



CITY OF MERCER ISLAND

9611 SE 36th Street • Mercer Island, WA 98040-3732

(206) 275-7605 • FAX (206) 275-7726

www.mercergov.org

June 14, 2018

Joseph Greif
Greif Architects
921 NE Boat St
Seattle WA 98105

**SEE ATTACHED RESPONSES TO THIS LETTER
ALONG WITH ADDITIONAL PLAN REVIEW RESPONSE COMMENTS
FROM PREVIOUS CITY REVIEW QUESTIONS**

RE: CAO17-014 (5236 W Mercer Way Critical Area Determination) Request for Information 2

Dear Joseph,

The City of Mercer Island Development Services Group has completed review of the resubmittal for project CAO17-014. The following issues need to be addressed before processing of the application can continue:

Planning:

1. The concurrency letter from PACE Engineering dated May 2, 2018 includes a list of recommended revisions to the project mitigation plan. Most of these recommendations were not incorporated into the resubmitted mitigation plan. These include:
 - a. Providing a table of figures to quantify the areas of buffer impact and the areas proposed for mitigation to provide an analysis of no net loss. Buffer impacts should be measured from the standard 35-foot buffer, rather than the reduced 25-foot buffer.
 - b. Using a species other than soft rush. The concurrency letter recommends not using soft rush, but the revised plan includes ten additional soft rush plantings.
 - c. Using less manna grass. The concurrency letter recommends cutting back on the use of manna grass and suggests alternate species. The revised mitigation plan proposed to use five times the number of manna grass plantings compared with the original submittal.
 - d. Using less Red Cedar and adding Sitka Spruce and Western hemlock. The revised mitigation plan uses six times the number of Red Cedar plantings compared with the original submittal and includes no Sitka Spruce or Western hemlock.
 - e. Using additional shrub species. The concurrency letter recommends adding Indian plum, Bald-hip rose, Sitka willow, and Black twinberry, but none of these species are shown in the revised mitigation plan.
 - f. Use of a King County Sensitive Area Boundary sign. There is no required sign design for use around wetland buffers, and the applicant is free to suggest a design. However, King County's contact information should not be printed on the sign.

- g. Location of the split-rail fence at the south property line. On Sheet W1.0 the note stating, "End new split rail fence at south prop. Line", appears to point to the orange checkered NDPE fence, when it should be at the edge of the wetland buffer, which includes the wetland buffer addition area.
- h. Extra items in the legend. The concurrency letter notes items that are included in the legend, but not shown on the plan, and which therefore should be removed. This comment was not address in the revised plan.

Please provide a revised mitigation plan that either incorporates the recommended revisions listed in the concurrency letter, or if the mitigation plan departs from the recommended revisions, then is prepared by and includes analysis by a Professional Wetland Scientist.

- 2. Please include an evaluation of temporary construction impacts to the wetland (such as construction of the retaining wall south of the driveway, materials staging, vehicle access etc.), and describe the measures proposed to mitigate these impacts (e.g. avoidance of wetland and buffer, remediation of impacts etc.). This analysis should be provided by a Professional Wetland Scientist.

Arborist:

- 3. *No comments at this time; all corrections can be addressed as part of the associated building permit. Please ensure that the plans resubmitted for this Critical Areas Determination are consistent with those submitted for the building permit.*

Fire:

- 4. Please verify height of the retaining wall to the south of the proposed driveway by providing top of wall and bottom of wall elevations at points along the retaining wall.

Engineering:

- 5. *No comments at this time; all corrections can be addressed as part of the associated building permit. Please ensure that the plans resubmitted for this Critical Areas Determination are consistent with those submitted for the building permit.*

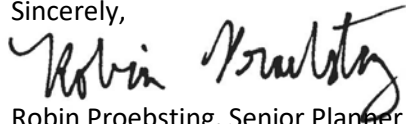
Geotechnical:

- 6. No corrections required at this time, however please expect a condition of approval on the associated building permit, requiring the project engineer to continuously monitor excavations and wall construction to verify stability of temporary cuts and suitability of wall foundation conditions.

The Planning Division's processing of the above land use application and associated building permit is on hold until these issues are resolved. Please submit a complete response and revised materials within **90 days** of this letter; if additional time is required for preparation of materials, please contact the City for an extension. If you have questions about the comments above, you may contact me via the information below.

I recommend a meeting between staff reviewers and the applicant team prior to resubmittal in order to have a chance to review comments before the resubmittal comes in. If you are amenable to this, please contact me to schedule a time to hold this meeting.

Sincerely,

A handwritten signature in black ink that reads "Robin Proebsting". The signature is written in a cursive, flowing style.

Robin Proebsting, Senior Planner
City of Mercer Island Development Services Group
robin.proebsting@mercergov.org
(206) 275-7717

CRITICAL AREAS DETERMINATION (CAO17-014)

Planning:

1. The concurrency letter from PACE Engineering dated May 2, 2018 includes a list of recommended revisions to the project mitigation plan. Most of these recommendations were not incorporated into the resubmitted mitigation plan. These include:

- a. Providing a table of figures to quantify the areas of buffer impact and the areas proposed for mitigation to provide an analysis of no net loss. Buffer impacts should be measured from the standard 35-foot buffer, rather than the reduced 25-foot buffer.

A new table called “No Net Loss” was created and is provided on Sheet W1.0 that shows wetland and restoration area calculations using the 35-foot wide wetland buffer (not the 25-foot wide wetland buffer). This new table provides a quantitative objective analysis that shows there is no net loss of environmental impact, because there is such a significant amount of wetland restoration and wetland buffer restoration being proposed.

- b. Using a species other than soft rush. The concurrency letter recommends not using soft rush, but the revised plan includes ten additional soft rush plantings.

Soft rush, although it would survive fairly well on this site, it can be invasive and has been replaced on the updated plan at your request. It has been replaced with a wide variety of other plants. In fact, there are now 22 different trees, shrubs and groundcover proposed on this very detailed planting plan. This is a very substantial amount of diversity.

- c. Using less manna grass. The concurrency letter recommends cutting back on the use of manna grass and suggests alternate species. The revised mitigation plan proposed to use five times the number of manna grass plantings compared with the original submittal.

Manna grass would also survive well on this site. At your request, its quantity has been substantially reduced.

- d. Using less Red Cedar and adding Sitka Spruce and Western hemlock. The revised mitigation plan uses six times the number of Red Cedar plantings compared with the original submittal and includes no Sitka Spruce or Western hemlock.

Western red cedar has been reduced, and Sitka spruce and western hemlock have been added at your request. I am not sure if Sitka spruce will survive extremely well though due to the lack of sunlight. Western hemlock should function fine in the drier areas of the wetland buffer.

- e. Using additional shrub species. The concurrency letter recommends adding Indian plum, Bald-hip rose, Sitka willow, and Black twinberry, but none of these species are shown in the revised mitigation plan.

At your request, Indian plum, bald hip rose, Sitka willow and black twinberry have been added to the mitigation plan. This updated mitigation plan has a tremendous amount of plant diversity.

- f. Use of a King County Sensitive Area Boundary sign. There is no required sign design for use around wetland buffers, and the applicant is free to suggest a design. However, King County's contact information should not be printed on the sign.

I have provided a new note next to the King County sign detail on Sheet W2.0 indicating a wetland sign detail without King County's reference is required.

- g. Location of the split-rail fence at the south property line. On Sheet W1.0 the note stating, "End new split rail fence at south prop. Line", appears to point to the orange checkered NDPE fence, when it should be at the edge of the wetland buffer, which includes the wetland buffer addition area.

The NGPE fence location near the south property line on Sheet W1.0 has been revised.

- h. Extra items in the legend. The concurrency letter notes items that are included in the legend, but not shown on the plan, and which therefore should be removed. This comment was not address in the revised plan.

The legend has been updated on Sheet W1.0.

Please provide a revised mitigation plan that either incorporates the recommended revisions listed in the concurrency letter, or if the mitigation plan departs from the recommended revisions, then is prepared by and includes analysis by a Professional Wetland Scientist.

Wetland Mitigation Plan has been revised to incorporate recommendations provided by PACE concurrency letter.

2. Please include an evaluation of temporary construction impacts to the wetland (such as construction of the retaining wall south of the driveway, materials staging, vehicle access etc.), and describe the measures proposed to mitigate these impacts (e.g. avoidance of wetland and buffer, remediation of impacts etc.). This analysis should be provided by a Professional Wetland Scientist.

Please reference the Construction Management Plan. Robert Knable, Professional Wetland Scientist, has prepared recommendations to minimize impact to the wetland during construction activities. See Construction Management Plan, pages 5-8.

Arborist:

3. No comments at this time; all corrections can be addressed as part of the associated building permit. Please ensure that the plans resubmitted for this Critical Areas Determination are consistent with those submitted for the building permit.

Corrections completed address both building comments and Critical Areas Determination are consistent; one set of corrected civil plans address bldg. and CAO comments.

Fire:

4. Please verify height of the retaining wall to the south of the proposed driveway by providing top of wall and bottom of wall elevations at points along the retaining wall.

Wall heights provided along wall. See civil plans, sheet C2.0.

Engineering:

5. *No comments at this time; all corrections can be addressed as part of the associated building permit. Please ensure that the plans resubmitted for this Critical Areas Determination are consistent with those submitted for the building permit.*

Noted. Corrections completed address both building comments and Critical Areas Determination are consistent; one set of corrected civil plans address bldg. and CAO comments.

Geotechnical:

6. No corrections required at this time, however please expect a condition of approval on the associated building permit, requiring the project engineer to continuously monitor excavations and wall construction to verify stability of temporary cuts and suitability of wall foundation conditions.

PLAN REVIEW RESPONSES – AUGUST 31ST 2018

Tree Review – Ryan Ringe

1. Please note for tree replacements to count for removed trees they must be at least 6' tall and be at least 10' apart.
Noted: the minimum tree density for the site has been met and no tree replacements are required.
2. Utility impacting 1082, 1084 has been request removed from right of way. This infrastructure conflict may have been resolved and retention of trees should be explored with your Arborist.
After reviewing the revised utility locations provided to me by Pace Engineers (utility trench moved from ROW to subject property), the utility conflicts with tree retention and the tree still must be removed (explanation in arborist report)
3. Tree 1084 is listed as a "hazard" please provide documentation for this conclusion. 6. Repeat correction.
Tree Condition Analysis for Tree #1084 provided in Arborist Report
4. Provide final tree report. The previous report is marked preliminary. Update C0.2 tree information if updated report changes information.
Final Arborist Report has been created and submitted.

TIR Comments

1. Please provide details to show how you are meeting all 13 Elements listed for MR#2 in the report. This comment was on the 1st review and did not get addressed with the submittal. *Details for Temporary Erosion and Sediment (TESC) measures, as identified as applicable in the TESC plan (e.g. silt fence, construction fence, inlet protection, interceptor swales, etc.), are described in the storm drainage report section 5 – Stormwater Pollution Prevention Plan.*
2. Please provide details for this statement, specifically for this project, not a general statement to address MR#3. This comment was on the 1st review and did not get addressed with the submittal. *Source controls are not required for residential projects development projects. Per the 2014 SWMMWW IV-2.1, sites and facilities that require the implementation of source control BMPs only apply to commercial, industrial and multifamily properties, as well as boatyards, and sand and gravel mining operations.*
3. Please provide details based on List 1, item by item to demonstrate how to meet the MR#5, not a general statement. If it is based on the geotechnical report, please list the specifically pages of the report. The report needs to be very specific. If it is based on the city map, please clearly indicate as well. This comment was on the 1st review and did not get addressed with the submittal. *Infeasibility narrative provided for each of the LID techniques in sequential order as identified in 2014 SWMMWW List #2. See Storm Drainage Report, pages 6 and 7.*
4. The architectural plan shows that the total impervious surface area is 8,021.7 sf. The drainage calculation only shows 8,000sf. Can you please address the difference? This comment was on the 1st round or review and was not addressed with the resubmittal.
Architectural site plan has been updated for consistency with civil plans. Hardscape plan has been purposefully limited to 8,000 SF.

Engineering-Civil Plan Comments

1. Provide dwelling/garage separation per IRC R302.6. Garage Separation details and notes have been added to the sheet A1.1a
2. Cannot locate, please cloud location of callout for dwelling/garage separation. *Now clouded and noted on sheet A1.1a with details and notes shown on sheet A5.3*

3. Provide the specific design information for the Post-Construction Soil Quality and Depth per Minimum Requirement 5 on the plan. Not a simple note. This comment was from the 1st review and did not get addressed. *BMP T5.13 implementation notes are included, on the TESC and Construction Management Plan, sheet C1.0. Implementation notes specify construction options for application to the site. See sheet C1.0.*
4. This area is too small for parking and staging, also the sewer line will be constructed at this location, slope is steep.
Contractor will be responsible for relocating onsite parking, staging, and stockpile during the phased activities of construction. The civil TESC & Construction Management Plan provides general guidance for the contractor regarding various aspects of the construction process, including parking, staging and stockpile locations. Due to limited onsite areas, the contractor shall designate a remote offsite parking and shuttle service, as approved by the City. The (to be determined) contractor shall update the Construction Management Plan accordingly.
5. The temporary construction runoffs cannot be discharging into the city ROW. This comment was from the 1st review and did not get addressed.
Temporary construction runoff will be directed to the proposed permanent stormwater discharge system. Construction runoff will be directed to proposed CB 2, and will also serve as the designated turbidity and water quality testing location. Proposed permanent discharge is routed to the existing tributary City of Mercer Island storm drain system located in the City ROW.
6. The stock pile area is not workable as this area will be constructed as a road.
Contractor will be responsible for relocating onsite parking, staging, and stockpile during the phased activities of construction. The civil TESC & Construction Management Plan provides general guidance for the contractor regarding various aspects of the construction process, including parking, staging and stockpile locations. Due to limited onsite areas, the contractor shall designate stockpile locations during the phases of construction, as approved by an authorized City representative. The (to be determined) contractor shall update the Construction Management Plan accordingly.
7. No new sewer manhole is allowed for a new single-family side sewer connection.
Proposed ROW sewer manhole removed from plans; the proposed connection will be a tee stub per district standard. See sheet C3.0.
8. If the pipe coverage is less than 24", then you will need a DI pipe. This comment was from the 1st review and did not get addressed.
Driveway culvert pipe is specified as ductile iron as directed. See civil plans, sheet C2.0.
9. Show the top of ditch line along W. Mercer Way, so the location of the water meter can be determined. The water meter must be located in the city ROW. This comment was from the 1st review and did not get addressed.
Water meter location has been proposed in the ROW, adjacent to the existing frontage property boundary. Slope and ditch information have been further identified, see "Frontage Plan" 10 scale blow-up detail, sheet C3.0, Site, Utility, and Sewer Plan.
10. Remove the discharge system out of city ROW and discharge to the existing water course inside the property line. This comment was from the 1st review and did not get addressed.
As coordinated during an in-person meeting with Ruji Ding, Senior Development Engineer, on 6/11/2018, the proposed development is tributary to the City's ROW Stormwater Conveyance system and shall be appropriately routed to the City's downstream conveyance network. The proposed storm alignment has been chosen in effort to reduce the magnitude of storm drainage infrastructure located in public ROW, minimize stormwater runoff impacts to neighboring parcels, and reduce potential erosion impacts to W Mercer Way roadside open ditch during large storm events.
11. Provide wall drain invert elevation.
Wall drain invert elevations identified on plans. See civil plans, sheet C2.0.
12. Provide the invert elevation for the roof drain.
Roof drain invert elevations identified on plans. See civil plans, sheet C2.0.
13. Can you provide a detail for the wall? Is there a drainage associated with the wall? This comment was from the 1st review and did not get addressed.
Keystone gravity block wall detail has been provided. Additional details for the wall at the southern end of the driveway parking area are further detailed in the shoring plans. Please see "Typical Gravity Wall Section" detail on civil plans, sheet C2.2 - Storm Drainage Details.
14. This CB cannot be in the City ROW.

The proposed storm alignment has been chosen in effort to reduce the magnitude of storm drainage infrastructure located in public ROW, minimize stormwater runoff impacts to neighboring parcels, and reduce potential erosion impacts to W Mercer Way roadside open ditch. See proposed ROW storm infrastructure alignment, sheet C2.0 and C2.1.

15. Where is this trench connecting to?
Trench is connecting to detention tank as described by key note #9, sheet C2.0. Connection elevation and slopes are also illustrated and specified in the storm profile, sheet C2.0.
16. Show invert elevation for the trench drain. Where does this trench drain connect to? This comment was from the 1st review and did not get addressed.
Trench drain elevations are specified in "Driveway Grading" 10 scale blowup, sheet C2.0. The trench drain connects to stormwater detention vault via a 4" PVC pipe as indicated in key note #9. Finished grade elevations of the trench drain range from 205.25 to 206.15. The trench drain finished grade elevations are determined to be above the detention pipe top of live storage elevation.
17. Please clearly show where all the foundation/wall drains are connecting to. It is very confusing.
All downspouts discharge to the eastern (upper) detention pipe system as specified in key note 12 and profile, sheet C2.0. Wall drain invert elevations identified on plans, and shall discharge to one of two locations – eastern detention pipe or keystone gravity wall system located at the southern limits of the driveway. See civil plans, sheet C2.0.
18. Provide wall drain invert elevation.
Wall drain invert elevations identified on plans. See civil plans, sheet C2.0.
The drainage runoff cannot be on the slope, it must be at the bottom of the water course bed. This comment was from the 1st review and did not get addressed. *The proposed storm alignment has been chosen in effort to reduce the magnitude of storm drainage infrastructure located in public ROW, minimize stormwater runoff impacts to neighboring parcels, and reduce potential erosion impacts to W Mercer Way roadside open ditch. See proposed ROW storm infrastructure alignment, sheet C2.0 and C2.1.*
19. Provide wall drain invert elevation.
Wall drain invert elevations identified on plans. See civil plans, sheet C2.0.
20. Provide wall drain invert elevations for ALL wall drains.
Wall drain invert elevations identified on plans. See civil plans, sheet C2.0.

Shoring Comments:

1. Piles are not recommended by the Geotech and are not included in the drawings. *Piles are going to be used. See new Piling drawings and Civil.*
2. The final shoring details have been provided by Longitude 120 and all preliminary notation has been removed from the drawings. Foundation detail has been provided for daylight basement area. A retaining foundation detail and calculations has been provided, as requested, at the stair area. *See new Piling drawings and Civil.*
3. This comment relates to 3" diameter pipe piles as part of the building foundation which are not included in the scope of this project. *See new Piling drawings and Civil.*
4. Piles are going to be used. *See new Piling drawings and Civil.*
5. Provide lagging detail at this location.
Laggings at this location would directly bear against soldier pile flange under the soil pressure behind the wall. No detail is needed.
28. Provide shoring wall elevations showing top of wall and bottom of pile elevation.
Plan on Sheet S-2 shows the finished grade behind the wall and temporary excavation elevation. Soldier pile schedule on Sheet S-3 shows clearly the top and bottom of pile elevation and excavation elevation. Sufficient information are provided for construction.

6. Provide lagging detail at this location.

Laggings at this location would directly bear against soldier pile flange under the soil pressure behind the wall. No detail is needed.

Planning Comments:

1. Please provide top of wall and bottom of wall elevations at points along the driveway.
Top and Bottom of wall elevations have been provided. See sheet C2.0.