard slope to provide construction access for equipment? Provide temporary grading plan showing extent of slope disturbance and degree of disturbance.

Helical anchors have been removed from the plans. W piles will be installed instead, using the same methodology as driven pipe piles. See attached revised structural calculations.

13. ESNW report 2/5/19 and sections on LA3.1 indicate the proposed wall will be constructed using temporary benches and toe slope open cuts. Provide an excavation plan reflecting the anticipated bottom of excavation and all temporary slopes to accommodate the installation of all wall, foundation, and drainage system including footing step locations.

Please see the Wall Excavation Plan on sheet LA2.2.

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14. Driven pile installation should be continuous not periodic.

Periodic inspection for the piles has been changed to continuous.

15. The maximum 2-inch diameter pin pile capacity without pile load testing is 2 tons. With a 3 T design load, provide pile load testing.

Testing requirements have been added for the pipe piles.

16. Given the sloping ground conditions ranging from 1.4H:1V to 2H:1V in front of the walls, provide a minimum pile embedment length to ensure adequate pile support.

The geotechnical engineer has indicated that refusal will be encountered at depths beginning at 6' bgs. Note 14 currently requires that pipe piles shall have the additional requirement of being embedded 10 feet below grade. The geotechnical engineer has also stated that the contractor shall be prepared to drive piles as much as 20, depending on the existing conditions. No changes required to this note.

17. The pin piles were described as grouted pipe pile in the geotechnical report. Where is the grout provision in this design?

The geotechnical report has been revised and grouting is not necessary or recommended.

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18. The geotechnical report recommends 18-inch width of drainage material along the entire wall height, not 8-inches increasing to 18 inches. Revise all wall sections.
The detail on sheet LA3.2 have been edited to show 18-inch width drainage material along the entire wall height.
19. The proposed drain location does not match the recommendation on plate 3 of the 2019 ESNW Geotech report.
The proposed drain locations have been updated per the 2019 Geotech Report.
20. Wall drainage should not be allowed to exit through wall onto slope in front of wall. Wall drainage should be collected and tight lined to a controlled discharge location (not onto slopes). Revise all wall sections.
Drainage for the wall will be collected by footing drain and tight lined to the nearest storm catch basin.
Please see Wall Drain Plan and Details on Sheets LA2.3 - LA2.5
21. An excavation plan will be required to reflect the temporary excavation necessary for installation. The geotechnical report 2/5/19 recommends a cut of 1.5H:1V on page 2, these details note a maximum of 1:1, and the detail graphically depicts a cut much steeper than this. Please coordinate between all disciplines to correctly reflect the cuts necessary for construction.
Please see the Wall Excavation Plan on sheet LA2.2. Details have been edited to reflect a 1.5H:1V max cut.
22. Provide sequence of construction on plan for the wall and tieback system. The geotechnical report describes backfill prior to the installation of anchors, and the wall has not been designed to resist the backfill without anchors in place.
Please see General Construction Sequencing note on Sheet LA1.1 Note that helical tiebacks have been removed from the plan.
23. Provide a detail of the footing reinforcement through a typical step, and a max step height "x"
The allowable vertical step and step reinforcing has been added to detail 4 on sheet LA3.2.