

Sewall Wetland Consulting, Inc.

PO Box 880
Fall City, WA 98024

Phone: 253-859-0515

October 30, 2019

Evan Maxim
Planning Director
City of Mercer Island
9611 SE 36th Street
Mercer Island, Washington 98040

RE: 5637 East Mercer Way – Parcel #1924059312
City of Mercer Island, Washington
SWC Job#14-206

Dear Evan,

This letter is a response to your September 23, 2019 email to Bill Summers regarding permitting related to Parcel #1924059312.

Below is a response to the recommendations in this document;

ESA December 6, 2018 email:

Mr. Anderson noted that the proposed grade of the garage floor, as shown on Sheet 1, 2018 Site Plan Wetland & Buffer Disturbance (The Healy Alliance AZ, 2018) is located below existing grade at the southwest corner of the house. The garage floor is located at 179.5 feet, the grade at the southwest house corner is 185 feet, and the grade at the backside of what appears to be a retaining wall is 193 feet. Although not shown on the plans, it is likely that a drainage system will need to be installed on the backside of retaining wall and adjacent to the building foundation to alleviate static pressure on these structures by transporting groundwater down-gradient. The retaining wall drainage system would likely impact wetland hydrology up-gradient of the wall by acting as a groundwater "sink." Similarly, the foundation drainage system would impact wetland hydrology adjacent to the of the building (i.e., southwest). The extent and degree of impact to wetland hydrology is unknown at this time and ESA is not qualified to make this determination. ESA recommends that design plans detail the proposed drainage system for the project and the City consult a hydrogeomorphologist to determine likely impacts to wetland area.

Response: It is our opinion that the proposed site plan and foundation drainage system will not impact hydrology of the wetland. Surface seepage of the slope wetland upslope of the proposed home contains soils that do not appear prone to drainage or creating a "sink effect" as it would in a more permeable soil type. Water that seeps through this

wetland area will continue to flow in the same direction and with the same amount of water as it does prior to development.

Mr. Anderson also discussed a stormwater detention tank that was depicted on previous plan sheets immediately east of the building, underneath the proposed driveway. The applicant did provide preliminary stormwater calculations for this tank; however, Sheet 1, 2018 Site Plan Wetland & Buffer Disturbance (The Healy Alliance AZ, 2018) does not show a stormwater tank. Mr. Anderson points out that the tank's proximity to the wetland boundary and required excavation to install may have a negative impact on wetland hydrology. The area around the tank may need to be backfilled with coarse material and drainage may need to be provided to address buoyancy of the tank. Should continuous drainage of the area surrounding the tank be required, this project element may act as a "sink" similar to the drainage system discussed above. ESA recommends the applicant provide additional details on the stormwater detention tank to address the potential for indirect impacts to the adjacent wetland.

Response: It is our opinion that the proposed stormwater tank under the driveway will not impact wetland hydrology or functions from the construction or use of the tank. Water within the wetland in this area appears to be seeping to the east and not influenced by the area of dense fill to the south where the gravel driveway currently exists.

ESA June 10, 2019 email

Groundwater and Stormwater

Groundwater conveyance and stormwater detention and conveyance have briefly been discussed in previously submitted materials and are again covered in Core Design's February 21, 2019 response memo. Limited design information has been available to determine potential impacts to wetland and stream hydrology and Core Design's memo indicates more detailed design will become available in later phases of the project (e.g., final design) and that any impact to hydrology would be mitigated. For the purposes of the RUE and SEFA determination, critical area impacts and mitigation associated with conveyance and detention project elements can be determined at a later design stage.

Response: See previous responses regarding the stormwater and drainage system above.

Mitigation Extent

Permanent wetland impacts have decreased since the original 2015 design submittal. In addition, all temporary wetlands impacts are now categorized as permanent. Wetland impacts will be addressed when the applicant identifies an offsets mitigation opportunity, whether that is permittee-responsible or use of the King County Mitigation Reserves Program. Relocation of the building has increased the extent of wetland and stream buffer impacts, while reducing direct wetland impacts. The onsite buffer enhancement plan was expanded compared to previous submittals; however, it is unclear if the applicant has mitigated at a 1:1 mitigation ratio, as typically required by local regulations. The applicant should confirm that their buffer mitigation plan achieves the 1:1 buffer mitigation standard.

Response: The latest revised mitigation plan mitigates for buffer impacts at a ratio of 1:1 as requested with enhancement.

On-site vs Off-site Compensatory Mitigation

The applicant proposes the purchase of wetland credits from King County's Mitigation Reserve Program resulting in mitigation that would be installed off-island. The applicant has previously indicated that on-island mitigation options are not available within the subbasin; however, the City recommends exploration of mitigation opportunities elsewhere on the island as noted in the SEPA Determination of Significance, dated July 27, 2017. Potential mitigation opportunities within the City include in-kind mitigation such as restoration or enhancement of wetlands on public or private properties. Opportunities for out-of-kind mitigation such as culvert removal where blocking to fish passage or stream restoration, may also be considered. If the applicant is not able to fully provide mitigation on-island to comply with MICC 19.07.030D, the City may allow the remainder of the compensatory mitigation requirements to be satisfied through the King County mitigation reserve program.

Response: The latest mitigation plan as well as the proposed use of the King County Mitigations Reserve program is the only feasible mitigation for the impacts of a single-family home on the site. We have not found any other restoration, enhancement or creation opportunities available to us within the City limits.

If you have any questions in regards to this report or need additional information, please feel free to contact me at (253) 859-0515 or at esewall@sewallwc.com.

Sincerely,
Sewall Wetland Consulting, Inc.



Ed Sewall
Senior Wetlands Ecologist PWS #212

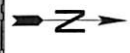
Attached: *Critical Area Enhancement Plan revised to 10-30-19*

WETLAND/WETLAND BUFFER IMPACT SITE PLAN

MITIGATION PLAN NOTE:
 THIS CONCEPTUAL PLAN MANAGES SITE ACTIVATION PLANNING AND IMPACTS THAT MIGHT OCCUR DURING CONSTRUCTION AND OPERATION. THE FINAL PLAN WILL BE REVISED TO ADDRESS ISSUES OF VARIABILITY DUE TO SOILS AND OTHER SITE CONDITIONS.

- PLANTING PLAN LEGEND:**
- PROJECT STAKE
 - LIMITS OF CATEGORY III WETLAND
 - CATEGORY III WETLAND
 - CENTERLINE OF THE 2' WATERCOURSE
 - STEEP SLOPE INCLUDES WETLAND BUFFER
 - WETLAND BUFFER IMPACT (1:0.93 3:1)

UNITS OF MEASUREMENT:
 HORIZONTAL MEASUREMENTS (FEET)
 VERTICAL MEASUREMENTS (FEET)
 CONTOUR INTERVAL = 2'



DATE: 09/04/2015
 DESIGN BY: JMC
 DRAWN BY: JMC
 CHECKED BY: JMC

| NO. | DATE | NOTES |
|-----|------------|----------------------------|
| 1 | 09/08/2015 | ADD D STREAM |
| 2 | 10/21/2015 | REVISED PER CITY COMMENTS |
| 3 | 12/04/2015 | REVISED PER NEW SITE PLAN |
| 4 | 12/17/2015 | ADD D IMPACT SITE PLAN |
| 5 | 01/24/2016 | REVISED PLANTING PLAN |
| 6 | 01/29/2016 | ADD D MITIGATION PLAN NOTE |
| 7 | 10/30/2019 | REVISED PER NEW SITE PLAN |

CRITICAL AREA ENHANCEMENT PLAN
 - MI TREEHOUSE LLC -

5637 EAST MERCER WAY
 MERCER ISLAND, WASHINGTON



Sewall Wetland Consulting, Inc.

27641 Covington Way SW #2, Covington, WA 98042 253-859-0515 Fax 253-852-4732



SCALE IN FEET
1" = 20'

WASHINGTON (NORTHING, 6028350.00)
VERTICAL DATUM: NAVD83
CONTOUR INTERVAL: 2'

PLANTING PLAN LEGEND
PROJECT SITE LIMITS
LIMITS OF CATEGORY III WETLAND
CATEGORY III WETLAND
CENTRAL OF THE 2 WETLANDS
STEP-UP ENCLOSURE WETLAND BATTER

MITIGATION PLAN NOTE
THIS CONCEPTUAL PLANT MITIGATION PLAN WAS PREPARED BY MITIGATION PLANNING AND ACTION THAT WHICH THE LINE PLAN MAY BE REVISED TO ADDRESS RESULTS OF PLANT INSTALLATION AND OTHER SITE CONDITIONS.

PLANTING PLAN NOTES
1. BEST PRACTICES AND BEST PRACTICES SHALL BE FOLLOWED FOR ALL MITIGATION AND RESTORATION DRAWINGS HAVE BEEN APPROVED FOR VISUAL IMPACTMENT.
2. PROJECT AND ACCOMPANYING SCHEDULE SHALL BE REVISIONS TO ORIGINAL DRAWINGS.
3. PLANT INSTALLATION SHALL BE MONITORED BY PLANT DESIGNER.
4. PLANT INSTALLATION SHALL BE MONITORED BY PLANT DESIGNER.
5. SEE THIS SHEET FOR PLANT INSTALLATION DETAILS.

PLANT SCHEDULE

| COMMON NAME | SCIENTIFIC NAME | SIZE/TROM | QUANTITY | SPACING |
|--------------------|-------------------------|-----------------------|-------------------|-----------------|
| WESTERN RED CEDAR | TAXUS CANADENSIS | 2.0 GALLON CONTAINERS | 32 | AS SHOWN |
| EMERALD PINNACLE | LEUCOPHYLLON ALBICOMMIS | 2.0 GALLON CONTAINERS | 14 | AS SHOWN |
| MAHOGANY | SWITCH GRASS | 2.0 GALLON CONTAINERS | 19 | AS SHOWN |
| RED-OILY DOGWOOD | FRAXINUS ROBURATA | 4 FOOT LIME STAKE | 180 | 2 FT ON-CENTERS |
| SITKA WILLOW | SAULUS VIRIDICANS | 4 FOOT LIME STAKE | 100 | 2 FT ON-CENTERS |
| COMMON LADYSLIPPER | AMMOCYTIS ALBA | 1 GALLON CONTAINERS | 64 | 1 FT ON-CENTERS |
| SLUGS | 10 FT PLUGS | 150 | 1 FT ON-CENTERS | |
| | | | TOTAL: 563 | |

1 PLANTING PLAN

MONITORING PLAN & MAINTENANCE PLAN

IMPLEMENTATION GOALS, OBJECTIVES, AND PERFORMANCE STANDARDS
(IMPLEMENTATION GOALS, OBJECTIVES, AND PERFORMANCE STANDARDS ARE THE MOST IMPORTANT PARTS OF THE MONITORING PLAN AND SHOULD BE CONSIDERED FIRST WHEN THE PERFORMANCE STANDARDS ARE SET.)

MONITORING PLAN
MONITORING PLAN GOALS, OBJECTIVES, AND PERFORMANCE STANDARDS ARE AS SET BY THE CITY OF MERCER ISLAND AND SHALL BE MONITORED BY THE CITY OF MERCER ISLAND. THE CITY OF MERCER ISLAND SHALL BE RESPONSIBLE FOR THE MONITORING PLAN. THE MONITORING PLAN SHALL BE MONITORED BY THE CITY OF MERCER ISLAND. THE MONITORING PLAN SHALL BE MONITORED BY THE CITY OF MERCER ISLAND. THE MONITORING PLAN SHALL BE MONITORED BY THE CITY OF MERCER ISLAND.

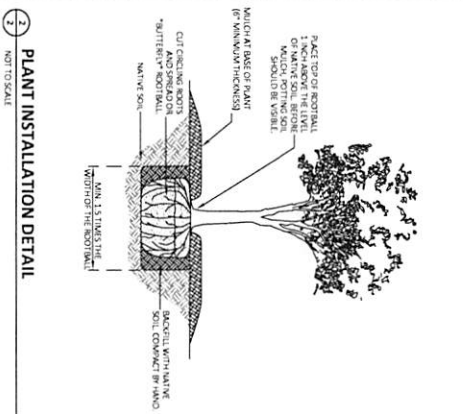
ANNUAL MONITORING
MONITORING OF THE AS BUILT BY THE CITY OF MERCER ISLAND, ANNUAL GOALS AND MONITORING SHALL BE COMPLETED ON A REGULAR BASIS. MONITORING OF THE AS BUILT BY THE CITY OF MERCER ISLAND, ANNUAL GOALS AND MONITORING SHALL BE COMPLETED ON A REGULAR BASIS. MONITORING OF THE AS BUILT BY THE CITY OF MERCER ISLAND, ANNUAL GOALS AND MONITORING SHALL BE COMPLETED ON A REGULAR BASIS.

CONSTRUCTION PLAN
CONSTRUCTION OF THE MONITORING PLAN SHALL BE COMPLETED ON A REGULAR BASIS. MONITORING OF THE AS BUILT BY THE CITY OF MERCER ISLAND, ANNUAL GOALS AND MONITORING SHALL BE COMPLETED ON A REGULAR BASIS.

GENERAL MAINTENANCE
GENERAL MAINTENANCE OF THE MONITORING PLAN SHALL BE COMPLETED ON A REGULAR BASIS. MONITORING OF THE AS BUILT BY THE CITY OF MERCER ISLAND, ANNUAL GOALS AND MONITORING SHALL BE COMPLETED ON A REGULAR BASIS.

TABLE 1-1: GOALS, OBJECTIVES, MONITORING SCHEDULE, & PERFORMANCE STANDARDS

| GOAL | OBJECTIVE | SCHEDULE | PERFORMANCE STANDARDS |
|---|---|---|---|
| TO SUCCESSFULLY FINISH ON SITE TO INSTALL AND SUCCESSFULLY ESTABLISH 596 NATIVE PLANTS. | MONITORING OF THE AS BUILT BY THE CITY OF MERCER ISLAND, ANNUAL GOALS AND MONITORING SHALL BE COMPLETED ON A REGULAR BASIS. | MONITORING OF THE AS BUILT BY THE CITY OF MERCER ISLAND, ANNUAL GOALS AND MONITORING SHALL BE COMPLETED ON A REGULAR BASIS. | MONITORING OF THE AS BUILT BY THE CITY OF MERCER ISLAND, ANNUAL GOALS AND MONITORING SHALL BE COMPLETED ON A REGULAR BASIS. |



GENERAL NOTES:
1. WORK SHALL COMPLY TO ANY AND ALL APPLICABLE PERMITS AND/OR APPROVED CONSTRUCTION DOCUMENTS.
2. WORK SHALL BE COMPLETED BY THE DATE SPECIFIED IN THE PERMITS AND/OR APPROVED CONSTRUCTION DOCUMENTS.
3. BEFORE THE START OF CONSTRUCTION, A PRELIMINARY CONSTRUCTION PLAN SHALL BE SUBMITTED TO THE CITY OF MERCER ISLAND FOR REVIEW AND APPROVAL.
4. A COPY OF THESE APPROVED DRAWINGS MUST BE ON THE JOB SITE AT ALL TIMES AND THE DRAWINGS MUST BE KEPT IN A PROTECTIVE COVER AND MUST BE AVAILABLE TO THE CITY OF MERCER ISLAND AT ALL TIMES.
5. SITE CONDITIONS MAY VARY FROM THE INFORMATION PROVIDED ON THESE DRAWINGS WHEN CONFLICTS WITH THE WORK SHOWN ON THESE DRAWINGS.

