

**Sewall Wetland Consulting, Inc.**

PO Box 880  
Fall City, WA 98024

Phone: 253-859-0515

January 24, 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 questions in the ESA memorandums dated 10-17-19, regarding Parcel #1924059312

Below is a response to the recommendations in this document;

**ESA Memorandum dated October 17, 2108**

**Summary of Recommendations**

In summary from our findings above, we have the following recommendations (in addition to those provide in previous reviews, as applicable) to ensure project consistency with the requirements of MIMC 19.07, provide continued hydrology to an onsite stream and wetland, and implement sufficient mitigation to functionally compensate for project impacts:

1. The March 8th CAR should indicate why the northeast corner of the building footprint is considered temporary and not permanent wetland impact.

Response: The area of the northeast corner of the site is now considered a permanent impact on the attached revised mitigation plan.

2. Provide rationale to support the determination that decks will result in temporary, rather than permanent, wetland impacts.

Response: Although we are proposing to replant the area under the decks, for the purpose of the impact calculations, we now are including

the decks as an impact. This area will now be replanted with slough sedge as a mitigation action

3. The entire square footage of the northern deck should be considered as impact.

Response: As described in the previous response, this area is now considered an impact as requested.

4. For comparison reasons, the applicant should ensure that 2015 impact calculations were based on the entire square footage of the northern deck.

Response: A recalculation of the 2015 impacts assuming the entire deck as an impact, Wetland impacts are 3,450sf, and wetland buffer impacts 1,863sf.

5. The applicant should provide detailed discussion and associated impact calculations, if applicable, of the proposed excavation and grading activities. Grading should be designated as permanent wetland impact and mitigated appropriately.

Response: As requested, all structures and grading are now considered a permanent impacts as shown on the attached Wetland and Buffer Impact Site plan dated revised 12-17-18.

6. Provide detailed information about the fence or wall that surrounds the development.

Response: There is no fence or wall around the proposed development. The only fencing will be a temporary silt fence during construction.

7. If the area encompassed by the perimeter fence or wall will be permanently disturbed, then appropriate mitigation should be implemented based on the impact area.

Response: The retaining wall is now considered a permanent impact.

8. A house maintenance area should be calculated and mitigated.

Response: A 5' BSBL area has been calculated as an impact as requested.

9. An additional offset or paper buffer of 5 feet from the maintenance area is appropriate; impacts should be calculated and mitigation implemented.

Response: A 5' BSBL area has been calculated as an impact as requested.

10. Recalculate buffer impacts applying the 50-foot wetland buffer.

Response: The total wetland buffer impact area using 50' has been calculated as requested, and results in 3,479sf of buffer impact.

11. Include the northern retaining wall in the impact area calculation.

Response: The northern wall has been calculated as a permanent impact.

12. Consider installing conveyance from the proposed grading area located at the southwestern portion of the development to route water around the house and discharge and spread flow north and northwest of the house to provide continued hydrology to the down-gradient wetland and stream. Provide discussion as to how the proposed stormwater facility affects the delivery of groundwater and surface waters to the down-gradient wetland and stream.
- 

Response: Water from the excavated areas will be collected through footing drains and discharged through a spreader into the wetland to the northwest as requested. This will help maintain current hydrologic patterns and maintain hydrology to the wetland and stream located north of the structure.

13. Apply Core Design BMPs to the proposed project.

Response: BMPs recommended in Core's March 23, 2018 Report will be adopted & implemented

14. Mitigation discussion within the CAR should clarify the type of onsite mitigation.

Response: The mitigation for the project will consist of two actions;

1. On-site buffer enhancement to include under planting the existing buffer with conifers, as well as replanting areas that are graded

and under the elevated decks. This is depicted on the attached Critical Area Enhancement Plan revised to 1-24-19.

2. Purchase of off-site credits from the King County Mitigation Reserves program to compensate for permanent wetland impacts.

15. Mitigate onsite to compensate for permanent buffer impacts.

**Response:** On-site wetland buffer enhancement includes removal of any blackberry and under planting with conifers as depicted on the attached Critical Area Enhancement Plan revised to 1-24-19.

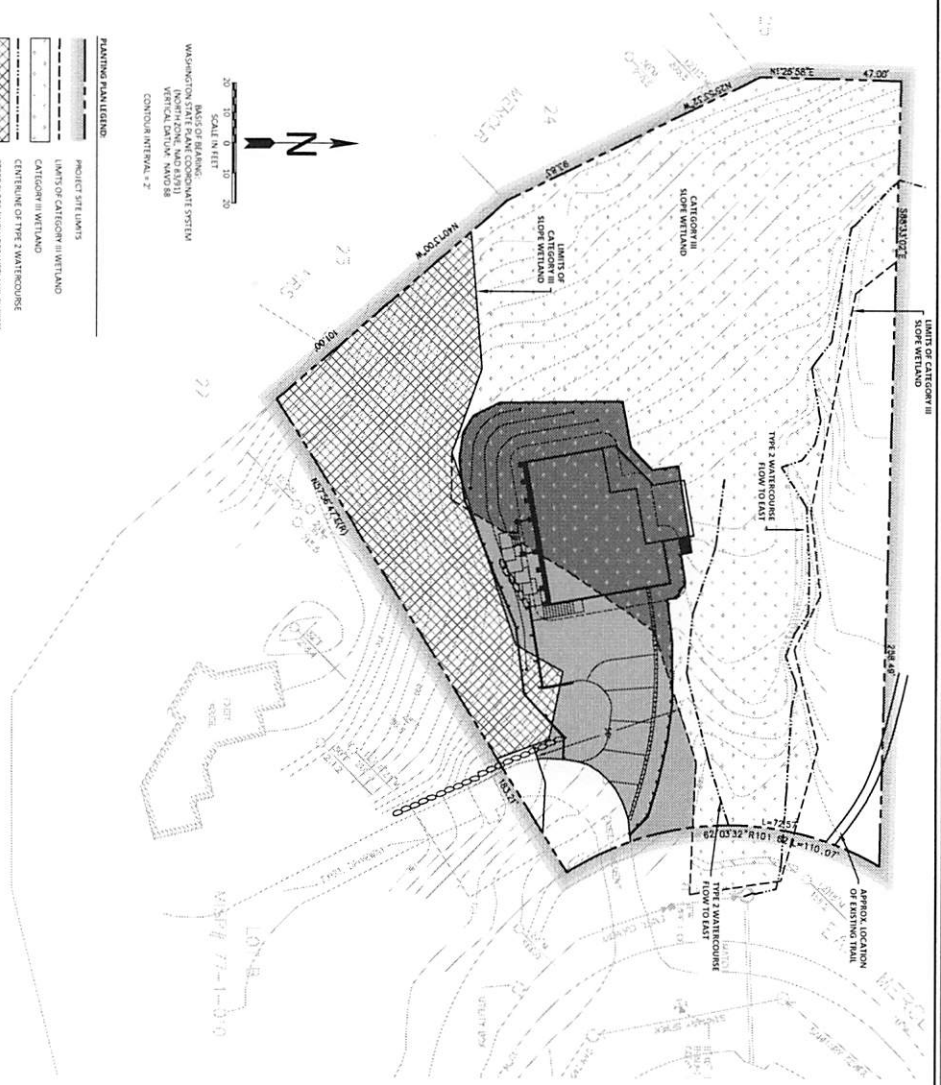
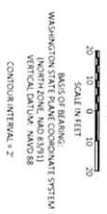
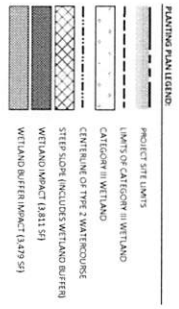
If you have any questions in regards to this report or need additional information, please feel free to contact me at (253) 859-0515 or at [esewall@sewallwc.com](mailto:esewall@sewallwc.com).

Sincerely,  
Sewall Wetland Consulting, Inc.



Ed Sewall  
Senior Wetlands Ecologist PWS #212

Attached: *Critical Area Enhancement Plan revised to 1-24-19*



NO.	DATE	NOTES
1	09/08/2015	ADDED STREAM
2	10/21/2015	REVISED PER CITY COMMENTS
3	12/04/2018	REVISED PER NEW SITE PLAN
4	12/17/2018	ADDED IMPACT SITE PLAN
5	01/24/2019	REVISED PLANTING PLAN

DATE: 01/24/2019  
JOB NUMBER: 14-208  
DRAWN BY: EANC  
CHECKED BY: ES

**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 253-852-4712

**MONITORING PLAN & MAINTENANCE PLAN**

**ENHANCEMENT PLAN GOALS, OBJECTIVES, AND PERFORMANCE STANDARDS**

ENHANCEMENT PLAN GOALS, OBJECTIVES, AND PERFORMANCE STANDARDS ARE OUTLINED IN TABLE 1-1 BELOW. THE GOALS AND OBJECTIVES OF THE PLAN ARE CONSIDERED MEASURABLE WHEN THE PERFORMANCE STANDARDS ARE ACHIEVED.

**MONITORING PLAN**

**AS-BUILT**

FOLLOWING COMPLETION OF THE WORK SHOWN ON THIS PLAN, A QUALIFIED PROFESSIONAL SHALL PREPARE AN AS-BUILT FOR THE COMPLETED WORK. THE DOCUMENT SHALL BE SUBMITTED TO THE CITY OF MERCEUR ISLAND FOR REVIEW AND APPROVAL PRIOR TO THE APPROVAL OF THE AS-BUILT.

BASELINE MONITORING DATA SHALL BE COLLECTED AT THE TIME OF THE AS-BUILT PER ANNUAL COMPLETION MONITORING FOR RED WOOD SUGGESTED STANDARDS. AT THE TIME OF EACH MONITORING THE COMPACT YEARS DOCUMENT PRESERVATION CONDITIONS WITHIN BUFFER AREAS. BASELINE MONITORING AND PHOTOGRAPHS SHALL BE SUBMITTED WITHIN THE AS-BUILT OF THE AS-BUILT AND BASELINE MONITORING DATA SHALL BE SUBMITTED TO THE WORK SHOWN ON THIS PLAN BY THE DATE THAT THE

**ANNUAL MONITORING**

FOLLOWING ACCEPTANCE OF THE AS-BUILT BY THE CITY OF MERCEUR ISLAND, ANNUAL COMPLETION MONITORING SHALL BE COMPLETED FOR A PERIOD OF FIVE (5) YEARS. ANNUAL COMPLETION MONITORING SHALL BE COMPLETED BY A QUALIFIED PROFESSIONAL AND REPORTING TO THE CITY OF MERCEUR ISLAND BY NOVEMBER 30TH OF EACH MONITORING YEAR.

MONITORING SHALL COMPREHEND A QUALITATIVE ASSESSMENT OF CONDITIONS WITHIN BUFFER AREAS. MONITORING SHALL BE COMPLETED BY A QUALIFIED PROFESSIONAL AND REPORTING TO THE CITY OF MERCEUR ISLAND BY NOVEMBER 30TH OF EACH MONITORING YEAR.

MONITORING SHALL BE COMPLETED WITHIN BUFFER AREAS AND ASSESSED IN ACCORDANCE WITH THE SUCCESS STANDARDS ESTABLISHED FOR THE PROJECT.

THE CONDITION OF INSTALLED PLANT STOCK INCLUDING SURVIVAL, PRESERVATION, AND GROWTH SHALL BE MONITORED.

A DIRECT COUNT AND ASSASSMENT OF INSTALLED PLANT STOCK SHALL BE USED TO EVALUATE PLANT STOCK CONDITIONS. IN ADDITION PHOTOGRAPHS ESTABLISHED DURING THE AS-BUILT.

THE RESULTS OF EACH MONITORING ASSESSMENT SHALL BE SUBMITTED IN A WRITTEN REPORT AND SUBMITTED TO THE CITY OF MERCEUR ISLAND NO LATER THAN NOVEMBER 30TH OF THE RESPECTIVE MONITORING YEAR.

**CONTRIBUTOR PLAN**

SOILS AND COMPLETION MONITORING ASSESSMENT REVEAL THAT THE PERFORMANCE STANDARDS FOR THE RESPECTIVE YEAR ARE NOT MET. THE CONTRIBUTOR SHALL WORK WITH THE CITY OF MERCEUR ISLAND TO DEVELOP A MONITORING PLAN THAT WILL BE SUBMITTED TO THE CITY OF MERCEUR ISLAND FOR REVIEW AND APPROVAL. THE FOLLOWING ACTIONS INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING ACTIONS:

1. ADDITIONAL PLANT INSTALLATION.
2. SOILS CONTROL.
3. ADJUSTMENT TO THE IRRIGATION REGIME.
4. ADJUSTMENT TO THE PLANTING SCHEDULE.
5. PLANT SUBSTITUTIONS FOR SIZE, QUANTITY AND LOCATION.

IF BY MAY 31ST OF ANY YEAR THE PERFORMANCE STANDARDS ARE NOT MET, THE CONTRIBUTOR SHALL WORK WITH THE CITY OF MERCEUR ISLAND TO DEVELOP AN APPROVED COMPLETION MONITORING PLAN THAT WILL BE SUBMITTED TO THE CITY OF MERCEUR ISLAND FOR REVIEW AND APPROVAL. THE CONTRIBUTOR SHALL BE RESPONSIBLE FOR THE COST OF THE COMPLETION MONITORING PROGRAM FOR THE DURATION OF THE MONITORING PLAN.

**MAINTENANCE PLAN**

THE SECTION PROVIDES A GENERAL OVERVIEW OF THE MAINTENANCE PROGRAM FOR THE PROJECT. THE PERFORMANCE STANDARDS FOR RED WOOD STANDARDS SHALL BE USED TO EVALUATE PLANT STOCK CONDITIONS. IN ADDITION PHOTOGRAPHS ESTABLISHED DURING THE AS-BUILT.

**GENERAL MAINTENANCE**

PLANT STOCK SHALL BE MAINTAINED AT REGULAR INTERVALS DURING THE MONITORING PERIOD TO PROMOTE THE SUCCESSFUL ESTABLISHMENT AND GROWTH OF THE INSTALLED PLANT STOCK.

GENERAL MAINTENANCE SHALL INCLUDE:

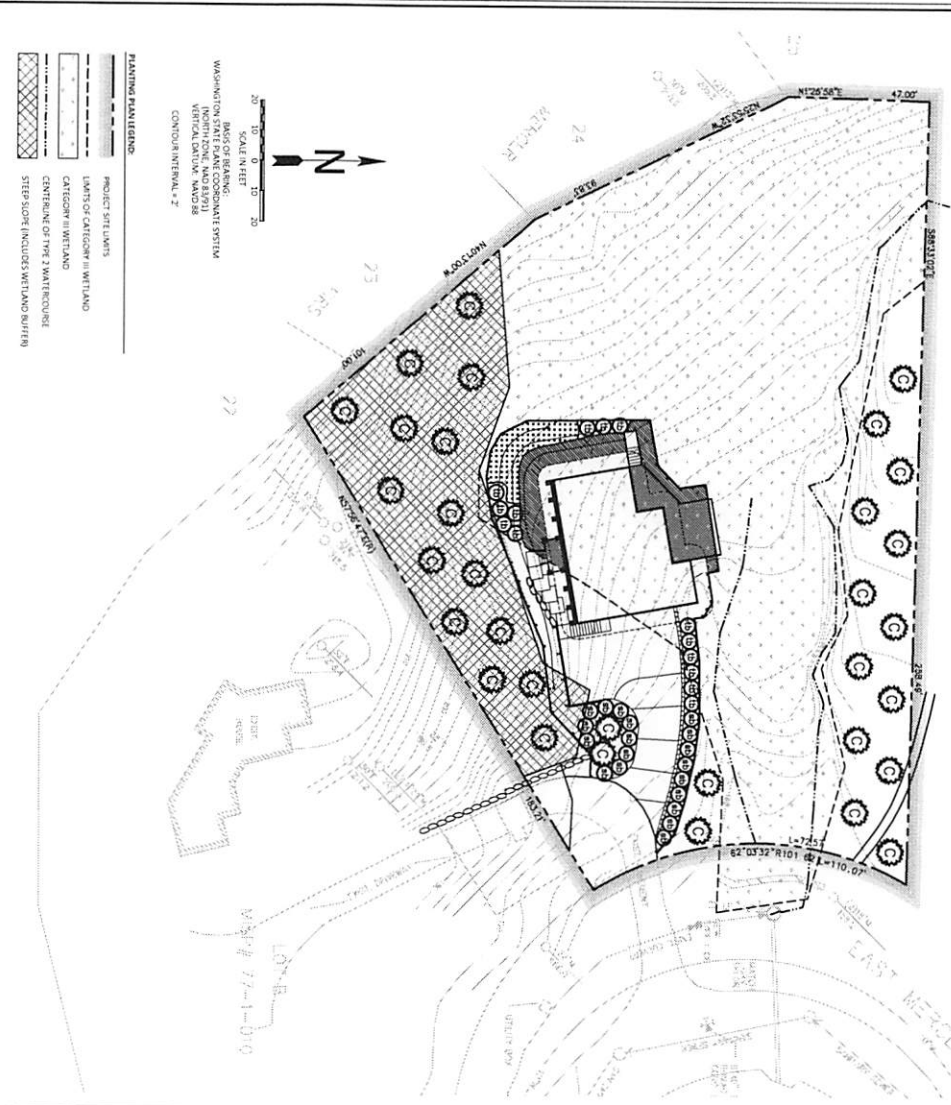
1. REMOVAL OF WEEDS TO MAINTAIN A CLEAN APPEARANCE.
2. THE REMOVAL OF PLANTS THAT APPEAR TO BE IN DISTRESS AND/OR DIED.
3. THE REMOVAL OF TRASH, LITTER, AND/OR OTHER NON-DECOMPOSING DEBRIS.
4. GENERAL MAINTENANCE WORK SHALL OCCUR MONTHLY DURING THE GROWING SEASON AND ANNUALLY DURING THE WINTER MONTHS TO PROMOTE THE SUCCESSFUL ESTABLISHMENT AND GROWTH OF THE INSTALLED PLANTS.

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

GOAL	OBJECTIVE	SCHEDULE	PERFORMANCE STANDARDS
TO SUCCESSFULLY ENHANCE ON-SITE WETLAND AND BUFFER AREAS USING NATIVE PLANT SPECIES.	ESTABLISH 500 NATIVE PLANTS.	AS-BUILT OR WITHIN 90 DAYS FOLLOWING PLANT INSTALLATION.	<ul style="list-style-type: none"> <li>• 100% SURVIVAL BY INSTALLED PLANT STOCK AFTER THE FIRST GROWING SEASON (YEAR 1). THE STANDARDS CAN BE MET IN ACCORDANCE WITH THE MEASUREMENT NUMBERS.</li> <li>• 100% SURVIVAL BY INSTALLED PLANT STOCK AFTER THE FIFTH GROWING SEASON (YEAR 5).</li> </ul>

**GENERAL NOTES:**

1. WORK SHALL CONFORM TO ANY AND ALL APPLICABLE PERMITS AND/OR APPROVED CONSTRUCTION DRAWINGS.
2. WORK SHALL BE COMPLETED BY PERSONS EXPERIENCED IN THE PERFORMANCE WORK SHOWN ON THESE DRAWINGS.
3. BEFORE THE START OF CONSTRUCTION, A PRE-CONSTRUCTION MEETING SHALL BE HELD WITH THE DESIGNER, THE OWNER, AND THE PLANT DESIGNER.
4. A COPY OF THIS APPROVED DRAWING MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
5. SET CONDITIONS MAY VARY BASED ON SEASON AND/OR THE DURATION OF THE CONSTRUCTION PERIOD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING AND REPORTING TO THE DESIGNER WHEN CONDITIONS ARE NOT AS SHOWN ON THESE DRAWINGS.

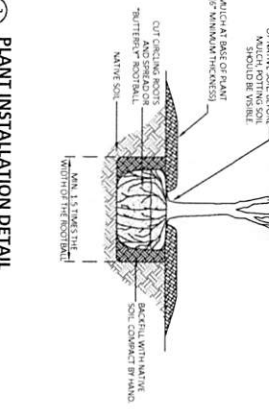


**PLANTING PLAN NOTES:**

1. BASE TOPOGRAPHIC AND SET IN AN AREA BY A REGISTERED PROFESSIONAL ENGINEER.
2. ZONING DISTRICT IS: SA-0400000 - WASHINGTON HEIGHTS - 429-448-3000. SOURCE DRAWINGS HAVE BEEN MODIFIED FOR VISUAL ENHANCEMENT.
3. PROJECT AND ACCORDANT EXISTING NATIVE VEGETATION WITHIN WETLANDS PLANTS.
4. PLANT MATERIAL, QUANTITY AND LOCATION SHALL BE INDICATED BY PLAN DESIGNER PRIOR TO PLANT INSTALLATION.
5. PLANT LOCATIONS SHOWN ARE APPROXIMATE. ADJUST PLANT LOCATIONS TO ACCOMMODATE SET CONDITIONS TO PRESENT AND PROJECT DESIGN, NATIVE VEGETATION, AND/OR PHYSICAL CONSTRAINTS IN THE FIELD OF INSTALLATION.
6. SEE THIS SHEET FOR PLANT INSTALLATION DETAILS.

**PLANTING PLAN**

COMMON NAME	SCIENTIFIC NAME	SIZE/TROM	QUANTITY	SPACING
WESTERN RED CEDAR	Thuja bicolata	2 GALLON CONTAINER	32	AS SHOWN
TRANSVERSE HORSESHOE	Erigeron phillyria	2 GALLON CONTAINER	14	AS SHOWN
SAKONBERY	Rubus spectabilis	2 GALLON CONTAINER	19	AS SHOWN
RED OAK DOGWOOD	Cornus sericea	4 FOOT LIVE STAKE	200	2 FT ON CENTER
SITKA WILLOW	Salix sitchensis	4 FOOT LIVE STAKE	180	2 FT ON CENTER
COMMON ADAPTION	Artemisia flexuosa	1 GALLON CONTAINER	68	3 FT ON CENTER
SCIONA SEDGE	Carex cana	10 M PLANT	150	18" ON CENTER
<b>TOTAL:</b>			<b>561</b>	



UNDERSTANDING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. UTILITY LOCATIONS AND CHARACTERISTICS SHOWN ON THIS DRAWING, IF ANY ARE BASED ON THE FIELD LOCATION OF THE APPLICANT OR SURVEYOR, ARE NOT GUARANTEED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO THE START OF WORK.

**811** Know what's below. Call before you dig.

**PLANTING PLAN**

NO.	DATE	NOTES
1.	09/08/2015	ADDED STREAM
2.	10/21/2015	REVISED PER CITY COMMENTS
3.	12/04/2018	REVISED PER NEW SITE PLAN
4.	12/17/2018	ADDED IMPACT SITE PLAN
5.	01/14/2019	REVISED PLANTING PLAN

**Planting Plan, Notes, Details, & Monitoring Plan**

DATE: 02/04/2015  
 DRAWN BY: LAMC  
 CHECK BY: ES

SHEET 2 OF 2