

Memorandum

To:	Norine Allerdice	Date:	October 27, 2022
From:	April Ng		
Project:	Butenwieser/Wiley Residence 6838 96 th Ave SE Mercer Island, WA 98040 King County APN 302405-9010	File No:	2205-199
Subject:	Building Permit Review 1 Response		

The comments are restated below, followed by responses. Updated drawings have been clouded with Revision 1: 10/27/22 Building Permit Resubmittal.

Geotechnical Peer Review		
<i>Comment</i>	<i>Response</i>	<i>Document Ref.</i>
G000 a. Geotechnical engineer to review plan set and provide PE stamped letter indicating whether the plans are in accordance with their design and construction recommendations and provide a statement of risk in accordance with MICC 19.07.160.B.3.	The geotechnical addendum dated April 26, 2022 (Revised August 16, 2022) includes section 1.2 Statement of Risk. The addendum itself includes Mike Reiter's PE stamp. Aspect Consulting can provide an additional statement of risk letter with the final plan set if necessary.	Geotechnical Addendum
C100 Either add notes re: wall demolition and replacement sequencing from Aspect Consulting report addendum dated April 26, 2022 or clearly reference addendum at the locations where existing walls will be removed.	Notes have been added to C100 to include Aspect Consulting recommendations for wall removal.	C100
C200A Geotechnical engineer to review temporary open cut required at this location. The recommended temporary open cut angle of 1.5H:1V in the geotechnical report would appear to encroach on the adjacent property. Provide recommendations on how to accomplish this excavation. Provide a section detail for clarification.	The geotechnical addendum dated April 26, 2022 (Revised August 16, 2022) includes recommended temporary shoring information. The structural foundation at the building has been revised to reduce the extent of temporary shoring along the southern property line. Reference S112, 3/S303.	S112, 3/S303
L604 Geotechnical engineer and landscape architect to review proposed planting options and verify that the options are in general	Geotechnical engineer and landscape architect reviewed planting schedule and general planting notes for the ECA/restoration areas. It was agreed that the plant schedule is appropriate, however the ECA/Restoration	L603, L604

accordance with the recommendations presented in the geotechnical report (Section 4.5, Aspect Consulting, dated September 2, 2021). Otherwise provide other options or measures that reduce the potential for slope instability or erosion.	notes and details will add jute mesh on all ECA slopes to be installed prior to planting. Notes will also be added to promote planting these areas in late September or after April 1 st to avoid the wet weather season. Reference L603, L604.	
L604 Geotechnical engineer to review extent of proposed "ECA RESTORATION AREAS" and provide recommendations on reducing areal extent of slope disturbance, if applicable. Provide recommendations as needed to reduce potential adverse effects on slope stability or to mitigate increased potential for erosion due to the proposed activities. Include recommendations on plan sheet.	Geotechnical engineer and landscape architect reviewed the extent of proposed areas for invasive removal and new plantings. The ECA/Restoration notes and details will add jute mesh on all ECA slopes to be installed prior to planting. Notes will also be added to promote planting these areas in late September or after April 1 st to avoid the wet weather season. Reference L603, L604.	L603, L604
S001 A minimum of 3% of the total piles will be load tested. Minimum one test and maximum 5 tests.	Note added.	S001
S004 Soldier pile installation should be continuously monitored by the geotechnical engineer.	Modified to continuous inspection.	S004
S004 Include continuous monitoring of steel pipe pile installation and load testing by geotechnical engineer.	Added to statement of special inspections.	S004
S111 Indicate that the embedment depth will be determined by the acceptance criteria indicated in the geotechnical report (Aspect, Sept.2, 2021)	Note added to pile schedule.	S111
S403 This 18-inch dimension is pending resolution of catchment capacity required for the soldier pile wall located at the base of the existing steep slope. (City of Mercer Island comment previously provided for Project: CAO21-007).	Catchment wall height revised to 2'-0".	S403

Tree Review		
<i>Comment</i>	<i>Response</i>	<i>Document Ref.</i>
C200B	A shed that is above grade on piers is proposed to replace the existing shed. Grading in this area is proposed to be	C101A, C101B

<p>(For Civil and Architect) Tree 362 is shown with grading shown within the project arborists limits of allowable disturbance on sheet C200A. The tree protection is shown only 4' away. Increase the tree protection to 11' from tree face, call this distance out. This will allow chain link fence to be anchored into ground at the correct location and be inspected. The demo/soil cut for the new house location will require the project arborist or equivalent on site to locate and prune roots.</p>	<p>very minimal. While the survey only provided 2-foot contours, LPD has provided 1-foot contours which is intended to mimic existing grade. Since there is proposed work in this area, the tree protection fencing where possible has been shown at 11 feet. Notes have been provided concerning the limitation of work within the RLOD.</p>	
<p>C200A (For Civil) Please put the trees and tree protection and utilities on the same sheet and remove civil call outs. If utilities/grading are within saved trees arborist given limits of allowable disturbance. They should be tunnel/bored or air excavated under arborist supervision. See previously provided checklist.</p>	<p>Due to the confusion line work when existing and proposed is shown on the same plan, LPD has provided an additional Tree protection plan for the proposed condition to show utilities and grading within the tree protection zones.</p>	<p>C101A, C101B</p>

Fire Review		
<i>Comment</i>	<i>Response</i>	<i>Document Ref.</i>
<p>E-mail Received 6/28/22: Suggested Changes to Code Alternative</p>	<p>MHP has reviewed and updated code alternative letter with this re-submittal.</p>	<p>Fire Code Alternate Memo</p>

Building Review		
<i>Comment</i>	<i>Response</i>	<i>Document Ref.</i>
<p>A113 Provide SD/CD in this area.</p>	<p>A Smoke Detector is located on the plans just north of GL E and east of GL 7 and has been adjusted to a combination smoke detector / carbon monoxide detector.</p>	<p>A113</p>
<p>G100 Include table R402.1.1 on the permit plan set if the energy compliance form is not provided in the plan set.</p>	<p>Table R402.1.1 has been included on G100 and additional details provided on Assembly Sheet A010.</p>	<p>G100, A010</p>
<p>G101 Building would appear to be obscured from the street please provide on plans or provide narrative on address identification compliance. Per: R319.1 Buildings shall be provided with approved address identification. The address identification shall be legible and placed in a</p>	<p>Address identification has been included on G101. Team proposes to mount address identification to pole that is visible from vehicles approaching from 96th Ave SE. Location will need to be coordinated with existing utility poles and vegetation in this area.</p>	<p>G101</p>


<p>position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. ... Where access is by means of a private road and the building address cannot be viewed from the public way, a monument, pole, or other sign or means shall be used to identify the structure. Address identification shall be maintained.</p> <p>Note: Mailboxes are not an approved address identification alternative.</p>		
<p>G101 How is this going to be installed without excavating on the adjacent property? Provide a excavation narrative or note extents on plan to comply with geotech recommendations or acquire adjacent property owners permission.</p>	<p>Note has been updated. This is a soldier pile and timber lagging retaining wall so excavation isn't required on the adjacent property.</p>	<p>G101</p>
<p>L100 Please remove reference of project "Not for construction". BUILDING PERMIT SUBMITTAL as referenced below is appropriate</p>	<p>Removed from all Landscape sheets.</p>	
<p>A030 Please specify in wet conditions where this is glazed that it is safety glazed. It appears to be referenced in bathrooms.</p>	<p>Type A doors are painted solid wood doors as indicated in the door schedule on A030. Type C1 and C2 are glazed shower doors and safety glazing has been included for these areas with notes added to the General Door Notes and Door & Frame Abbreviations.</p>	<p>A030</p>
<p>A111 Provide a narrative on plans of how this shower is drained.</p>	<p>The metal gating at the shower is open to a curb below that directs water toward an area drain and is tied into the sanitary sewer system. Plan notes have been updated on A111. C300 shows the sanitary line from the shower. 7/C401 shows the section detail.</p>	<p>A111, C300, 7/C401</p>
<p>A113 Either specify a combo alarm or locate all CO alarms: Note hardwire requirement. R315: Carbon monoxide alarms are required on each floor and outside of each separate sleeping area in the immediate vicinity of the bedrooms in dwelling units within which fuel-fired appliances are installed and in dwelling units that have attached garages.</p>	<p>Alarms have been updated to a combination smoke detector / carbon monoxide alarm.</p>	<p>A113</p>
<p>A410</p>	<p>A light switch has been added to the Level 2 stair landing.</p>	<p>A410</p>

<p>Provide and locate on plans light switches for interior stairs per: R303.7. <i>There shall be a wall switch at each floor level to control the light source where the stairway has six or more risers.</i></p>		
<p>A133 Specify CFM of kitchen hood and if required: specify makeup air system compliant with IRC M1503.4 if rating exceeds 400 cfm make up air will be required per M1503.6. . . .<i>shall be mechanically or passively provided with makeup air at a rate approximately equal to the exhaust air rate. Such makeup air systems shall be equipped with not fewer than one damper complying with Section M1503.6.2.</i></p>	<p>Kitchen hood as specified is equipped with Airflow Control Technology for a minimum 200 CFM and maximum 390 CFM.</p>	<p>A133</p>
<p>A412 Verify elevator is compliant with R321. <i>Where provided, passenger elevators, limited-use and limited-application elevators or private residence elevators shall comply with ASME A17.1/CSA B44.</i></p>	<p>Elevator as specified complies with ASME A17.1. Note has been added to 3/A412 as well.</p>	<p>3/A412</p>
<p>A010 Provide note that per R302.11, <i>fire blocking shall be provided to cut off all concealed draft openings (both vertical and horizontal) and to form an effective fire barrier between stories, and between a top story and the roof space.</i></p>	<p>Assembly Note #5 has been revised.</p>	<p>A010</p>
<p>G100 Architecture or landscape: Please provide two (schematic/diagrammatic) site sections of proposed conditions (cross and long). The two red-lines are suggestions of where it would be sufficient. Provide these to demonstrate context of slopes and buildings and final grades.</p>	<p>Site sections have been added on G102, which is a new sheet.</p>	<p>G102</p>
<p>G100 Thanks for providing the solar analysis! Please provide on permit plan set 1,200 Kwh per energy credit. "+3,600 kwh provided"</p>	<p>Information has been added to Energy Code Notes on G100.</p>	<p>G100</p>
<p>G100 R402.1.2 is R-Value Computation</p>	<p>Updated to R402.4.1.1.</p>	<p>G100</p>
<p>S004</p>	<p>See S005 for revised note concerning structural observations.</p>	<p>S005</p>

<p>Structural: Structural observations will be required for this project per: 1704.6.1</p> <ul style="list-style-type: none"> -Note on plans as well that structural observations are to be provided. -Note that EOR will be provided a Precon reference to these observations to contractor or related party. <p>Provide in resubmission for review to comply with 1704.6. For this project include structural observations noting <u>frequency and extent</u> for elements that include (but not limited to):</p> <p>Observation #1: Covered walkway:</p> <ul style="list-style-type: none"> - Inspection/verification of concealed hardware for beam and girder connections. Including the rod bracing anchoring. Simpson CBH hardware instances. Kerf plates at base and elevated walk path. <p>- Completeness of design intent of detail 13/S709 & 8/S709.</p> <p>Observation #2: Main house (separated from garage & shed):</p> <ul style="list-style-type: none"> - Cantilever foundations at Grid 6 for general conformance for design. Including re-bar, pile locations, and general widths and depths verification of wall and footing. - Simpson CBH hardware instances. - Prior to floor sheathing review of main girders (Glue-lamb and W beams) at level 2 and roof framing, of hardware to joists or columns. <p>1704.6 <i>Prior to the commencement of observations, the structural observer shall submit to the building official a written statement identifying the <u>frequency and extent</u> of structural observations.</i></p> <p><i>At the conclusion of the work included in the permit, the structural observer shall submit to</i></p>		
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<p><i>the building official a written statement that the site visits have been made and identify any reported deficiencies that, to the best of the structural observer's knowledge, have not been resolved.</i></p>		
<p>A162 Specify Glulam: All structural members exposed to weather without adequate protection from roof, eave, or overhang (would apply in this cases (open covered walkway) must be durable species or pressure treated per IRC R317.1.3.</p> <p>If cap is provided it would satisfy the protection requirement would need to fully protect the member from wind-driven rain and be detailed to provide ventilation so as not to capture condensation against the structural member.</p>	<p>Structural drawings specify a Port Orford Cedar (P.O.C.) glulam at all exterior glulam beams and columns. In addition, the design team has specified an exterior pressure treatment for all exterior glulams in the form of Klear Gard Permapost.</p>	<p>S161, A162</p>

Engineering Review		
<i>Comment</i>	<i>Response</i>	<i>Document Ref.</i>
<p>C100 Please provide specific design for the temporary discharge, where and how the temporarily construction runoffs from the sediment tank will be discharging into?</p>	<p>Discharge location for Sediment tank has been noted on C100.</p>	<p>C100</p>
<p>C100 The city record shows it is an old 5/8" water meter, not a 2" water meter.</p> <p>The old meter and service line can not remain, they will need to be replaced to meet the current city standard.</p>	<p>The existing 5/8" meter has been indicated to be removed and salvaged to the City of Mercer Island and the service capped at the existing water main. A new 2-inch Water/Fire Service has been indicated on C300.</p>	<p>C100, C300</p>
<p>C200A Please show how this new asphalt pavement is connecting to the the street pavement. If the remaining area will remain as existing, please show the existing pavement.</p>	<p>Existing Asphalt to remain has been shown on the plans. Detail 11/C402 provides additional information.</p>	<p>C200A, 11/C402</p>
<p>C200B Is there a detail showing how the walking path going through the bioretention area?</p>	<p>Bridge over the bioretention area is shown on 1/L404</p>	<p>1/L404</p>
<p>C200B</p>	<p>The bridge will be located above the ponding depth of the bioretention area and will span the pond. The soil section</p>	

Please explain how the planting specific for the bioretention will work with a bridge on the top.	and planting will be continuous throughout the pond and below the bridge.	
C200B Are there footing and roof drainage connections for this building?	The proposed shed will be on piers. It has a shed roof that slopes west to east. The downspouts on the east side will be routed below the structure to be connected into the system at the northwest corner.	
C200B Please verify the size, material and the conditions of the existing storm	Outlet pipe to Lake Washington is a 6-inch pvc pipe. 	
C200B No daylight the downspout drainage.	Downspout has been tied into storm drainage piping.	
C300 See comments on C100.	New 2-inch Fire/Water service has been included on C300.	
C400 Please show the inlet pipe and discharge pad on this detail, including the invert elevation.	Inlet pipe and pad has been indicated on the bioretention section, 3/C400.	3/C400

Planning Review		
<i>Comment</i>	<i>Response</i>	<i>Document Ref.</i>
G000 Not an ADU Affidavit needs to be recorded. Provide recorded document or recording number.	The Not an ADU Affidavit has been sent to the county to be recorded and is being returned directly to the City of Mercer Island. Please let us know if this has not been received.	
G000 Submit Affidavit for Exemption from Substantial Development Permit.	The Affidavit for Exemption from Substantial Development Permit was submitted under permit CAO21-007 / SHL21-047 / SEP21-027 and has been included with our building permit resubmittal.	Affidavit for Exemption from Substantial Development
G100 This is a large lot per MICC 19.02.020(I). Please show compliance with one of the options in this section.	A scan of the notarized site subdivision covenant has been included with the resubmittal. The team will send the recording number once received from the county.	Site Subdivision Covenant
G100 Show lot slope calculation	Lot slope calculations have been added to Zoning Analysis on G100. 2/G200 has also been updated to	G100, 2/G200

	indicate highest and lowest elevations as well as horizontal distance between the two points.	
G101 Does the proposed building footprint include the roof line? If not, add roof line to site plans.	The Level 3 roof line has been added to the site plans.	1/G101
G101 Provide height of fence and gate within setbacks	Heights have been added to G101. Additional information is available on A350.	1/G101, 2/A350, 3/A350
G101 Provide height of wood slat fence and gate	Height dimensions have been added to G101. Additional information is available on A350.	1/G101, 1/A350
G101 Is the cove existing or will this modification be permitted under a separate shoreline permit?	This modification will be permitted under a separate shoreline permit. A clarifying note has been added to 1/G101.	1/G101
G200 Is this gravel parking pad included in the vehicular use section? If not, please add.	The gravel parking pad was included in the vehicular use section. It has been separated out for clarity and indicates how much gravel parking is to remain on 3/G200.	3/G200
G200 Identify existing elements to be removed	3/G200 has been updated to clarify which existing elements will be removed and what existing elements will remain. Please note that calculations were updated throughout all zoning diagrams, so the sheet has been clouded.	3/G200
G200 Adding up the numbers listed below, I get 8124 sf of proposed lot coverage. It looks like this might be coming from the existing lot coverage to remain. Please confirm and include in calculation.	Total project lot coverage is 8,499 SF and includes some existing lot coverage to remain. A detailed calculation chart has been added to G200 and zoning diagrams updated to clearly reflect what is existing to remain versus existing to be removed.	G200
G200 Adding up the numbers listed below, I get 3015 of proposed hardscape. It looks like this might be coming from the existing hardscape to remain. Please confirm and include in calculation.	Total project hardscape area is 3,706 SF and includes some existing hardscape to remain. A detailed calculation chart has been added to G200. Zoning diagrams have been updated to clearly reflect what is existing to remain versus existing to be removed.	G200
G200 Include maximum allowed lot coverage and hardscape numbers	Maximum allowed lot coverage and hardscape numbers are included with the calculations on G200 as well as in the Zoning Code Analysis on G100.	G100, G200
G200 Provide a similar code diagram for compliance with MICC 19.13.050(K)(4)(i) for native vegetation coverage over 75% of the 20 ft vegetation area shown in Figure C. Be sure to provide square footage of the area 0-20' from OHWM.	The Watershed Company prepared this plan for Permit Numbers CAO21-007, SHL21-042, SEP21-027 on sheet W5. This sheet has been included as part of the building permit resubmittal. L601 provides additional planting information in this area.	W5, L601

<p>G200 Provide a similar code diagram for compliance with MICC 19.13.050(A) Table C:</p> <p>Maximum hardscape and lot coverage 0-25' from OHWM = 10% 25-50' from OHWM = 30%</p> <p>Be sure to provide square footage of areas 0-25' and 25-50' from OHWM.</p>	<p>The Watershed Company prepared this plan for Permit Numbers CAO21-007, SHL21-042, SEP21-027 on sheet W3 as part of their Critical Areas Report.</p> <ul style="list-style-type: none"> • Within 0-25', there are 206 SF (7.9%) of impervious surfaces which is under the 10% allowed. • Within 25'-50', there are 640 SF (24.5%) of impervious surfaces which is under the 30% allowed. <p>The Watershed Company plan sheets have been included with this building permit resubmittal.</p>	<p>W3</p>
<p>G201 Covered walkway should be included in GFA calculation</p>	<p>GFA calculations have been updated to include the covered walkway.</p>	<p>2/G201</p>
<p>G201 513 or 510?</p>	<p>510 square feet, this has been adjusted.</p>	<p>2/G201</p>
<p>A152 Areas in rooms with a ceiling height of 12-16' must be counted as 150% of the GFA. Please adjust GFA calculations</p>	<p>Garage roof has been adjusted so that the finished ceiling height to underside of structure is less than 12'.</p>	<p>7/A152</p>
<p>A171 Show existing and finished grade on all elevation drawings</p>	<p>Existing and finished grade have been added to Shed elevations.</p>	<p>A171</p>
<p>A202 Show maximum and proposed downhill building facade height per MICC 19.02.020(E)(2)</p>	<p>Maximum downslope height and proposed façade height has been added to 1/A202 and 2/A201.</p>	<p>1/A202, 2/A201</p>
<p>A350 Indicate greatest height of fence</p>	<p>Fence has been adjusted and greatest height from existing or finished grade, which ever is lower, has been included.</p>	<p>3/A350</p>

Sincerely,



April Ng, AIA, Associate

Attachments:

- 6838 96th Ave SE_01_Plan Set Building Permit Resubmittal
- 6838 96th Ave SE_02_Critical Areas Report Drawings
- 6838 96th Ave SE_03_Drainage Report Revised
- 6838 96th Ave SE_04_Fire Code Alternate Updated
- 6838 96th Ave SE_05_Revised Geotechnical Addendum
- 6838 96th Ave SE_06_Water Meter Sizing Worksheet Revised
- 6838 96th Ave SE_07_Shoreline Exemption Affidavit
- 6838 96th Ave SE_08_Site Subdivision Covenant