

David Grubb davidg@ghdarch.com AOA-7217

SUBJECT: Wetland & Stream Reconnaissance & Shoreline Restoration Seifert Residence, 3261 – 67th Ave. SE Parcel 370890-0065, Mercer Island, WA (PRE23-029)

Dear David:

On September 20, 2023 I conducted a wetland ad stream reconnaissance on the subject property located on Lake Washington utilizing the methodology outlined in the May 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0). No wetlands were identified on or adjacent to the property during the field investigation. One piped watercourse is mapped off-site to the east on the east side of 67th Ave. SE.

The site is currently entirely developed with a single-family residence and associated maintained yard. The front yard includes scattered Douglas fir (Pseudotsuga menziesii) and ornamental trees and the back yard consists of a terraced lawn with ornamental plantings that extend to a rock wall along the shoreline. No intact native plant communities are located on the site and no definitive hydrophytic plant communities were observed on or adjacent to the property.

Borings taken on the site revealed higher chroma non-hydric soils and there was no evidence of ponding or prolonged soil saturation anywhere in the vicinity of the property above the rock wall. Attachment A contains a data sheet prepared for a representative location in the upland on the site. This data sheet documents the vegetation, soils, and hydrology information that aided in the no wetland determination for the property.

Piped Watercourse

A piped watercourse is mapped by the City of Mercer Island off-site to the east on the east side of 67th Ave. SE. Piped watercourses require a standard 45-foot structure setback that extends west across the roadway and into the far eastern portion of the property.

David Grubb March 7, 2024 Page **2** of **5**



Typical view of area on top of piped watercourse looking south.

David Grubb March 7, 2024 Page **3** of **5**



View of terraced back yard and shoreline.

SHORELINE RESTORATION

It Is my understanding that the proposed residential re-model project will result in an increase of more than 1,000 s.f. of "new development" area and that the shoreline re-vegetation provisions of MIMC 19.13.050.K.4.i apply. As part of this code section, native vegetation coverage must be provided over 75 percent of the 20-foot vegetation area along the shoreline.

Based on the site plan you have provided; we have prepared a conceptual vegetative planting plan (**Figures 1 and 2**) that maximizes native plantings along the shoreline without removing the existing hardscape.

The proposed plantings have been designed to increase the plant species and structural diversity along the shoreline and to provide physical and visual screening to the shoreline from the residence. Increasing the plant species and structural diversity within the shoreline would also increase the wildlife habitat of the area over current conditions.

Goal, Objective, and Performance Standard for Enhancement Area

The primary goal of the enhancement plan is to restore the shoreline with native vegetation. To meet this goal, the following objectives and performance standards have been incorporated into the design of the plan:

David Grubb March 7, 2024 Page **4** of **5**

<u>Objective A:</u> Increase the structural and plant species diversity within the enhancement area.

<u>Performance Standard:</u> At the end of the five-year monitoring period, the enhancement area will contain at least seven native plant species. In addition, there will be 100% survival of all woody planted species throughout the enhancement area at the end of the first year of planting. Following Years 2 through 5, success will be based on an 80% survival rate.

<u>Objective B:</u> Limit the amount of invasive and exotic species within the enhancement area.

<u>Performance Standard:</u> After installation and at the end of the fifth year after planting, exotic and invasive plant species will be maintained at levels below 10% total cover in all planted areas.

Monitoring Methodology

The monitoring program will be conducted for a period of five years, with annual reports submitted to the City of Mercer Island.

Photo-points will be established from which photographs will be taken throughout the monitoring period. These photographs will document general appearance and progress in plant community establishment in the enhancement area. Review of the photos over time will provide a visual representation of the success of the plan.

Maintenance Plan

Maintenance will be conducted on a routine, year round basis. Additional maintenance needs will be identified and addressed following a twice-yearly maintenance review. Contingency measures and remedial action on the site shall be implemented on an as-needed basis at the direction of the consultant or the owner. Tall grasses and weeds shall be removed at the base of plants to prevent engulfment. Weed control should be performed by hand removal.

Contingency Plan

All dead plants will be replaced with the same species or an approved substitute species that meets the goal of the enhancement plan. Plant material shall meet the same specifications as originally installed material. Replanting will not occur until after the reason for failure has been identified (e.g., moisture regime, poor plant stock, disease, shade/sun conditions, wildlife damage, etc.). Replanting shall be completed under the direction of the consultant, City of Mercer Island, or the owner. David Grubb March 7, 2024 Page **5** of **5**

As-Built Plan

Following completion of construction activities, an as-built plan for the enhancement area will be provided to the City of Mercer Island. The plan will identify and describe any changes in relation to the original approved plan.

If you have any questions regarding the reconnaissance or conceptual planting plan, please give me a call.

Sincerely,

ALTMANN OLIVER ASSOCIATES, LLC

John altman

John Altmann Ecologist

Attachments



Date: 9/21/2023

Notes:



ATTACHMENT A DATA SHEETS

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project Site:	Parcel 37	708900	<u>065</u>			Cit	ty/County:		1	_	Sampling D	ate:	<u>9-20</u>	<u>-23</u>	
Applicant/Owner:	<u>Seifert</u>								S	state: <u>WA</u>	Sampling Po	oint:	DP#	1	
Investigator(s):	John Altr	nann, C	<u>Dain Altmann</u>					Se Ra	ction, To nge:	ownship,	<u>S11,T24</u>	<u>N,R4E</u>			
Landform (hillslope, te	rrace, etc.):				Local relie	ef (concave	, conve	x, none): <u>concave</u>		Slope	: (%):		
Subregion (LRR):	A			La	t: <u>47.57982</u>			Long:	-122.24	<u>4903</u>		Datum:			
Soil Map Unit Name:	KpD									NWI clas	sification:				
Are climatic / hydrolog	ic conditio	ns on t	he site typical fo	or this t	ime of year?	Yes	\boxtimes	No		lf no, explain ir	n Remarks.)				
Are Vegetation X,	Soil	□,	or Hydrology	□,	significantly dis	turbed?	Are "Nor	mal Cir	cumstar	nces" present?		Yes	\boxtimes	No	
Are Vegetation ,	Soil	□,	or Hydrology	□,	naturally proble	matic?	(If neede	d, expl	ain any	answers in Re	marks.)				

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?		No					
Hydric Soil Present?		No	\boxtimes	Is the Sampled Area within a Wetland?	Yes	No	\boxtimes
Wetland Hydrology Present?	Yes	No	\boxtimes				
Remarks: Upland plot, see map for location.							

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1				Number of Dominant Species	
2				That Are OBL, FACW, or FAC:	
3				Total Number of Dominant	
4				Species Across All Strata:	
50% =, 20% =		= Total Cover		Percent of Dominant Species (A/	B)
Sapling/Shrub Stratum (Plot size:)				That Are OBL, FACW, or FAC:	-,
1				Prevalence Index worksheet:	
2				Total % Cover of: Multiply by:	
3				OBL species x1 =	
4				FACW species x2 =	
5				FAC species x3 =	
50% =, 20% =		= Total Cover		FACU species x4 =	
<u>Herb Stratum (</u> Plot size: <u>10</u>)				UPL species x5 =	
1. <u>mowed lawn</u>	<u>100</u>	<u>yes</u>	<u>NI</u>	Column Totals:(A)(B)	
2				Prevalence Index = B/A =	
3				Hydrophytic Vegetation Indicators:	
4				□ 1 – Rapid Test for Hydrophytic Vegetation	
5				□ 2 - Dominance Test is >50%	
6				\Box 3 - Prevalence Index is $\leq 3.0^{1}$	
7				4 - Morphological Adaptations ¹ (Provide supporting	
8				data in Remarks or on a separate sheet)	
9				5 - Wetland Non-Vascular Plants ¹	
10				Problematic Hydrophytic Vegetation ¹ (Explain)	
11					
50% = <u>50</u> , 20% = <u>20</u>	<u>100</u>	= Total Cover		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
Woody Vine Stratum (Plot size:)				p p	
1					
2				Hydrophytic	
50% =, 20% =		= Total Cover		Vegetation Yes No	
% Bare Ground in Herb Stratum					
Remarks: historically graded mowed lawn.					

Project Site: Parcel 3708900065

SOIL

SOIL										:	Sampling Po	oint: <u>DF</u>	P#1			
Prof	ile Descr	iption: (Describe	to the depth	n needed to	documen	t the indi	cator or con	firm the abse	ence of indi	cators	.)					
D	epth	Matrix				Redox										
(inch	nes)	Color	%	Color (m	oist)	% Тур		Loc ²	Text	Texture		Remarks				
0	0-10	<u>10YR3/2</u>	100		_					GSL gravelly sandy loam						
1	<u>1-15</u>	<u>10YR4/2</u>	<u>100</u>		_					<u>GSL</u>	gravelly	<u>/ sandy</u>	loam			
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¹ Typ	e: C= Cor	ncentration, D=De	pletion, RM=	Reduced Ma	trix, CS=C	overed o	r Coated Sar	nd Grains.	² Location:	PL=Po	re Lining, M	=Matrix	¢			
Hydr	ric Soil In	dicators: (Applic	able to all L	RRs, unless	otherwis	e noted.))		Inc	licator	s for Proble	ematic	Hydric	Soils ³ :		
	Histosol	(A1)			Sandy F	Redox (St	5)				2 cm Muck	(A10)				
	Histic E	pipedon (A2)			Stripped	l Matrix (S6)				Red Parent	Materia	al (TF2)			
Black Histic (A3)					Loamy Mucky Mineral (F1) (except MLRA 1) Very Shallow Dark Surface (e (TF12)					
	Hydrogen Sulfide (A4)				Loamy Gleyed Matrix (F2)						.)					
	Deplete	d Below Dark Surf	ace (A11)		Deplete	d Matrix (F3)									
	Thick Da	ark Surface (A12)			Redox D	Dark Surfa	ace (F6)									
	Sandy N	lucky Mineral (S1)		Depleted Dark Surface (F7) ³ Indicators of hy						s of hydroph	hydrophytic vegetation and				
Sandy Gleyed Matrix (S4) Redox Depressions (F8)							unless disturbed or problematic.					ent,				
Rest	rictive La	ayer (if present):														
Туре):															
Depth (inches):							Hydric Soils Present? Yes 🗌 No 🛛									
Rem	arks: ı	no redoximorphic f	features													

HYDROLOGY

Wetland Hydrology Indicators:													
Prim	ary Indicators (minimum	of one re	quired;	Secondary Indicators (2 or more required)									
	Surface Water (A1)					Water-Stained Leaves (B9)		Water-Stained Leaves (B9)					
	High Water Table (A2)					(except MLRA 1, 2, 4A, and 4B)		(MLRA 1, 2, 4A, and 4B)					
	Saturation (A3)					Salt Crust (B11)		Drainage Patterns (B10)					
	Water Marks (B1)					Aquatic Invertebrates (B13)		Dry-Season Water Table (C2)					
	Sediment Deposits (B2	2)				Hydrogen Sulfide Odor (C1)		Saturation Visible on Aerial Imagery (C9)					
	Drift Deposits (B3)					Oxidized Rhizospheres along Living Roots (C3)	3) 🗆	Geomorphic Position (D2)					
	Algal Mat or Crust (B4)							Shallow Aquitard (D3)					
	Iron Deposits (B5)					Recent Iron Reduction in Tilled Soils (C6)		FAC-Neutral Test (D5)					
	Surface Soil Cracks (B6)					Stunted or Stresses Plants (D1) (LRR A)		Raised Ant Mounds (D6) (LRR A)					
	Inundation Visible on Aerial Imagery (B7)					Other (Explain in Remarks)		Frost-Heave Hummocks (D7)					
Sparsely Vegetated Concave Surface (B8)													
Field	Observations:												
Surfa	ace Water Present?	Yes		No	\boxtimes	Depth (inches):							
Wate	r Table Present?	Yes		No	\boxtimes	Depth (inches):							
Satu (inclu	Saturation Present? Ves D No (includes capillary fringe)			No	\boxtimes	Depth (inches): Wet	etland Hy	drology Present? Yes 🗌 No 🛛					
Desc	ribe Recorded Data (stre	eam gau	ge, mor	nitoring	well, a	erial photos, previous inspections), if available:							
Rem	arks: dry												