

Exhibit List
Rehder / City File No. PLN50583A RUE

Staff Contact: Kelly Tayara, Senior Planner

Public Hearing: January 14, 2021

No.	Document Description		Date
1	Staff Report	Dated	12/28/2020
2	Site Assessment Review for LID (City Development Engineer)	Dated	7/13/2020
3	Preapplication Conference Summary Letter	Dated	7/29/2020
4	Land Use Application	Submitted	8/12/2020
5	Notice of Incomplete Application	Dated	8/18/2020
6	Notice of Complete Application	Dated	8/28/2020
7	Notice of Application / SEPA Comment Period* / Hearing	Published	9/4/2020
7A	Postcard Mailer	Published	9/4/2020
7B	Mailing List	Dated	9/2/2020
7C	Affidavit of Publication	Dated	9/4/2020
7D	Certificate of Posting	Dated	9/4/2020
8	SEPA Checklist with Staff Response*	Completed	9/2/2020
9	Wetland Report	Dated	10/2015
9A	Wetland Report missing Figure 1	Submitted	12/10/2020
10	Geotechnical Evaluation	Dated	8/12/2020
11	Stormwater Management Worksheet (City Form #B109)	Submitted	8/12/2020
11A	Stormwater Pollution Prevention Plan (SWPPP) Narrative	Submitted	8/12/2020
12	Applicant Narrative / Decision Criteria Discussion (revised)	Submitted	8/27/2020
13	Site Plan (Revised)	Submitted	12/16/2020
14	Public Comment - Wohlsen	Submitted	9/17/2020
15	Public Comment - Blevins	Submitted	9/18/2020
16	Kitsap Public Utility District Water Service Letter	Submitted	8/12/2020
17	Kitsap County Public Health District Notice of Pending Building Site Application	Dated	10/16/2018
18	City Development Engineer Recommendation	Dated	11/4/2020

*SEPA notice was published in error; the project is exempt per WAC 197-11-800; while a wetland encumbers the property, the proposed development is not on lands covered by water.



Department of Planning and Community Development

Staff Report

Project Rehder RUE
File No. PLN50583A RUE
Date December 28, 2020
To City of Bainbridge Island Hearing Examiner
Project Manager Kelly Tayara, Senior Planner

Request	Reasonable Use Exception (RUE) to construct a single-family residence on a lot encumbered by a wetland and associated buffer (effectively a buffer reduction from 110 feet to 50 feet to accommodate a homesite area)
Owner / Applicant	Vance Rehder PO Box 10880 Bainbridge Island, WA 98110
Site Address	NE Pine Way (no site address)
Tax Parcel Number	022402-1-005-2007
Environmental Review	The project is exempt from the State Environmental Policy Act (SEPA) under WAC 197-11-800(1)(b)(i).

Hearing Examiner Review

The Hearing Examiner shall review the Reasonable Use Exception (RUE) application and conduct a public hearing pursuant to the provisions of BIMC 2.16.100. The Hearing Examiner shall approve, approve with conditions, or deny the request based on the proposal's compliance with the RUE review criteria discussed below.

Summary of Request

The applicant requests approval to construct a single-family residence (SFR) and associated septic facilities on a lot which is encumbered by a wetland and associated buffer.

Staff Recommendation

Approval of the request as conditioned

Part I: Land Use Process / Application History

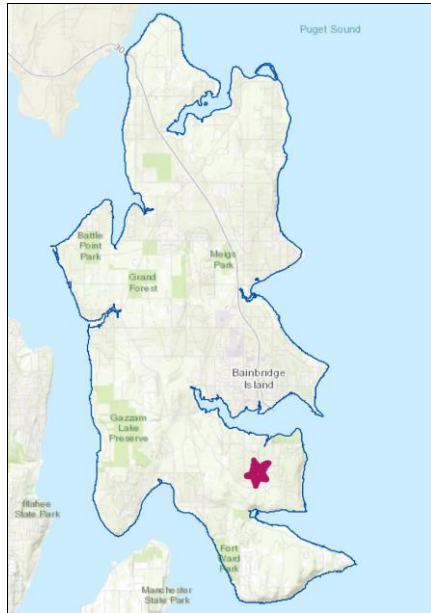
Date:	Action:
July 28, 2020	Preapplication conference held
August 12, 2020	Application submitted
August 18, 2020	Notice of Incomplete Application issued
August 20, 2020	Additional / revised application materials submitted
August 28, 2020	Notice of Complete Application issued
September 4, 2020	Notice of Application / SEPA Comment Period* / Public Hearing published
January 14, 2020	Scheduled date for public hearing

*SEPA notice was published in error; the project is exempt per WAC 197-11-800; while a wetland encumbers the property, the proposed development is not on lands covered by water.

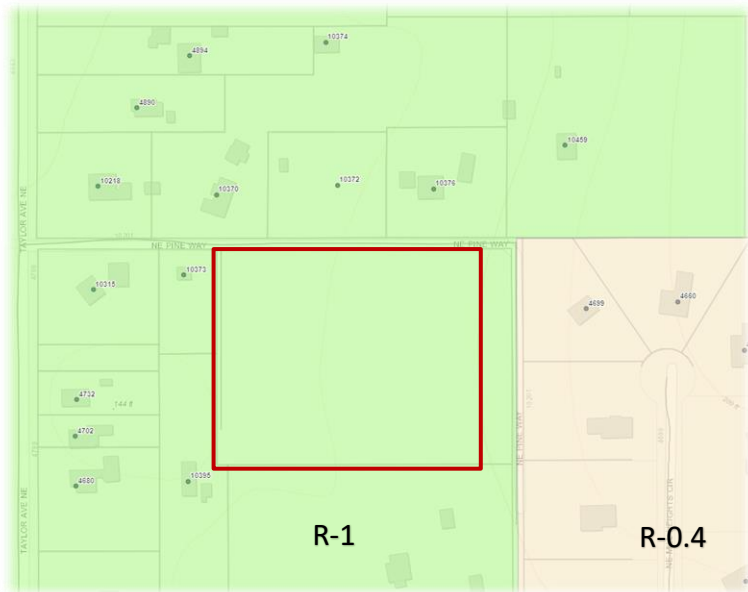
Part II: General Information and Site Characteristics

Assessor's Record Information:	
Tax lot number	022402-1-005-2007
Owner of record	Vance Rehder
Lot size	4.75 acres
Use:	
The site is developed with a driveway and contains a shed. The shed is currently the subject of a Code compliance investigation.	
Zoning and Comprehensive Plan Designation:	
The subject property is zoned R-1 (one unit per acre).	
Terrain:	
The terrain is generally level with sloping upland forest to the east. A depressional wetland encumbers the property.	
Soils:	
Kapowsin gravelly ashy loam and McKenna gravelly loam	
Access:	
The property is accessed from Pine Way.	
Public Services:	
Police	City of Bainbridge Island Police Department
Fire	Bainbridge Island Fire District
Schools	Bainbridge Island School District
Water	Kitsap Public Utility District
Sewer	On-site septic proposed
Surrounding Properties - Use, Zoning, and Comprehensive Plan Designation:	
All adjacent properties contain single-family residential development. Surrounding properties are also within the R-1 district and Residential-1 Comprehensive Plan Designation, with the exception of adjacent properties to the east which are within the R-0.4 district and the Residential-0.4 Comprehensive Plan Designation.	

Vicinity Map, Zoning Map, and Aerial Image



Vicinity Map



Zoning Map



Aerial Photograph (2018)

Part III: Agency / Public Comment

Two agency comments were received. The Bainbridge Island Fire District recommends approval of the application as proposed. The Kitsap Public Health District preliminarily approved the Building Site Application.

Two public comments were received. Both commenters expressed concern about flooding events that occur in the neighborhood during the rainy season and how the site drainage will impact neighboring properties.

One commenter noted that two buildings have been constructed on the site in the time since the current owner purchased the property, and asked if the 1,200 square-foot building footprint maximum for a Reasonable Use Exception takes into account the footprint of the existing buildings. The commenter also asked whether there are requirements for the foundation type on the site.

Another commenter expressed concern about the proximity of the proposed septic system / drainfields to a shared property line and asked whether the proposed home foundation will change.

Part IV: Comprehensive Plan Analysis

*Comprehensive Plan goals and policies are presented in normal font, and **staff discussion in bold**.*

The Comprehensive Plan designation for the site is Residential-1. The Comprehensive Plan guiding principles, goals and policies, along with implementing regulations in the Municipal Code, are used to evaluate the proposal and weigh project impacts. The following Comprehensive Plan guiding principles, goals and policies apply to the proposal:

1. Environmental Element

- A. Policy EN 1.2: Taking into account the present and future need to reduce the potential for personal injury, loss of life, or property damage due to flooding, erosion, landslides, seismic events, climate change or soil subsidence, properties adjoining or adjacent to critical areas must be developed in observance of the following principles in descending order:
- Avoid the impact if possible
 - Minimize or limit the degree or magnitude of the action and its implementation by using appropriate technology to avoid or reduce impacts
 - Reduce or eliminate the impact over time by preservation and maintenance operations during the life of the action
 - Rectify by repair, rehabilitation or restoration of the affected environment.
 - Compensate for unavoidable impacts by replacing, enhancing or providing substitute resources or environments.

Critical areas are identified in order to flag concerns during the review process and to make applicants aware of potential hazards or areas where development may be constrained. Compatible development will be allowed which avoids designated critical areas, minimizes the impact or mitigates potential problems through engineering, siting or design. Proposals will be examined on a case-by-case basis to allow for creative solutions and to assure that the special combinations of factors in a particular case are addressed.

The Municipal Code utilizes mitigation sequencing consistent with this Comprehensive Plan policy, as discussed under the decision criteria section of this report. Critical areas are identified and development constraints are evaluated within the report below.

- B. Policy EN 4.1: Employ conservation design methods and principles such as low impact development techniques for managing storm and wastewater, green building materials, high-efficiency heating and lighting systems.

The City Development Engineer finds that the proposal protects the critical area functions and values consistent with the best available science as it pertains to the incorporation of low impact development for the purpose of handling of stormwater, retaining vegetation, and mimicking natural hydrology to the maximum extent feasible. The Development Engineer recommends a condition that the applicant engage a design and construction professional to explore utilizing minimal excavation foundation systems per the 2012 Low Impact Development Guidance Manual for Puget Sound as means of minimizing impacts (condition 14.D).

- C. Policy EN 5.6: Protect wetlands and riparian areas.

The applicant is proposing to enhance a wetland buffer area which is 22,239 square feet in size and lies between the proposed homesite and the wetland. The proposed homesite area is dominated by young conifer trees amongst dense salmonberry and holly. The mitigation planting proposal includes 180 trees and 305 shrubs to enhance existing vegetation and provides a 50-foot width buffer from the wetland.

2. Land Use Element

- A. Policy LU 14.1: The Residential District area is designated for less intensive residential development and a variety of agricultural and forestry uses.

The subject property is 4.75 acres in size within a district which allows one single-family dwelling per acre. This land use approval mechanism limits the property to a single dwelling.

Part V: Land Use Code Analysis

*Municipal Code regulations are presented in normal font, and **staff discussion in bold.***

The following Bainbridge Island Municipal Code (BIMC) regulations apply to the proposal:

1. BIMC Title 18 Zoning

- A. BIMC 18.06.020 Purpose of Individual Residential Districts

The purpose of the residential districts is to provide for housing at various densities while preserving the unique character of the island, promoting sustainable development, and minimizing negative impacts of new residential development on surrounding areas. The purpose of the R-1 zone is to provide residential neighborhoods in an environment with special Island character consistent with other land uses such as agriculture and forestry, and the preservation of natural systems and open space. The low density of housing does not require the full range of urban services and facilities.

The property is located within the R-1 zoning district. The proposed development provides a single home on 4.75 acres lot within a district which allows one unit per acre. The proposed residence and associated facilities are located within an area which is approximately 36,500 square feet in size and preserves approximately 3.9 acres as protected wetland and buffer.

- B. BIMC 18.09.020 Permitted Uses

Single-family residential use is permitted in the R-1 zoning district.

C. BIMC Table 18.12.020-2 Standard Lot Dimensional Standards for Residential Zone Districts

Dimensional Standard	Requirement	Proposed / Compliance Evaluation
Lot Area	40,000 square feet minimum	Lot area exceeds 200,000 square feet in compliance with this standard.
Density	40,000 square feet minimum	The proposed density of one unit on the lot, which is in excess of 200,000 square feet, complies with this standard.
Lot Dimensions	80 feet width/depth minimum	The lot is approximately 385 feet by 535 feet and complies with this requirement.
Lot Coverage	15% maximum	Proposed lot coverage, which is defined as the area covered by buildings, is less than one percent and complies with this standard.
Setback - Front Lot Line	25 feet minimum	A front setback extends from a building or structure to the right-of-way. The Pine Way right-of-way borders the north and east side of the property. The proposed development area is set back over 300 feet from the adjacent right-of-way to the north and approximately 100 feet from the adjacent right-of-way to the east. The project complies with this standard.
Setback - Side Lot Line	10 feet minimum	For properties with two front lot lines, the remaining setbacks are side setbacks in accordance with BIMC 18.12.050. Permitted setback modifications are found in BIMC 18.12.040: At or near-grade structures such as driveways and utilities which are accessory to a single-family residence are permitted in setbacks. The existing driveway extends from the north section of the Pine Way right-of-way for the length of the west property line along the west boundary then turns east along the south property boundary, terminating approximately 140 feet from the west property line. The existing shed is set back 10 feet from the west property line and 12 feet from the south property line. The residence is proposed 20 feet from the south property line, and the drainfield ten feet from the south property line. Existing and proposed development comply with this standard, as modified by permitted encroachments in BIMC 18.12.040.
Building Height	25 feet maximum	Height is measured as the vertical distance above grade to the midpoint of the roof, and compliance is verified during building permit review.

2. BIMC 16.20 Critical Areas

A. BIMC 16.20.140 Wetlands

i. Wetland Identification, Designation and Categories

A wetland delineation is required for development proposals which are within 300 feet of a designated wetland. Identification of wetlands and delineation of their boundaries must be done in accordance with [WAC 173-22-035](#). Wetland delineations shall be valid for five years from the date of the delineation.

A wetland delineation was conducted in August 2015, and documented in the Wetland Delineation Report prepared by Ecological Land Services, Inc (October 2015). The report describes a single wetland which is completely contained within the property. The wetland lies in a shallow depression and occupies 80 percent of the property. Wetland vegetation is forested in the eastern portion and scrub / shrub in the western portion, with a seasonally flooded hydroperiod in the low depressional area and saturated hydroperiod on the gradual eastern slope. The surrounding upland vegetation is primarily mixed deciduous and coniferous forest with a sparse high shrub layer and dense herbaceous layer.

The wetland report documents a Category III wetland with moderate function value; categorization is in accordance with the Washington State Wetlands Rating System for Western Washington – 2014 Update.

ii. Wetland Buffers

All regulated wetlands must be surrounded by a buffer in accordance with Department of Ecology guidance [Appendix 8-C: Guidance on Buffers and Ratios for Western Washington](#). Wetland buffers shall remain as undisturbed or enhanced vegetation areas for the purpose of protecting the integrity, function, and value of wetland resources.

A structure or hard surface setback line of 15 feet is required from the edge of any wetland buffer. Minor structural or impervious surface intrusions into the areas of the setback, such as uncovered porches, walkways, stairways, retaining walls, fences, and patios, may be permitted if the Department determines upon review of an analysis of buffer functions submitted by the applicant, that construction and/or maintenance of such intrusions will not encroach into the wetland buffer or adversely impact the wetland.

Wetland buffers shall be temporarily fenced or otherwise suitably marked between the area where the construction activity occurs and the buffer. Fences shall be made of a durable protective barrier and shall be highly visible. The Director may require that permanent signs and/or fencing be placed on the common boundary between a wetland buffer and the adjacent land. Such signs will identify the wetland buffer. The Director may approve an alternate method of wetland and buffer identification if it provides adequate protection to the wetland and buffer.

The wetland report documents a Category III wetland with moderate function value. The standard wetland buffer from the delineated wetland edge is 110 feet (BIMC 16.20.140.I.4. Table 5). A structure / hard surface setback line of 15 feet is required from the edge of the buffer.

The standard wetland buffer extends beyond the property lines, with the exception of a very small area in the southwest corner; in this area, the structure / hard surface setback extends beyond the property line. The property is completely encumbered by the wetland, buffer, and structure / hard surface setback (see Figure 2 from the wetland report below). The applicant proposes a buffer reduction as discussed in the section below; there is no provision for modification to a structure / hard surface setback.

Recommended conditions include temporary construction fencing and permanent low-impact fencing and signage to protect the wetland and buffer (conditions 6 and 8).



Figure 2: Wetland Delineation Report Ecological Land Services, Inc (October 2015)

iii. Buffer Modifications

On each site, only one of the following three modifications to buffer widths may be allowed provided the applicant demonstrates the need for modification through mitigation sequencing pursuant to BIMC 16.20.030 and the modification that results in the retention of the greatest area of buffer is used:

- 1) Buffer Width Averaging. The width of a required buffer may be averaged if the total area of buffer after averaging is equal to the area required without averaging.
- 2) Buffer Width Reduction. The width of a required buffer may be reduced if the applicant can demonstrate that the reduction will provide equal or greater functions and values as would be provided under the required buffer and that this will improve the protection of wetland functions and all of the following conditions are met: The buffer may not be reduced more than 25 percent of its required width; Native vegetation on other portions of the site is retained in order to offset habitat loss from buffer reduction.
- 3) Any other buffer modification resulting in a reduced buffer area requires a Reasonable Use Exception pursuant to BIMC 16.20.080.

Buffer Width Averaging (option 1) is not a viable option for development because the total area of the buffer must be the same before as after the development and the standard buffer and structure / hard surface setback encumber the entire property.

Buffer Width Reduction (option 2) is not a viable option because the reduction is limited to 25 percent of the standard buffer, or 27.5 feet. A buffer reduction would provide some relief (e.g. a building area approximately 360 square feet in size in the southwest corner of the lot), but the required zoning setbacks, along with the 15-foot-width structure / hard surface setback from the reduced buffer, do not provide the buffer the relief needed to establish a home which is served by a septic system.

The only available buffer modification that provides for a buffer reduction in order to accommodate single-family residential development is a Reasonable Use Exception (option 3).

B. BIMC 16.20.100 Aquifer Recharge Areas

Aquifer recharge areas are areas that have a critical recharging effect on groundwater used for potable water supplies and/or that demonstrate a high level of susceptibility or vulnerability to groundwater contamination from land use activities. The entirety of Bainbridge Island is classified as an aquifer recharge area to preserve the volume of recharge available to the aquifer system and to protect groundwater from contamination. Any proposed development or activity requiring a Site Assessment Review pursuant to BIMC 15.19 and 15.20 that is located within the R-1 zoning designations requires designation of an Aquifer Recharge Protection Area (ARPA); except, designation of an ARPA is not required for development and activities located on properties protected in perpetuity by a legal instrument acceptable to the City Attorney wherein at least 65 percent of the site meets ARPA development standards.

The wetland and reduced buffer occupy more than 65 percent of the property and the project is conditioned to protect and maintain this area in perpetuity via recorded notice to title.

BIMC 16.20.070.G requires that the owner of any property with field-verified presence of critical area or buffer on which a development proposal is submitted shall file for record with the Kitsap County Auditor a notice which identifies the presence of a critical area and buffer, identifies the application of critical area regulations to the property, and states that limitations on actions in or affecting such areas may exist.

The notice runs with the land and is a legal instrument acceptable to the City Attorney that protects the property in perpetuity. Therefore, designation of an ARPA is not required. The recommended conditions include submittal of the recorded notice to title prior to issuance of the residential construction permit.

C. BIMC 16.20.080 Reasonable Use Exceptions

i. Applicability and Intent

An applicant may request a Reasonable Use Exception (RUE) pursuant to BIMC 16.20.080.A when a site assessment review pursuant to BIMC 15.20 or a pre-application conference demonstrates that:

- 1) The subject property is encumbered to such an extent by critical areas and/or critical area buffers that application of this chapter would deny all reasonable use of the subject property;
- 2) Reasonable use of the subject property cannot be achieved through Buffer Modification (BIMC 16.20.110 and 140) or a Habitat Management Plan (BIMC 16.20.110); and
- 3) Alternatives to development through an RUE are not available or acceptable.

The information provided at the preapplication conference demonstrated adequately that the property is encumbered to such an extent by the wetland and its associated buffer that application of wetland regulations in BIMC 16.20.140 would deny all reasonable use of the subject property. The wetland and associated standard buffer of 110 feet, along with a structure / hard surface setback of 15 feet from the edge of the buffer, extend beyond the property boundaries.

BIMC 16.20.140.I.8 provides two alternatives to a Reasonable Use Exception for buffer modifications, but because the buffer extends well beyond the property line, these alternatives provide little-to-no relief. Because buffer averaging requires the same buffer area before the modification as after, it provides no relief. A buffer reduction does not provide the relief necessary to establish a home which is served by a septic system.

A Habitat Management Plan is a detailed report that outlines and documents the location of fish and wildlife conservation areas, any planned incursions or habitat impacts and a strategy for limiting impacts. A Habitat Management Plan does not enable one to reduce a wetland buffer.

There is no provision in the Municipal Code, outside of a Reasonable Use Exception, that would allow for a buffer modification which would enable the applicant to locate residential development on the site.

ii. Reasonable Use Review Criteria

The Hearing Examiner shall approve, approve with conditions, or deny the request based on the proposal's compliance with all of the RUE review criteria below.

- 1) The application of this chapter would deny all reasonable use of the property;

The reasonable use provisions of the critical areas chapter provide for single-family residential development within residential districts. Without these provisions, application of wetland regulations within the critical areas chapter make residential development of the property infeasible.

- 2) There is no reasonable alternative to the proposal with less impact to the critical area or its required buffer;

The property is completely encumbered by the wetland, associated buffer and required setback from the buffer. Development is proposed in the area of the lot which is furthest from the wetland. Other permitted uses in the district, such as a passive recreation park, may have less impact to the critical area buffer. However, given the wetland characteristics and property's location, which offers no unique viewpoints or specific recreational opportunities, such use would not be a reasonable alternative to a single-family residence. There do not appear to be any other

reasonable alternatives to the proposed use that would achieve the same purpose for the applicant with less impact to the critical area or its required buffer.

- 3) The proposal minimizes the impact on critical areas in accordance with mitigation sequencing (BIMC 16.20.030), which required that all proposed development, uses and activities utilize mitigation sequencing as follows:
- Avoid the impact altogether by not taking a certain action or parts of an action
 - Minimize impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps to avoid or reduce impacts
 - Rectify the impact by repairing, rehabilitating, or restoring the affected environment
 - Reduce or eliminate the impact over time by preservation and maintenance operations during the life of the action
 - Compensate for the impact by replacing, enhancing, or providing substitute resources or environments
 - Monitor the impact and take appropriate corrective measures.

The proposed home is situated in the southwest corner of the property which represents the largest area of upland on the property and is furthest from the wetland. The proposal takes into account natural topography in locating the home and septic drainfields. Minimal grading (less than 50 cubic yards) is proposed to maintain natural drainage.

Impacts on the wetland and buffer are minimized by locating the home and drainfield in the southwest corner and southern edge of property, respectively. The area covered by buildings (lot coverage) is limited to 1,200 square feet, as provided through the reasonable use criteria, which minimizes pollutant runoff and affords minimal impact on habitat. Recommended conditions include consideration of Low Impact Development guidance for utilization of minimal excavation foundation systems, exploration of alternative foundation systems, use of permeable materials for hardscape where feasible, as a means of minimizing impacts.

There is little opportunity to repair, rehabilitate or restore the homesite area as the project represents a permanent impact to the buffer.

To reduce and compensate for impacts, the applicant proposes enhancing a 50-foot width, one-half acre area which is between the homesite area and wetland (see Figure 5 from the wetland report below). The proposed homesite area is dominated by young conifer trees amongst dense salmonberry and holly. The mitigation planting proposal includes 180 trees and 305 shrubs to enhance existing vegetation.

Monitoring requirements are found in BIMC 16.20.180.G. Monitoring includes tracking changes in plant species composition and density over time and identifying corrective measures if project performance standards are not being met. Monitoring reports must be submitted annually for a period of not less than seven years and a surety ensuring fulfillment of the compensation project, monitoring program, and any contingency measure must be provided. The project is conditioned to require submittal of a monitoring plan and an estimate for completion of the monitoring program with construction permit application, and monitoring surety prior to occupancy.

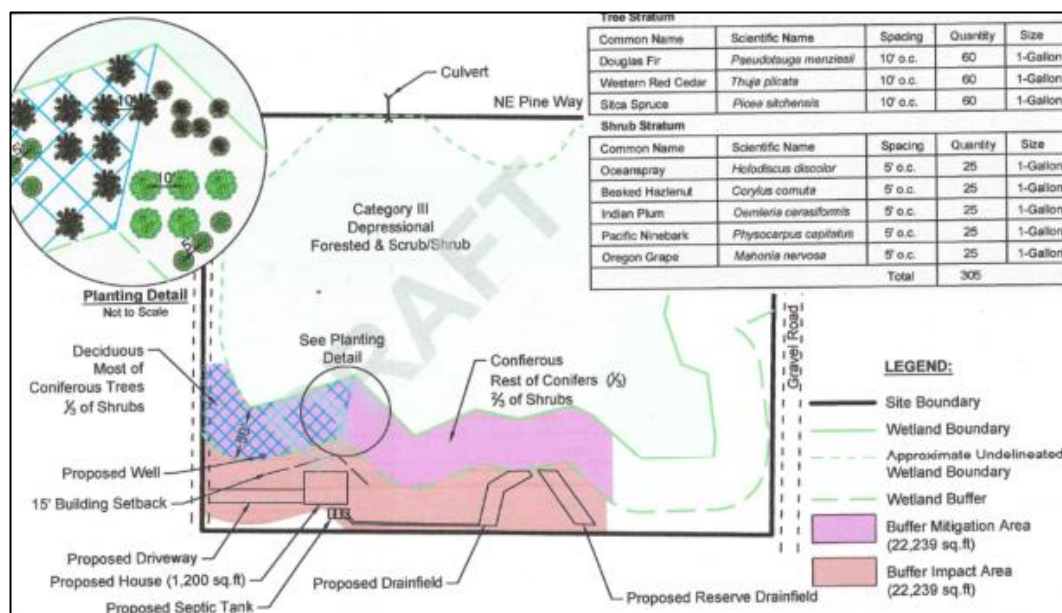


Figure 5: Wetland Delineation Report Ecological Land Services, Inc (October 2015)

- 4) The proposed impact to the critical area is the minimum necessary to allow reasonable use of the property;

The applicant proposes a buffer reduction to 50 feet along the entire south boundary of the wetland, along with a 15 foot building setback from the house. The recommended conditions slightly modify the proposal to provide a 50 foot buffer width and 15 foot structure / hard surface setback between the buffer and the homesite area, and to require the full buffer width outside that area (i.e. from the drainfield east) (condition 3).

Locating the homesite further south would encroach into the 10 foot zoning setbacks from the east and south property line. Additionally, the properties to the south and southwest are traversed by a non-fish seasonal stream (the standard 50 foot width stream buffer does not extend onto the subject property), and similarly encumbered by wetlands and their buffers. Such a proposal would require a zoning variance in addition to an RUE. Additionally, the proposed location of the residence and drainfield take best advantage of the topography of the lot.

The City has considered single-family residential lot coverage of 1,200 square feet reasonable for a lot that is encumbered by critical areas, provided mitigation is proposed to adequately compensate for impacts. As conditioned, the impact to the critical area is the minimum necessary to allow reasonable use.

- 5) The inability of the applicant to derive reasonable use of the property is not the result of actions by the applicant, or of the applicant's predecessor, that occurred after February 20, 1992;

The inability of the applicant to derive reasonable use of the property is not the result of actions by the applicant, or of the applicant's predecessor, that occurred after

February 20, 1992 because the wetland is a naturally occurring feature, and the buffer a regulatory requirement.

- 6) The proposed total lot coverage does not exceed 1,200 square feet for residential development;

In accordance with BIMC 18.12.050, Rules of Measurement, lot coverage means that portion of the total lot area covered by buildings, excluding up to 24 inches of eaves on each side of the building, any building or portion of building located below predevelopment and finished grade. Any portion of a slatted or solid deck located more than five feet above grade shall be counted towards lot coverage.

The applicant has constructed a shed on the property, and this is currently under investigation with the Code Compliance division. It appears that the shed is approximately 200 square feet in size, does not encroach into zoning setbacks, and is within the required hard surface / structure setback from the standard wetland buffer, albeit in the area furthest from the wetland. The project is conditioned to limit total lot coverage to 1,200 square feet; therefore, the shed will likely be removed unless the proposed residence is modified to ensure total lot coverage does not exceed 1200 square feet (condition 2).

- 7) The proposal does not pose an unreasonable threat to the public health, safety, or welfare on or off the property;

As conditioned, the project does not pose a threat to public health, safety, or welfare. The applicant submitted a geotechnical evaluation of the location and foundation system of the residence. Due to the hydric soils on the site and the proximity of the drainfield to neighboring properties, the recommended conditions include a requirement that the applicant include geotechnical evaluation of the location of related elements, including the drainfield and stormwater elements (condition 5).

- 8) Any alterations permitted to the critical area are mitigated in accordance with mitigation requirements applicable to the critical area altered;

A mitigation plan must provide for goals and objectives that are related to the functions and values of the wetland, in accordance with wetland mitigation plan guidance found in BIMC 16.20.180.G.

According to the wetland report, there is high potential for improving water quality and habitat through landscaping. The proposed mitigation plan introduces native species including spruce, hazelnut, ocean spray, ninebark and Oregon grape to a priority habitat area which is dominated by alder, Western red cedar and salal. The proposed plantings are intended to improve the structure of the plant community and richness of the plant species, thereby providing opportunity to increase the current low value habitat function. The proposed plant diversification and distribution has the potential to diversify the existing area characteristics, increasing the scrub-shrub vegetation to improve the existing low-value water quality functions.

The wetland report documents extensive existing native vegetation throughout the site, with the exception of some Evergreen blackberry (*Rubus laciniatus*) in the wetland itself, and some holly (*Ilex opaca*) which is within the homesite and mitigation areas (wetland report Figure 2, test plots 5, 6 & 8). The recommended project conditions include removal of all holly within the proposed mitigation area,

but in order to avoid disturbance within the wetland, removal of the Evergreen blackberry is not a recommended condition.

- 9) The proposal protects the critical area functions and values consistent with the best available science and results in no net loss of critical area functions and values;

The proposal results in no net loss of critical area functions and values. While development necessitates a reduced wetland buffer width, the proposed compensatory mitigation provides the potential to improve water quality and habitat functions overall. As conditioned, the project incorporates protective measures consistent with best available science, including Low Impact Development measures, best management practices for stormwater, and protective fencing to avoid wetland impacts both during and after construction.

- 10) The proposal addresses cumulative impacts of the action;

Development is proposed in a manner that minimizes impact to the wetland and mitigates the reduction of the wetland buffer width with dense, diversified plantings within the reduced buffer. Temporal impacts are addressed with protective measures, such as construction fencing. Future impacts are addressed by ensuring that compensatory mitigation areas are monitored for success and maintained in perpetuity, in addition to the permanent protective fencing along the reduced buffer boundary.

- 11) The proposal is consistent with other applicable regulations and standards.

The proposal is consistent with applicable regulations and standards, including the Municipal Code and Washington Administrative Code, as documented throughout this report.

Part VI – CONCLUSIONS

In making this recommendation, the City considered public comment, the character of the area in which the property is located, the applicable decision criteria of the Municipal Code, all other applicable law, and the necessary documents and approvals. The proposed development, as modified by recommended conditions, is consistent with the goals and policies of the Comprehensive Plan and complies with all applicable Municipal Code regulations.

The application is properly before the Hearing Examiner for decision.

A land use permit automatically expires and is void if the applicant fails to file for a building permit or other necessary development permit within three years of the effective date of the permit unless (a) the applicant has received an extension for the permit; or (b) the permit provides for an extended time period.

Any decision of the Hearing Examiner may be appealed in accordance with BIMC Chapter 2.16.020.R.2.

Recommended Conditions:

1. Except as provided in these conditions of approval, all construction plans and constructions activities shall substantially comply with the plans approved through this Reasonable Use Exception.
2. Total lot coverage is limited to 1,200 square feet. Lot coverage is measured as the total lot area covered by buildings, excluding up to 24 inches of eaves on each side of a building. Any portion of a slatted or solid deck located more than five feet above grade shall be counted towards lot coverage.
3. The homesite area, which includes the dwelling and necessary infrastructure, shall provide a 50 foot wide buffer from the edge of the wetland and 15 foot hard surface / structure setback from the buffer. Outside of the homesite area, the full wetland buffer width shall be provided: The homesite area shall not extend east of the reserve drainfield.
4. Prior to any construction activity, including any development, vegetation removal, land clearing, or grading, the applicant shall obtain an applicable permit from the City.
5. Permit application for any construction activity shall include geotechnical evaluation of the location of the drainfield and stormwater elements to ensure that the proposed systems provides for public health, safety and welfare both on and off the property.
6. Permit application for any construction activity shall include a construction fencing plan which, at a minimum, delineates the north and east clearing limits. The fence shall be made of durable material and shall be highly visible. Once the fencing plan is approved by the City, the fencing shall be installed and installation approved by the City prior to any other construction activity.
7. Permit application for any construction activity shall include a compensatory mitigation area monitoring program which is consistent with the requirements of BIMC 16.20.180.G and an estimate for the cost of completion of the monitoring. Monitoring reports shall be submitted annually for a period of seven years. Once the monitoring plan and estimate is approved by the City, and prior to occupancy, the applicant shall provide a surety ensuring fulfillment of the monitoring program, in an amount not less than 50 percent of the approved estimate.
8. Prior to occupancy of the residence, a split-rail fence shall be installed for the entire length of the common boundary between the buffer and the hard surface structure setback. The fence shall be depicted on the submitted building permit plans.
9. Prior to occupancy of the residence, two signs indicating the presence of a protected wetland buffer shall be placed on the fence (north and east). Signs shall be made of metal or a similar durable material and shall be between 64 and 144 square inches in size.
10. All holly (*Ilex opaca*) within the compensatory mitigation area shall be removed.
11. All work within the compensatory mitigation area, including planting and invasive species removal, shall be with hand labor or hand-held equipment
12. All mitigation plantings shall be installed prior to occupancy. At the discretion of the Department of Planning and Community Development, if deemed necessary to ensure plantings are accomplished during an optimal season, a planting performance assurance device shall be provided in accordance BIMC 16.20.160.
13. The applicant shall submit a recorded notice to title to document the presence of the wetland, buffer and compensatory mitigation planting area. The notice shall be recorded with the Kitsap County Auditor prior to the issuance of construction permit for the residence.

14. The applicant shall comply with the following conditions to the satisfaction of the City Engineer:
- A. Existing access to the Pine Way right-of-way shall be improved to the standard paved residential driveway approach detail (City of Bainbridge Island Design and Construction Standards) DWG 8-170. A waiver to this condition may be requested during building permit review if the applicant demonstrates to the City Engineer's satisfaction that the adverse effect of additional hard surface from a paved road approach in a wetland buffer would justify overriding City policy on paved road approaches in the public right of way. In this case, the existing gravel approach could remain but would be subject to potential grading requirements to ensure a standard road approach connection that protects/ballasts the existing City-maintained asphalt roadway surface in the Pine Way right-of-way.
 - B. All underground utilities (well water, septic transport, power, etc.) shall be routed to minimize site disturbances to the maximum extent feasible.
 - C. Use of soil sterilant to construct the driveway shall be strictly prohibited.
 - D. Consideration shall be given to utilizing minimal excavation foundation systems per the 2012 Low Impact Development Guidance Manual for Puget Sound as means of minimizing impacts to the proposed home site and the adjacent wetland and its buffer. A bid comparison/ analysis shall be submitted demonstrating the applicant has engaged an appropriate design and construction professional to explore alternative foundation systems including stilts, helical piers, and pin piles with grade beams. The bid(s) shall be obtained from a designer or installer with documented experience building with minimal excavation technology and submitted with the building permit for City Development Engineer review prior to building permit review, approval, and issuance.
 - E. Areas outside the building footprint, driveway, septic components and associated drain field and any necessary construction setbacks shall be protected from soil stripping, stockpiling, and compaction by construction equipment through installation of resilient, high visibility clearing limits fencing or equivalent, subject to inspection by the City prior to clearing and construction.
 - F. Hardscaping should be constructed of permeable materials or contain wide permeable jointing where feasible to allow infiltration or shallow subsurface filtration of surface stormwater.
 - G. In addition to complying with BIMC 15.20 and 15.21, surface stormwater from the proposed structures and the developed driveway shall discharge and disperse at a location and in a manner consistent with BMP T5.10B – Downspout Dispersion Systems and BMP T5.12 – Sheet Flow Dispersion. Strong priority shall be given to diffuse flow methods (i.e. BMP C206: Level Spreader, pop-up emitters, diffuser tee or engineered equivalent) to minimize point discharges of surface stormwater into or towards the wetland on site.

SITE ASSESSMENT REVIEW: COMPLETE

Date: July 13, 2020**SmartGov Case No.:** SAR80384**Owner:** Vance Rehder; 206.384.8837; rehdervance@gmail.com**Mailing Address:** P.O. Box 10880 | Bainbridge Island, WA 98110**Applicant/Agent:****Project:** Pine Way SFR**Site Location:** NE Pine Way | Bainbridge Island, WA 98110**Tax Identification No.:** 022402-1-005-2007

This completed Site Assessment Review (SAR) letter serves as an endorsement from the Department of Public Works of the project with recommendations to achieve Low Impact Development (LID) to the maximum extent practicable based on the Department of Ecology's Storm Water Management Manual for Western Washington (SWMMWW). The following LID recommendations apply to the site as it has been presented in the application to reduce vegetation removal, minimize hard surface installation, and mimic natural hydrology. This assessment is non-binding unless the recommendations are as required under BIMC 15.20. Application for permits with the City of Bainbridge Island for which a SAR is required shall be in substantial conformance with this proposal, or, else a new SAR shall be required.

Project Surfaces/Thresholds:

Threshold	Proposed Project
Proposed New/Replaced Hard Surface Total	~2,200 sf
Proposed Land Clearing/Disturbance	~3,000 sf
Existing Site Impervious Coverage	N/A
Total Site Area	206,910 sf
Site Previously Developed Under Adopted Stormwater Regulations (after 2/10/1999)	NO
Type of Development (New or Redevelopment)	New Development

Recommendations

- This application proposes the construction of a new single family residence and associated onsite septic system creating approx. 2200sf of new/replaced hard surfaces on a 207000sf lot that is previously undeveloped and significantly burdened by wetlands/buffer. Subject lot is a regular rectangle (east-west axis) located south of Pine way and East of Taylor avenue, and is accessed via gravel easement road along the western edge of the lot. Property is surrounded on all 4 sides by similar residential development. A mapped wetland occupies roughly 85% of the lot, and the associated buffer nearly fully encompasses the lot. Lot appears relatively flat, topographically. The critical areas mapped to the property will likely influence Low Impact Development decisions. Independent of any land use requirement, the proposed work shall be reviewed, permitted, constructed, and inspected via a Building permit issued by COBI Planning and Community Development Department.
- An application for Building permit will require the project demonstrate compliance with applicable minimum requirements (MRs) # 1 through 5 of the City's adopted stormwater manual.
 - MR#1 – Develop a Permanent Stormwater Site Plan (SSP).
 - MR#2 – Develop a Construction Erosion Control Plan: Also known as Stormwater Pollution Prevention Plan (SWPPP).
 - MR#3 – Source Control of Pollution – Generally N/A for projects of this scope (residential).
 - MR#4 – Preservation of Natural Drainage Systems and Outfalls
 - MR#5 – On-Site Stormwater Treatment

- *Develop a Permanent Stormwater Site Plan (MR #1):* The SSP is the collection of all the technical information and analysis necessary for the City Development Engineer to evaluate a proposed development project for compliance with state and local stormwater requirements and lays out the long term, **permanent** solution for the runoff generated by the project. Contents of the SSP will vary with the type and size of the project, and individual site characteristics, and contain site-appropriate development principles, as required, to retain native vegetation and minimize impervious surfaces to the extent feasible.
 - This project creates less than 5,000sf of new/replaced hard surface so this plan/narrative/drawing **is** required but does **not** have to be created by (or under the direction of) a professional engineer licensed to practice in Washington State.
 - Initial analysis indicates soils which are generally feasible for both infiltration and dispersion (see MR#5 for additional information).
- Compliance with MR#2 *Develop a Construction Erosion Control Plan* requires submittal and approval of a Construction Stormwater Pollution Prevention Plan (SWPPP) with the building permit application, also called an Erosion Control Plan. The SWPPP applies to all land-disturbing activities and temporary impacts associated with construction of the project. A well followed SWPPP with established clearing and disturbance limits and clearly thought out phasing helps to minimize unnecessary destruction of healthy soils during the construction process.
 - Erosion control devices shall be installed to prevent sedimentation of any existing drainage system and to retain sediment on-site during site preparation operations, both airborne (dust) and water borne (sediment laden runoff). Special attention shall be given to preventing sediment from entering the reduced wetland buffer.
 - Temporary construction entrances and access roads shall be constructed of inert materials. Recycled concrete is strictly prohibited.
 - Low Impact BMPs proposed for infiltration must be protected from the compaction of any area intended for infiltration to prevent loss of infiltration capacity (similar to an on-site septic system). Proposed BMP areas should be flagged/marked/fenced early in the site preparation. No tracked/wheeled vehicular traffic, no laydown storage and only very minimal pedestrian traffic should be allowed in those areas.
 - Construction laydown, parking and material storage areas should be carefully located and maintained to minimize vehicular and pedestrian traffic through exposed soil areas.
 - Applicant should complete COBI form B109D (available online) or equivalent and annotate the location of intended erosion control elements on the stormwater site plan drawing and maintain that with the building permit when issued by COBI Planning and Community Development.
- MR#3 *Source Control of Pollution* – Generally N/A for projects of this scope (residential).
- MR#4 *Preservation of Natural Drainage Systems and Outfalls.* COBI expects that existing drainage patterns are anticipated to continue to occur at the natural location to the max extent practicable as a result of this project. The manner by which any runoff is discharged from the project site shall not cause a significant adverse impact to downstream receiving waters and downgradient properties.
- MR#5 – *On-Site Stormwater Management.* Project shall employ on site BMP's to infiltrate, disperse, and retain stormwater runoff on-site to a feasible extent without causing flooding or erosion impacts. Use list #1 (SWMMWW Vol I, I-2.5.5) for each runoff generating surface (Roofs or Other Hard Surfaces) and select the first BMP that is considered feasible in each case.
 - Selection rationale and Infeasibility criteria per the SWMMWW shall be documented in the SSP narrative, especially when a BMP is deemed infeasible and the next lowest priority BMP is considered. Use COBI Form B109b to document infeasibilities and include it as part of the SSP when submitting for review.
 - The site appears to be an excellent candidate for full-dispersion (BMP T5.30), which is the highest priority BMP available and should be utilized if feasible. Flow paths on the property down gradient from the development area could easily exceed the required 100 feet and the contributing area would be less than 10% of the entire site area.
 - All other BMP methods on List No. 1 for both Other Hard Surfaces (Permeable Pavement, Bioretention Areas, and Sheet Flow Dispersion, listed in priority order) and Roof Surfaces (Full Downspout Infiltration,

Bioretention Areas, Downspout Dispersion, and Perforated Stub-Out Connections, listed in priority order) are potentially feasible based on assumed site conditions and should be fully considered in priority order during the drainage design phase.

- Site soils and areas that support infiltration (i.e. shown not to meet the infeasibility criteria of the stormwater manual) would require full-downspout infiltration or a rain garden sized per the Rain Garden Handbook for Western Washington meeting the 'GOOD' performance standard.
- Consider utilizing minimal excavation foundation systems per the 2012 Low Impact Development Guidance Manual for Puget Sound as means of minimizing impacts to the wetland on site. Appropriate design and construction professionals with previous experience building with this technology should be consulted for analysis and comparison to traditional foundation systems.
- Hardscaping should be constructed of permeable materials or contain wide permeable jointing where feasible to allow infiltration or shallow subsurface filtration of surface stormwater.
- Diffuse flow methods (i.e. BMP C206: Level Spreader) should be used to discharge surface stormwater towards the wetland. It is recommended that a level spreader dispersion trench is placed a minimum of 50 feet upgradient of the wetland boundary, although 25 feet is the absolute minimum.

Aquifer Recharge Protection Area (ARPA)

- Any proposed development or activity requiring a site assessment review (SAR), located within the R-0.4, R-1 or R-2 zoning designation, requires designation of an Aquifer Recharge Protection Area (unless exempt under BIMC 16.20.100.E.1(a-d)). Initial Public Works evaluation is that this property **will likely** require designation of an ARPA, although the lot size may contribute to an exemption.
 - **COBI Planning and Community Development holds the final determination authority for ARPA designation and compliance and will address this requirement during the permit review process.** If you have questions about the Aquifer Recharge Protection Area (ARPA) or other critical areas requirements for critical areas located on or adjacent to your property, please contact the Planning Department at PCD@bainbridgewa.gov or (206) 780-3770.

Other design considerations

- Retaining or planting trees within 20 feet of hard surfaces where feasible is recommended to reduce peak stormwater runoff amounts.
- Placement of any rain garden, infiltration system and/or downspout dispersion systems shall comply with the [Kitsap County Health Ordinance 2008A-01](#) for setbacks from wells, primary septic fields and reserve areas, and septic system components. (see Table 1B of the ordinance). It is highly recommended you include any proposed stormwater measures with the septic BSA to avoid future permitting conflicts.
- Location of survey elements (property corners/lines) and existing surface features (driveway, drain fields, wetlands, etc.) shall be derived from survey completed by a Public Land Surveyor certified to practice in Washington State for the building permit application submittal documentation.
- It is COBI policy that the surfacing material for driveways (or easement roads accessed by a new SFR) abutting a public roadway shall match the material of the roadway (asphalt in this case) from the existing edge of pavement to the back of the right of way. An asphalt paved road approach per COBI Design and Construction Standards and Specifications (DCSS) is required from edge of existing pavement on Pine Way NE to back of right of way/property line (see COBI standard drawing 8-170).
 - A separate Road Approach Application available from Public Works or online shall be a required submittal with the building permit documentation. The road approach for the house will be reviewed and approved as part of the overall permit review process.
 - The driveway/road approach will be assumed to require a driveway culvert (COBI drawing 8-175R,) unless it can be demonstrated to the city engineer that the absence of a culvert does not alter existing roadside drainage patterns and there is no risk of flooding damage to existing roadway prism or adjacent properties during the design storm event.

Summary

These recommendations are not fully inclusive of all requirements for the site proposal and do not constitute an approval, permit, or a planning level review (or an endorsement of any required land use approval/plat amendment request required for approval). They represent a site-specific analysis and review of low impact development principles based on the project proposal and define some of the civil site design and documentation requirements going forward in the permitting process for this project. Please don't hesitate to contact COBI Development Engineering with any questions or concerns. This letter will be required as a submittal with the follow-on application for the Building Permit Application associated with the Reasonable Use Exception/Single Family Residence on this site.



Paul Nylund, P.E.
Development Engineer
Public Works, Engineering



July 29, 2020

Vance Rehder
PO Box 10880
Bainbridge Island, WA 98110

Re: Preapplication Conference Summary City File No. PLN50583A PRE

Dear Mr. Rehder,

Thank you for meeting with City staff and the Deputy Fire Marshal on July 28 to discuss single-family residential development of the 4.75 acre undeveloped property located on Pine Way (T.P.N. 022402-1-005-2007). A summary of the conference discussion and City staff review follows, along with submittal requirements for project application review.

The property is encumbered by wetland critical areas and their buffers, in addition to a stream and related buffer in the southwest corner of the property. Critical areas are regulated through [BIMC 16.20](#) Critical Areas.

The proposal for single-family residential development requires a Reasonable Use Exception (RUE), which requires a quasi-judicial decision by a Hearing Examiner. The project is subject to review under the State Environmental Policy Act (SEPA).

The submitted wetland delineation was conducted in August, 2015, and in accordance with BIMC 16.20.140, wetland delineations are valid for five years from the date of the delineation. As discussed during the conference, in order to avoid the requirement to provide a new delineation, I encourage you to submit complete application for the RUE within a timeframe which allows staff sufficient time to intake, route and review the application for completeness (within the next week or two).

The submitted wetland report contains a soils discussion which confirms that there are hydric soils on the site, and refers the reader to figure 3 of the report for the U.S.D.A Natural Resources Conservation Service soils mapping, but figure 3 does not contain this information, nor am I able to find the information elsewhere in the report.

During the conference, both the Development Engineer and I expressed concern about the planned foundation of the home with respect to the hydric soils on the site. The International Building Code requires that buildings and structures be constructed to safely accommodate all loads and foundation construction must be capable of transmitting the loads to the supporting soil. Fill soils that support footings and foundations must be designed, installed and tested in accordance with accepted engineering practice.

Because the RUE application must demonstrate that the proposed impact to the critical area is the minimum necessary to allow reasonable use of the property, and that the proposal does not pose an unreasonable threat to the public health, safety, or welfare, on and off the property, the supporting materials for the application must include a geotechnical evaluation of the location and foundation system of the residence and related elements, including the drainfield and stormwater elements. The

evaluation must be conducted by a geotechnical engineer licensed to practice in the State of Washington.

Because I realize that it may take some time to obtain this evaluation, I ask that you provide the estimated date that the geotechnical evaluation will be submitted to the City when you submit application for the RUE; this will allow the City to publish with some degree of accuracy the date of the hearing upon deeming the application complete.

Please do not hesitate to contact me ktayara@bainbridgewa.gov or 206.780.3787 in the event you have any questions.

Thank you,



Kelly Tayara, Senior Planner

Footnote

¹ BIMC 18.12.050 Rules of measurement.

- K. Lot Coverage. "Lot coverage" means that portion of the total lot area covered by buildings, excluding up to 24 inches of eaves on each side of the building, any building or portion of building located below predevelopment and finished grade. Any portion of a slatted or solid deck located more than five feet above grade shall be counted towards lot coverage. Also excluded are ground-mounted accessory small wind energy generators, solar panels, composting bins, rain barrels/cisterns, and covers designed to shade ground-mounted heat pumps and air conditioners to increase their efficiency.

Please note that information provided at the pre-application conference and in this letter reflects existing codes and standards, currently available information about the site and environs, and the level of detail provided in the pre-application conference submittal. Comments provided pursuant to pre-application review shall not be construed to relieve the applicant of conformance with all applicable fees, codes, policies, and standards in effect at the time of complete land use permit application. The comments on this proposal do not represent or guarantee approval of any project or permit. While we have attempted to cover as many of the Planning, Engineering, Building and Fire related aspects of your proposal as possible during this preliminary review, subsequent review of your land use permit application may reveal issues not identified during the initial review. If the city's pre-application review indicates that the City intends to recommend or impose one or more conditions of permit approval, and if the applicant objects to any of said conditions, the applicant is hereby requested and advised to provide written notice to the City of which conditions the applicant objects to and the reasons for the applicant's objections.

General Information	
Pre-Application Conference Date:	July 28, 2020
Project Name and Number:	Rehder PLN50583A
Project Description:	Habitat buffer reduction to construct single family residence and drainfield on a property encumbered by wetland and buffer.
Project Address:	xxxx Pine Way
Tax Parcel Number(s):	022402-1-005-2007
Lot Size:	4.75 acre
Zoning/Comp Plan Designation:	R-1 / Residential
City Project Manager:	Kelly Tayara, Senior Planner ktayara@bainbridgewa.gov 206.780.3787

Land Use Review Process			
Required Land Use Application / Review			
<ul style="list-style-type: none"> To request an application submittal appointment, sign up here https://www.bainbridgewa.gov/1110/Planning-and-Building-Submittal-Appointm The basic submittal requirements are found in the Administrative Manual Required additional plans, studies, reports, and any other requirements for application submittal: <ul style="list-style-type: none"> SEPA checklist Geotechnical Evaluation or the estimated date that this will be submitted to the City The Master Land Use Application is here https://www.bainbridgewa.gov/DocumentCenter/View/7982/Master-Application-PDF Permit fees for applications / reviews identified in this letter (Due at application submittal): <table border="1" data-bbox="334 1360 1385 1413"> <tr> <td>Reasonable Use Exception</td><td>\$ 3,816.00</td></tr> </table> 		Reasonable Use Exception	\$ 3,816.00
Reasonable Use Exception	\$ 3,816.00		
Application Review Process / Timeline			
<p>Land use review procedures are found in BIMC 2.16</p> <ul style="list-style-type: none"> Public Notice Requirements for Land Use Applications BIMC 2.16.020.K <ul style="list-style-type: none"> Within 28 days after receiving a land use permit application, the Department will deem the application complete or incomplete. Within 14 days of complete application, the Department shall publish a Notice of Application, Hearing, and SEPA comment period, as applicable. Application Time Frames <ul style="list-style-type: none"> Within 120 days of complete application, the Department should issue decision on land use applications. Any period during which a request for correction, modification, or additional information necessary for review remains outstanding is excluded from the 120 day period. 			

Bainbridge Island Municipal Code Requirements
Critical Areas BIMC 16.20
BIMC 16.20.080 Reasonable Use Exception
BIMC 16.20.100 Aquifer Recharge Area
Zonng BIMC Title 18
<p>Zoning: R-1</p> <p>Building setback: Front lot line (2) 25 feet; Side lot line (2) 10 feet; rear lot line N/A</p> <p>Note: Add 4 feet to each front setback and five feet to each side setback for each story over two. A story is that portion of a building included between the upper surface of a floor and the upper surface of the floor or roof next above. For example, two floors above a garage would be considered a three-story home.</p> <p>Allowable lot coverage² 15% = approximately 31,036 square feet maximum</p> <p>Maximum height 30 feet</p> <p>Please see Rules of Measurement and Permitted Setback / Height Modifications</p>

Department/Agency Comments
Public Works Department:
Development Engineer Paul Nyland provided the comment during the conference. Mr. Nyland can be reached at 206.780.3783 or panyland@bainbridgewa.gov
Bainbridge Island Fire District Comment:
Deputy Fire Marshal Jackie Purviance, who may be reached at jpurviance@bifd.org or 206.842.7686, provided the attached comment.



MEMO

Date: July 8, 2020
To: Kelly Tayara, Planning Department
From: Jackie Purviance, Deputy Fire Marshal
Re: Rehder PRE PLN50583A PRE

The submittal has been reviewed resulting in the following comments:

1. Any future development shall comply with all provisions of the adopted Fire Code.
2. Fire apparatus access roads shall be not less than 12' wide with 13.5 feet overhead clearance. Dead ends greater than 150' require approved turnarounds.
3. The grade of existing private fire apparatus access roads shall not exceed 12%. Private fire apparatus access roads where grades are greater than 12% but not exceeding 15% shall be paved, or in lieu of paving, shall have an automatic fire sprinkler system installed in any new structure. Grades exceeding 15% will require the fire apparatus access road to be paved, all new structures to be equipped with automatic fire sprinkler systems, and special approval by the fire code official.
4. Residential fire sprinklers or a fire hydrant may be required to meet fire flow for future development.



DEPARTMENT OF PUBLIC WORKS - ENGINEERING

MEMORANDUM

Date: July 28, 2020
To: Kelly Tayara, Sr. Planner, Planning and Comm. Development
From: Paul Nylund, P.E., Development Engineer
Subject: PLN50583A PRE – Rehder RUE for SFR

Project Description:

The proposal is to construct a single-family residence (SFR) within a wetland buffer. The subject parcel is identified by tax id 022402-1-005-2007 and is located along the southern edge of NE Pine Way in the City of Bainbridge Island. A pre-application conference was held via online conferencing software on Tues, 28 July 2020.


Comments:

1. Decision criteria for review of an RUE by the City includes a determination of whether the application has proven no reasonable alternative to the proposal with less impact to the critical area or its buffer is possible and whether the impact is the minimum necessary to allow reasonable use of the property. Supporting information addressing the possible minimization of impacts and incorporation of the following recommendations should be provided with the application:
 - a. Preventing further encroachment into the wetland buffer from exterior access points (i.e. exterior walkways through the wetland buffer should utilize a handrail or barrier.
 - b. Hardscaping should be constructed of permeable materials or contain wide permeable jointing where feasible to allow infiltration or shallow subsurface filtration of surface stormwater prior to discharging to the wetland.
 - c. Reduction of construction and long-term use impacts by installing boardwalk style raised external walkways on pier foundations in the wetland buffer should be assessed versus at grade constructed walkways and hardscaping.
 - d. Minimization of other hard surfaces by reduction of the driveway to the minimum necessary.

- e. Consideration of stilt construction or grade beam on pier foundations versus of traditional slab on grade or retained earth and spread footing foundation construction and the impacts of each system should be addressed in the application through an assessment by the wetland biologist.
- 2. The land use application shall demonstrate how storm water shall be handled in conformance with current Bainbridge Island Municipal Code (BIMC) 15.20. The Site Assessment Review (SAR) recommendation letter issued on 7/13/2020 contains further information regarding implementation of Low Impact Development (LID) design.
 - a. Roof stormwater shall be treated according to List No. 1 of the stormwater manual. Diffuse flow methods (i.e. BMP C206: Level Spreader, or, BMP T5.10B: Downspout Dispersion Systems) should be used to discharge roof surface stormwater towards the wetland where full-infiltration on-site is not feasible.
- 3. New access to the COBI ROW shall be improved to the standard paved residential driveway approach detail DWG. 8-170. Road approach may remain as existing gravel approach if determined by City Engineer during Land Use or Building permit review that the adverse effect of additional hard surface from a paved road approach in a wetland buffer would justify overriding COBI policy on paved road approaches in the Public Right of Way.
- 4. The site is not located within the COBI water or sewer service areas.
- 5. Transportation Impact Fees (TIFs) per BIMC 15.30 shall be required for issuance of a building permit for a new single-family residence.
- 6. The driveway access to the site from Pine Way is over 150 feet. Access driveway shall be considered a fire apparatus access road and comply with surfacing, dimensional and loading requirements in addition to any other comments provided by fire marshal.

Please note that information provided in this letter reflects existing codes and standards, currently available information about the site and environs. Comments provided pursuant to preapplication review shall not be construed to relieve the applicant of conformance with all applicable fees, codes, policies, and standards in effect at the time of complete land use permit application. The comments on this proposal do not represent or guarantee approval of any project or permit. While we have attempted to cover as many of the Planning, Engineering, Building and Fire related aspects of your proposal as possible during this preliminary review, subsequent review of your land use permit application may reveal issues not identified during the initial review.

Open with Google Docs



CITY OF BAINBRIDGE ISLAND
MASTER LAND USE APPLICATION
P100

FOR OFFICIAL USE ONLY

PROJECT # _____
PLANNER _____

Project Name: Rehder Pine Way
Parcel Number(s): 022402-1-005-2007
Property Address: Pine Way NE

Type of Application: (Select all that apply)

Tree Removal & Vegetation Management ☐

Zoning Verification Letter ☐

Tree Removal & Vegetation Management ☐

Other: Reasonable Use Exception

Revision: Select ☐ **Type of Revision:** _____

Project Description:

Construct single family residence and drainfield across the south edge of property. Most of the property composed of wetland and buffer. RUE necessary to accomodate residence.

Page 1 / 3

Parcel #	Address	Property Owner
022402-1-005-2007	Pine Way NE	Vance Rehder

Project Contacts (owner, surveyor, engineer, etc)

Property Owner: Vance Rehder

Address: Box 10880

City: Bainbridge Is

State: WA

Zip: 98110

Email: rehder Vance@gmail.com

Phone: 206-384-8837

Name:

Agency:

Address:

Function:

City:

State:

Zip:

Email:

Phone:

Name:

Agency:

Address:

Function:

City:

State:

Zip:

Email:

Phone:

Name:

Agency:

Address:

Function:

City:

State:

Zip:

Email:

Phone:

Authorized Agent (Please attach notarized Owner/Applicant Agreement Form)

Name:

Agency:

Address:

City:

State:

Zip:

Email:

Phone:

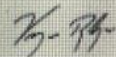
If additional parcels or contacts are required, please attach additional sheets

Applications **must be submitted by appointment only** by either the owner or the owner's designated agent. Should an agent submit an application, a **notarized Owner/Applicant Agreement** must accompany the application.

Supporting information and/or documents may be required to review your application. If you have questions about specific requirements for your project, please consult with planning staff prior to submitting your application. Submittal requirements for each application are described in the Administrative Manual for Planning Permits.

I affirm, under penalty of perjury, that all answers, statements, and information submitted with this application are correct and accurate to the best of my knowledge. I also affirm that I am the owner or designated agent of the subject site. Further, I grant permission to any and all employees and representatives of the City of Bainbridge Island and other governmental agencies to enter upon and inspect said property as reasonably necessary to process this application.

Vance Rehder



Aug 10 2020

Print Name (Owner)

Signature (Owner)

Date

Print Name (Owner)

Signature (Owner)

Date

Print Name (Owner)

Signature (Owner)

Date

Print Name (Owner)

Signature (Owner)

Date

Print Name (Agent)

Signature (Agent)

Date

**** INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED OR WILL DELAY PROCESSING. ****


CITY OF BAINBRIDGE ISLAND

280 Madison Ave N, Bainbridge Island, WA 98110

 Phone: 206-780-3750 Email: pcd@bainbridgewa.gov

 Website: www.bainbridgewa.gov

 Portal: <https://ci-bainbridgeisland-wa.smartgovcommunity.com/portal>

NOTICE OF INCOMPLETE APPLICATION

Rehder RUE
APPLICATION RECEIVED: August 12, 2020

PERMIT NUMBER: PLN50583A RUE

APPLICANT:
OWNER: REHDER VANCE H
 PO BOX 10880
 BAINBRIDGE ISLAND, WA 98110

PROJECT MANAGER: Kelly Tayara

PROJECT DESCRIPTION: Construct single family residence and drainfield across south edge of lot containing wetland and wetland buffer.

PROJECT LOCATION: NE Pine Way Bainbridge Island

DATE DETERMINATION MAILED: August 18, 2020

TO COMPLETE THIS APPLICATION THE FOLLOWING DOCUMENTS MUST BE SUBMITTED:
*** Environmental (Sepa) Checklist**

The checklist must be signed and the date submitted entered. In general, the questions are applicable to your project. In other words, "NA" is rarely a response that addresses any given question.

For example,

2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known. [help]

Response: NA

Suggested: Typical construction noise for six months and subsequently noise associated with a single-family occupancy.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. [help]

Response: NA

Suggested: None known

c. Proposed measures to reduce or control emissions or other impacts to air, if any: [help]

Response: NA

Suggested: None proposed

Another example is 8b, whether the property has been used as farmland – the response is either yes, or no, or you don't know, but the question is applicable to the project.



CITY OF BAINBRIDGE ISLAND

280 Madison Ave N, Bainbridge Island, WA 98110

Phone: 206-780-3750 Email: pcd@bainbridgewa.gov

Website: www.bainbridgewa.gov

Portal: <https://ci-bainbridgeisland-wa.smartgovcommunity.com/portal>

NOTICE OF INCOMPLETE APPLICATION

* Decision Criteria / Project Narrative

A complete and detailed written statement of the reason(s) for requesting the reasonable use exception including a detailed description of how the proposal will meet the reasonable use exception criteria as defined in BIMC 16.20.080:

The reasonable use exception criteria is found here

<https://www.codepublishing.com/WA/BainbridgeIsland/#!/BainbridgeIsland16/BainbridgeIsland1620.html#16.20.080>

* Site Plan

The requirements for a basic site plan are contained in the Administrative Manual pp 5-6

<https://www.bainbridgewa.gov/DocumentCenter/View/12244/Administrative-Manual-Rev-Dec-2019?bidId=>

Please note: Please submit the information requested within 60 days. Failure to do so will result in cancelation of the application in accordance with the following provision:

BIMC 2.16.020.J Voiding the application due to inactivity. A land use application, whether determined to be complete or incomplete, for which approval has not been granted, may be canceled for inactivity if an applicant fails to respond to the department's written request for revisions, corrections, or additional information within 60 days of the request. The planning director may extend the response period beyond 60 days if within that time period the applicant provides and subsequently adheres to an approved schedule within specific target dates for submitting the full revisions, corrections, or other information needed by the requesting department. (ORD 2004-12 § 1, 2004)

Please do not hesitate to contact me if you have any further questions. I may be reached by telephone at 206-780-3750 (Main) 206-780-3787 (Direct) or email pcd@bainbridgewa.gov (Main) ktayara@bainbridgewa.gov (Direct).

Sincerely,

Kelly Tayara

Senior Planner



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Notice of Complete Application

August 28, 2020

VANCE H REHDER
PO BOX 10880
BAINBRIDGE ISLAND, WA 98110

Re: Reasonable Use Exception
File Name: **Rehder RUE**
File Number: **PLN50583A RUE RUE**
Submitted: August 12, 2020

Dear Mr. Rehder:

The application for the above referenced project is complete in accordance with the submittal requirements located in the *Bainbridge Island Administrative Manual*. A determination of a complete application does not preclude the department from requesting additional information or studies.

Pursuant to *Bainbridge Island Municipal Code* Section 2.16.020(K), the applicant must post a legal notice of application on the property within five days of the publication of notice. The City will provide the notice boards and posting instructions, you must provide the stake/post. Carla Lundgren, Administrative Specialist, will contact you when the notice boards are prepared.

Correspondence concerning this application should make reference to both the file number and file name shown above.

Thank you,

Kelly Tayara, Project Manager
ktayara@bainbridgewa.gov 206-780-3787



PLANNING & COMMUNITY DEVELOPMENT
 280 MADISON AVENUE NORTH | BAINBRIDGE ISLAND, WA 98110
 206.780.3750 | PCD@BAINBRIDGEWA.GOV | WWW.BAINBRIDGEWA.GOV

NOTICE OF APPLICATION / SEPA COMMENT PERIOD / HEARING

The City of Bainbridge has received an application for the following project. The public has the right to view and request copies of the official file, provide written comments, and participate in any public meetings or hearings. This notice is posted at the project site, on City Hall kiosks, on the City website, mailed to property owners within 500 feet of the subject property and contiguous properties under the same ownership, and published in the Bainbridge Island Review.

PROJECT DESCRIPTION: Single-family residential development within a wetland buffer

PROJECT NAME: Rehder RUE

PROJECT NUMBER: PLN50583A RUE

PERMIT TYPE: Reasonable Use Exception

TAX PARCEL: 02240210052007

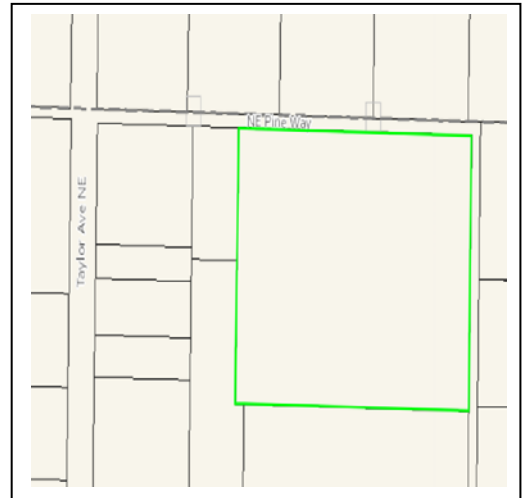
PROJECT SITE: NE Pine Way

DATE SUBMITTED: August 12, 2020

DATE COMPLETE: August 28, 2020

DATE NOTICED: September 4, 2020

COMMENT PERIOD: 14 DAYS



Comments must be submitted no later than 4:00pm on Friday, September 18, 2020.

Public comments may be mailed, emailed or personally delivered to the City using the staff name and contact information provided on this notice. The City will not act on the application before the comment period has ended.

STAFF CONTACT: **Kelly Tayara, Senior Planner**
 pcd@bainbridgewa.gov or (206) 780-3780

PUBLIC HEARING: **Tentative Date** December 10, 2020 at 10:00 am
 Hearings are generally held at Bainbridge Island City Hall, Council Chambers, 280 Madison Avenue North, Bainbridge Island, but may be remote (e.g. via Zoom). Hearing schedule updates may be viewed using this link <https://www.bainbridgewa.gov/434/Hearing-Examiner>

PROJECT DOCUMENTS: [PLN50583A RUE](#)
 To view documents and environmental studies submitted with this proposal, please follow the link above or go to the City website at bainbridgewa.gov, select 'Online Permit Center' and search using the project number. Public records requests may be made through the [Open Public Records Portal https://bainbridgewa.nextrequest.com/](https://bainbridgewa.nextrequest.com/). Instructions for alternate request methods are here <https://www.bainbridgewa.gov/243/Public-Records-Requests>

ENVIRONMENTAL REVIEW: This proposal is subject to State Environmental Policy Act (SEPA) review as provided in WAC 197-11-800. The City, acting as lead agency, has reviewed the proposal for probable adverse environmental impacts and expects to issue a Determination of Non-significance (DNS) threshold determination for this proposal. Utilizing the **optional DNS process** provided in WAC 197-11-355, the comment period specified in this notice may be the only opportunity to

comment on the environmental impact of this proposal. The proposal may include mitigation measures under applicable codes, and the project review process may incorporate or require mitigation measures regardless of whether an EIS is prepared. A copy of the subsequent threshold determination for the proposal may be obtained upon request.

REQUIRED PERMITS:

Reasonable Use Exception; Building Permit

**REQUIRED STUDIES /
ENVIRONMENTAL
DOCUMENTS:**

Geotechnical Engineering Investigation, Wetland Delineation Report and Mitigation Plan

**DEVELOPMENT
REGULATIONS USED FOR
PROJECT MITIGATION**

Bainbridge Island Municipal Code, Design and Construction Standards, Comprehensive Plan

DECISION PROCESS:

The land use application requires a quasi-judicial decision by a hearing examiner pursuant to BIMC 2.16.010 and requires a public hearing pursuant to BIMC 2.16.020. Following the close of the public hearing, the Hearing Examiner will issue a written decision and a notice of the decision will be sent to those parties who comment on this notice or participate in the public hearing. Appeal provisions will be included with the notice of decision.



Notice of Application (NOA)

Permit Number:
PLN50583A RUE

Project Name:
Rehder RUE

Publication Date:
September 4, 2020

Comment period ends
14 days from the
publication date.
Comments can be
submitted to
pcd@bainbridgewa.gov.

**Hearing Date
(Tentative):**
December 10, 2020
@ 10:00AM

Dear Property Owner:

This is to notify you that the City of Bainbridge Island has received a Notice of Application/SEPA Comment Period/Hearing at the location below.

Site Location: NE Pine Way

Project Description: Single-family residential development within a wetland buffer.

For more information on this project or to view the published legal notice, visit our website: <https://www.bainbridgewa.gov/433/Proposed-Land-Use-Actions>

To request a paper copy of this notice, you can:

- > Call us at 206-780-3750
- > Email us at pcd@bainbridgewa.gov

Information subject to change

Exhibit 7B
 PLN50583 A RUE Rehder
 September 4, 2020

Owner	Mailing Address	Mailing City	State	Mailing Zip
21 TARAS PLLC	6979 ISLAND CENTER RD	BAINBRIDGE ISLAND	WA	98110
ALBER CHAD N	4040 EVANS DR	BOULDER	CO	80303
BAILEY KENNETH THOMAS	10242 NE BARKENTINE RD	BAINBRIDGE ISLAND	WA	98110-3714
BERG INGRI GAYLE	4894 TAYLOR AVE NE	BAINBRIDGE ISLAND	WA	98110-2148
BLEVINS EARL & LINDA	10405 NE PINE WAY	BAINBRIDGE ISLAND	WA	98110
BURGESS MICHELLE J	4890 TAYLOR AVE NE	BAINBRIDGE ISLAND	WA	98110
BUTLER REUBEN & MEAGAN	4462 NE MILL HEIGHTS CIR	BAINBRIDGE ISLAND	WA	98110
DAGG MICHAEL J & ISOLDE	4660 NE MILL HEIGHTS CIR	BAINBRIDGE ISLAND	WA	98110
DALTON ROBERT & STEPHANIE G	4517 NE MILL HEIGHTS CIR	BAINBRIDGE ISLAND	WA	98110
DANIELS KEVIN & AGLIAM MARY	4620 NE MILL HEIGHTS CIR	BAINBRIDGE ISLAND	WA	98110
DETTER CHRISTOPHER J	10395 NE PINE WAY	BAINBRIDGE ISLAND	WA	98110
DORMAN CHRISTY M & BODLOVICH MICHAEL T	10490 NE WIGGINS RD	BAINBRIDGE ISLAND	WA	98110
FILIPOVIC PETER & TARA L	10372 NE PINE WAY	BAINBRIDGE ISLAND	WA	98110
FIRE DIST 02 (BAINBRIDGE IS)	8895 MADISON AVE N	BAINBRIDGE ISLAND	WA	98110-1831
FRANCIS VALERIE S	10218 NE PINE WAY	BAINBRIDGE ISLAND	WA	98110
GENKINGER THOMAS	10326 NE BARKENTINE RD	BAINBRIDGE ISLAND	WA	98110-3718
HAIG MARTHA KAREN	4685 TAYLOR AVE NE	BAINBRIDGE ISLAND	WA	98110-3185
HARRINGTON DANIEL J	4732 TAYLOR AVE NE	BAINBRIDGE IS	WA	98110-2147
HOBBS JOHN B & MICHELE F	4557 NE MILL HEIGHTS CIRCLE	BAINBRIDGE ISLAND	WA	98110
HOLLAND LAWRENCE P	10373 NE PINE WAY	BAINBRIDGE ISLAND	WA	98110
HURD JOHN W & HRESKO ELLEN M	4680 TAYLOR AVE NE	BAINBRIDGE ISLAND	WA	98110
KIMBALL FREDERICK JR & PAMELA	4702 TAYLOR AVE	BAINBRIDGE ISLAND	WA	98110
KING WESLEY & ANDREA	4500 TAYLOR AVE NE	BAINBRIDGE ISLAND	WA	98110
LENAHAN AMY S & AARON TEAQUE	4725 TAYLOR AVE NE	BAINBRIDGE ISLAND	WA	98110
MCPHAIL RYAN G & KNUTSON STEPHANIE A	10390 NE WIGGINS RD	BAINBRIDGE ISLAND	WA	98110
MILLER ELIZABETH N	PO BOX 10189	BAINBRIDGE ISLAND	WA	98110
MONIZ JEFFERY MICHAEL & VALERIE LEE	10468 NE BARKENTINE RD	BAINBRIDGE ISLAND	WA	98110-3713
MOYER DIANA M	10455 NE WIGGINS RD	BAINBRIDGE ISLAND	WA	98110-3177
MURPHY THOMAS J & ROCHON RICHARD JOSEPH	268 17TH AVE	SAN FRANCISCO	CA	94121
OLSON GREGORY G & MILLER TRACY M TRUSTEES	4353 NE MILL HEIGHTS CIR	BAINBRIDGE ISLAND	WA	98110
PIERRY ROBERT III & NUCKELS KENDRA	4341 NE MILL HEIGHTS CIR	BAINBRIDGE ISLAND	WA	98110-3707
REHDER VANCE H	PO BOX 10880	BAINBRIDGE ISLAND	WA	98110
SAMILSON TERRY & STELLMACHER ALLYN	PO BOX 10062	BAINBRIDGE ISLAND	WA	98110

September 4, 2020

Owner	Mailing Address	Mailing City	State	Mailing Zip
SAMSON FAMILY LAND CO LLC	8234 FERNCLIFF AVE NE	BAINBRIDGE ISLAND	WA	98110-2936
SKOTHEIM JULIA	2126 PLACE RD	PORT ANGELES	WA	98363-9664
SWENSON JENS R & LYNDA H	4699 NE MILL HEIGHTS CIR	BAINBRIDGE ISLAND	WA	98110
SZIGETHY ZOLTAN	4620 TAYLOR AVE NE	BAINBRIDGE ISLAND	WA	98110
TIRMAN MATTHEW R & AITCHISON CHRISTINA MARGARET INNES	4546 NE MILL HEIGHTS CIR	BAINBRIDGE ISLAND	WA	98110
TOTURA JOHN & ROBIN	5026 TAYLOR AVE NE	BAINBRIDGE ISLAND	WA	98110
TRAFTON BARBARA W & BEALL BRUCE E TRUSTEES	10315 NE PINE WAY	BAINBRIDGE ISLAND	WA	98110-3148
WOHLSSEN ROBERT C & LINDA A	10459 NE PINE WAY	BAINBRIDGE ISLAND	WA	98110-3149
ZWICKER HEIDI	5280 ROSE AVE NE	BAINBRIDGE ISLAND	WA	98110

Accounts Payable Approval Stamp

Exhibit 7C

Vendor Name: BAINBRIDGE REVIEW

Vendor Number: 55-8
(If Available)

Amount approved for payment: \$66.00

Reviewed by (e-sign): _____

Initial if unable to
e-sign:

cjl

Approved by (e-sign): _____

Initial if uable to
e-sign:

cjl

Date Approved (mm/dd/yyyy):

ORG: 63470586

OBJ: 544000

PRJ:

Contract #:

PO#:

Comments
or
Questions:

Received by: _____

Rev. 04/01/20 CEM
For Internal Use Only



Legal Invoice

Date: 09/04/2020

Sound Publishing, Inc.
Unit Attn: A/R
PO Box 930
Everett WA 98206-0930

Bainbridge Island Review

Bill To:

City of Bainbridge Island-LEGALS
280 Madison Ave N
Bainbridge Island WA 98110

Customer Account #: 80604980

Legal Description: BIR907590

Legal Description: County Notices

Desc: PLN50583A

Legal #: BIR907590

Ad Cost: \$ 66.00

Ordered By: CARLA LUNDGREN

Published: Bainbridge Island Review

Issues Ordered: 1

Start Date: 09/04/2020 **End Date:** 09/04/2020

Due: \$ 66.00

Please return this with payment. Questions? Call 1-800-485-4920

City of Bainbridge Island-LEGALS
280 Madison Ave N
Bainbridge Island WA 98110

Account #: 80604980
Invoice #: BIR907590
Due: \$ 66.00

Bainbridge Island Review

Affidavit of Publication

State of Washington }

County of Kitsap } ss

Dicy Sheppard being first duly sworn, upon oath deposes and says: that he/she is the legal representative of the Bainbridge Island Review a weekly newspaper. The said newspaper is a legal newspaper by order of the superior court in the county in which it is published and is now and has been for more than six months prior to the date of the first publication of the Notice hereinafter referred to, published in the English language continually as a weekly newspaper in Kitsap County, Washington and is and always has been printed in whole or part in the Bainbridge Island Review and is of general circulation in said County, and is a legal newspaper, in accordance with the Chapter 99 of the Laws of 1921, as amended by Chapter 213, Laws of 1941, and approved as a legal newspaper by order of the Superior Court of Kitsap County, State of Washington, by order dated June 16, 1941, and that the annexed is a true copy of BIR907590 PLN50583A as it was published in the regular and entire issue of said paper and not as a supplement form thereof for a period of 1 issue(s), such publication commencing on 09/04/2020 and ending on 09/04/2020 and that said newspaper was regularly distributed to its subscribers during all of said period.

The amount of the fee for such publication is \$66.00.

Dicy Sheppard

Subscribed and sworn before me on this
4th day of September

2020

Linda Phillips

Notary Public in and for the State of
Washington.

City of Bainbridge Island-LEGALS | 80604980
CARLA LUNDGREN



NOTICE OF APPLICATION

Notice is hereby given that the City of Bainbridge Island Planning & Community Development has received a Notice of Application/SEPA Comment Period/Hearing for the following development proposal(s).

Project Name: Rehder RUE

Project Number: PLN50583A RUE

Site Location: NE Pine Way

Project Description: Single-family residential development within a wetland buffer

Tentative Public Hearing Date/Time: December 10, 2020 @ 10:00AM

Location of Hearing: 280 Madison Ave N or Remote via Zoom (TBD)

COBI Staff Planner: Kelly Tayara (206) 780-3780

Any person may comment on the proposed application and/or request a copy of any decision. Only persons of record may appeal the decision. Contact the COBI Staff Planner listed above with questions, concerns and/or a request to receive further notice in reference to this project.

Comments must be submitted no later than 4:00PM on Friday, September 18, 2020. Comments can be submitted to pcd@bainbridgewa.gov or Planning & Community Development - 280 Madison Ave N, Bainbridge Island, WA 98110.

For more information on this project or to view the published legal notice, visit <https://www.bain>

bridgewa.gov/433/Proposed-Land-Use-Actions
Date of first publication:
September 4, 2020
Date of last publication:
September 4, 2020
(BIR907590)



CERTIFICATE OF POSTING

I, Vance Rehder, certify that the following sign(s)

- ☒ Proposed Land Use Action
- ☐ Tree and Vegetation Removal Permit
- ☒ Public Hearing
- ☐ Public Participation Meeting
- ☐ Other _____

Sep 4 2020

were posted on _____ for the following application at the address listed below:
(date)

Rehder Pine Way

Project Name - _____
PLN50583A RUE

Permit Number - _____
Pine Way

Physical Property Address - _____
02240210052007

Tax Assessor Number(s) - _____

I declare under the penalty of the perjury laws of the State of Washington that the foregoing is correct.

Vance Rehder

Signature

Sep 4 2020

Date

Instructions for posting signs:

- Sign must be posted within 5 days of Notice of Application or permit issuance.
- Sign must be posted where it is continually and clearly visible to passersby and neighbors.
- Sign must be posted overlooking the water on any waterfront property.
- Sign must be on the subject property, NOT in the right-of-way.
- Sign must remain in place until project completion.
- Upon project completion and/or final decision, the applicant is responsible for removing signs.

Email completed form within 48 hours of posting the signs to:

pcd@bainbridgewa.gov

Please note: Paper copies WILL NOT be accepted. Submit via email only.

CITY OF BAINBRIDGE ISLAND ENVIRONMENTAL (SEPA) CHECKLIST

LEFT COLUMN TO BE COMPLETED BY APPLICANT.

FOR STAFF USE ONLY

A. background [\[help\]](#)

1. Name of proposed project, if applicable: [\[help\]](#)

Rehder Pine Way

2. Name of applicant: [\[help\]](#)

Vance Rehder

3. Address and phone number of applicant and contact person: [\[help\]](#)

Box 10880 Bainbridge Is 98110

206-384-8837

4. Date checklist prepared: [\[help\]](#)

July 31 2020

5. Agency requesting checklist: [\[help\]](#)

City of Bainbridge

6. Proposed timing or schedule (including phasing, if applicable): [\[help\]](#)

1. Complete any dirt work including foundation and septic during dry months

2. construct residence

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain. [\[help\]](#)

No.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. [\[help\]](#)

-Wetland Delineation

-Geotech Report

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. [\[help\]](#)

No.

Agree

**CITY OF BAINBRIDGE ISLAND
ENVIRONMENTAL (SEPA) CHECKLIST**

LEFT COLUMN TO BE COMPLETED BY APPLICANT.

FOR STAFF USE ONLY

10. List any government approvals or permits that will be needed for your proposal, if known. [\[help\]](#)

Reasonable Use
Exception and Building
Permit

Reasonable Use Exemption

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.) [\[help\]](#)

Construct single family residence and associated drain field across south edge of property. 4.75 acre property is mostly covered by wetland and buffer.

Agree

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. [\[help\]](#)

Travel to Eagle harbor drive and continue to Taylor Ave.
Turn right on Taylor and travel south to Pine Way.
Turn Left and drive 200ft, parcel is to the right (south)

T.P.N. 02240210052007

NW1/4 of the NW1/4 of the NE1/4 of Sec 2 township 24n range 2e

B. ENVIRONMENTAL ELEMENTS [\[help\]](#)

1. Earth

a. General description of the site [\[help\]](#)
(circle one): Flat, rolling, hilly, steep slopes, mountainous,

other Flat

Agree

**CITY OF BAINBRIDGE ISLAND
ENVIRONMENTAL (SEPA) CHECKLIST**

LEFT COLUMN TO BE COMPLETED BY APPLICANT.

FOR STAFF USE ONLY

b. What is the steepest slope on the site (approximate percent slope)? [\[help\]](#)

No significant slopes on property.

Agree

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils. [\[help\]](#)

Kapowsin gravelly ashy loam

& McKenna gravelly loam

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe. [\[he\]](#)

No unstable soils.

Agree

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill. [\[help\]](#)

Less than 50 cubic yards sloping away from residence to maintain natural drainage.

Agree

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. [\[help\]](#)

No. Property is flat.

Agree

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? [\[help\]](#)

1.4%

Agree

a. Proposed measures to reduce or control erosion, or other impacts to the earth, if any: [\[help\]](#)

Preserving natural vegetation, installation of silt fence, cover or mulch any exposed soil.

Agree

**CITY OF BAINBRIDGE ISLAND
ENVIRONMENTAL (SEPA) CHECKLIST**

LEFT COLUMN TO BE COMPLETED BY APPLICANT.

FOR STAFF USE ONLY

2. Air

- a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known. [\[help\]](#)

General construction noise for six months, subsequent noise associated with single family occupancy.

Agree

- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. [\[help\]](#)

None known.

Agree

- c. Proposed measures to reduce or control emissions or other impacts to air, if any: [\[help\]](#)

None proposed.

Agree

3. Water

- a. Surface Water: [\[help\]](#)

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. [\[help\]](#)

Wetland.

Agree

- 1) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans. [\[help\]](#)

Yes, within 200 feet.

Agree

- 2) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material. [\[help\]](#)

No fill will be placed in wetland.

Agree

**CITY OF BAINBRIDGE ISLAND
ENVIRONMENTAL (SEPA) CHECKLIST**

LEFT COLUMN TO BE COMPLETED BY APPLICANT.

FOR STAFF USE ONLY

<p>3) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. [help]</p> <p>No.</p>	<p>Agree</p>
<p>4) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan. [help]</p> <p>No.</p>	<p>Agree</p>
<p>5) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge. [help]</p> <p>No.</p>	<p>Agree</p>
<p>b. Water runoff (including stormwater):</p>	
<p>1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe. [help]</p> <p>1200sq ft roof- downspout dispersion trench Driveway- run off can be sheet flowed onto adjacent vegetated areas to disperse naturally</p>	<p>Under review</p>
<p>2) Could waste materials enter ground or surface waters? If so, generally describe. [help]</p> <p>No.</p>	<p>Agree</p>
<p>3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.</p> <p>No.</p>	<p>Under review</p>
<p>a. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:</p> <p>Minimal grading will be done. Straw bales will be used if a high runoff event occurs</p>	<p>Under review / mitigate in accordance with BMP/Stormwater code</p>

**CITY OF BAINBRIDGE ISLAND
ENVIRONMENTAL (SEPA) CHECKLIST**

LEFT COLUMN TO BE COMPLETED BY APPLICANT.

FOR STAFF USE ONLY

Plants [\[help\]](#)

a. Check the types of vegetation found on the site: [\[help\]](#)

- ☒ deciduous tree: alder, maple, aspen, other
- ☒ evergreen tree: fir, cedar, pine, other
- ☒ shrubs
- ☐ grass
- ☐ pasture
- ☐ crop or grain
- ☐ Orchards, vineyards or other permanent crops.
- ☐ wet soil plants: cattail, buttercup, skunk cabbage, other
- ☐ water plants: water lily, eelgrass, milfoil, other
- ☐ other types of vegetation

b. What kind and amount of vegetation will be removed or altered? [\[help\]](#)

Removal of several alders, one non-landmark cedar and one non-landmark fir

Agree

c. List threatened and endangered species known to be on or near the site. [\[help\]](#)

None known

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any: [\[help\]](#)

Minimal excavation. Use of native plants, rain-garden, minimal lawn

Agree

e. List all noxious weeds and invasive species known to be on or near the site.
Blackberry.

Agree

**CITY OF BAINBRIDGE ISLAND
ENVIRONMENTAL (SEPA) CHECKLIST**

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4. Animals

a. List any birds and other animals which have been observed, or are known to be on or near the site. Examples include: [\[help\]](#)

birds: hawk, heron, eagle, songbirds, other:

mammals: deer, bear, elk, beaver, other:

fish: bass, salmon, trout, herring, shellfish, other :

Songbirds, deer.

Agree

b. List any threatened and endangered species known to be on or near the site.
[\[help\]](#)

None known

c. Is the site part of a migration route? If so, explain. [\[help\]](#)

Pacific Flyway

No.

d. Proposed measures to preserve or enhance wildlife, if any: [\[help\]](#)

None proposed

e. List any invasive animal species known to be on or near the site.

None known

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5. Energy and natural resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc. [\[help\]](#)

Agree – Applicant clarified that both are used for heat 8/25/20 email

Propane, wood for heating.

- b. Would your project affect the potential use of solar energy by adjacent properties?

If so, generally describe. [\[help\]](#)

Agree

No.

- c. What kinds of energy conservation features are included in the plans of this proposal?

List other proposed measures to reduce or control energy impacts, if any: [\[help\]](#)

Agree

Efficient building envelope, high efficiency hvac equipment, efficient water heating

6. Environmental health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste that could occur as a result of this proposal? If so, describe. [\[help\]](#)

Agree

No.

- 1) Describe any known or possible contamination at the site from present or past uses.
- 2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

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3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

4) Describe special emergency services that might be required.

5) Proposed measures to reduce or control environmental health hazards, if any:

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? [\[help\]](#)

Agree

None known.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site. [\[help\]](#)

Agree

Short term construction noise during business hours.

3) Proposed measures to reduce or control noise impacts, if any: [\[help\]](#)

Agree

None proposed.

7. Land and shoreline use

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe. [\[help\]](#)

Property is currently undeveloped land. Proposal will not affect adjacent properties.

Property has a shed on it / adjacent properties contain single-family residential development

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b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use? [\[help\]](#)

No.

Agree

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

No.

Agree

c. Describe any structures on the site. [\[help\]](#)

Shed.

Agree

d. Will any structures be demolished? If so, what? [\[help\]](#)

No.

Agree

e. What is the current zoning classification of the site? [\[help\]](#)

R-1

Agree

f. What is the current comprehensive plan designation of the site? [\[help\]](#)

Unincorporated

Disagree – The property is within incorporated City of Bainbridge Island and within the Residential-2 Comprehensive Plan designation

g. If applicable, what is the current shoreline master program designation of the site? [\[help\]](#)

NA

Agree

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h. Has any part of the site been classified as a critical area by the city or county? If so, specify. [\[help\]](#)

Agree

Yes. Property includes wetland and buffer.

i. Approximately how many people would reside or work in the completed project? [\[help\]](#)

Agree

3 bedroom SFR

j. Approximately how many people would the completed project displace? [\[help\]](#)

Agree

0

k. Proposed measures to avoid or reduce displacement impacts, if any: [\[help\]](#)

Agree

None.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: [\[help\]](#)

Agree

Obtain reasonable use exception

m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:

Agree

None.

8. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. [\[help\]](#)

Agree – no particular income level identified

One SFR.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. [\[help\]](#)

Agree

0

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c. Proposed measures to reduce or control housing impacts, if any: [\[help\]](#)

Agree

None.

9. **Aesthetics**

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed? [\[help\]](#)

Agree

30ft. Lap siding.

b. What views in the immediate vicinity would be altered or obstructed? [\[help\]](#)

none.

Agree

c. Proposed measures to reduce or control aesthetic impacts, if any: [\[help\]](#)

Native plant landscaping. Natural toned siding.

10. **Light and glare**

a. What type of light or glare will the proposal produce? What time of day would it mainly occur? [\[help\]](#)

Agree

None.

b. Could light or glare from the finished project be a safety hazard or interfere with views? [\[help\]](#)

No.

Agree

c. What existing off-site sources of light or glare may affect your proposal? [\[help\]](#)

Agree

None.

d. Proposed measures to reduce or control light and glare impacts, if any: [\[help\]](#)

None.

Agree

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11. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity? [\[help\]](#)
none.

Agree

b. Would the proposed project displace any existing recreational uses? If so, describe. [\[help\]](#)
No.

Agree

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any: [\[help\]](#)
None.

Agree

12. Historic and cultural preservation

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe. [\[help\]](#)
No.

Disagree – homes on two adjacent properties are over 45 years old

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources. [\[help\]](#)
no.

Agree

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c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc. [\[help\]](#)

Agree

None.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

Agree

Obtain reasonable use exception.

Adhere to BMP's.

13. Transportation

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any. [\[help\]](#)

Agree

Will use existing driveway off Pine Way.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop? [\[help\]](#)

Agree

Public transit available where Pine Way meets Taylor Ave.

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate? [\[help\]](#)

Agree

Proposing two stalls to serve the SFR.

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private). [\[help\]](#)

no.

Under review

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e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe. [\[help\]](#)

Agree

no.

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates? [\[help\]](#)

Agree

Two trips per day approximately

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

Agree

No.

h. Proposed measures to reduce or control transportation impacts, if any: [\[help\]](#)

Agree

None.

14. **Public services**

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe. [\[help\]](#)

Agree

No.

b. Proposed measures to reduce or control direct impacts on public services, if any. [\[help\]](#)

Agree

None.

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15. Utilities

- a. Circle utilities currently available at the site: [\[help\]](#)
electricity, natural gas, water, refuse service, telephone, sanitary sewer,
septic system, other electricity, water
- b. Describe the utilities that are proposed for the project, the utility providing the
service, and the general construction activities on the site or in the immediate
vicinity which might be needed. [\[help\]](#)

Agree

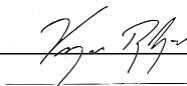
electricity-PSE
Water- KPUD
Septic system

C. Signature [\[HELP\]](#)

The above answers are true and complete to the best of my knowledge. I
understand that the lead agency is relying on them to make its decision.

Signature:

Name of signee Vance Rehder



Position and Agency/Organization Owner

Submitted: Aug 12 2020

CHECKLIST REVIEWED BY:

Kelly Tayara

Project Manager, Department of Planning and Community Development

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

**Wetland Delineation Report
for the
Pine Way Property
Bainbridge Island, Washington**

Prepared for:

Bruce Zwicker
5280 Rose Avenue
Bainbridge Island, Washington 98110
(206) 842-7774

Prepared by:

Ecological Land Services, Inc.
1157 3rd Avenue, Suite 220A
Longview, Washington 98632
(360) 578-1371
Project Number 2313.01

October 2015

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APPENDIX A

Wetland Determination Data Forms

APPENDIX B

Western Washington Wetland Rating Form

SIGNATURE PAGE

The information and data in this report were compiled and prepared under the supervision and direction of the undersigned.

A handwritten signature in cursive script, reading "Joanne Bartlett", written in dark ink.

Joanne Bartlett, PWS
Professional Biologist

INTRODUCTION

Ecological Land Services, Inc. (ELS) was contracted by Bruce Zwicker to conduct a wetland boundary delineation and report for the Pine Way property, which is comprised of parcel number 022402-1-005-2007, within a portion of Section 2, Township 24 North, Range 2 East of the Willamette Meridian, in Bainbridge Island, Washington (Figure 1). This report summarizes findings of the wetland delineation according to the *City of Bainbridge Island Municipal Code (BIMC), Chapter 16.20.160* (2007) for delineation methodology, wetland categorization, and required buffer widths.

METHODOLOGY

The wetland delineation followed the Routine Determination Method according to the U.S. Army Corps of Engineers, *Wetland Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Region, Version 2.0* (U.S. Army Engineer Research and Development Center, 2010).

The Routine Determination Method examines three parameters—vegetation, soils, and hydrology—to determine if wetlands exist in a given area. Hydrology is critical in determining what is wetland, but is often difficult to assess because hydrologic conditions can change periodically (hourly, daily, or seasonally). Consequently, it is necessary to determine if hydrophytic vegetation and hydric soils are present, which would indicate that water is present for long enough duration to support a wetland plant community. By definition, wetlands are those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands are regulated as “Waters of the United States” by the U.S. Army Corps of Engineers (USACE), as “Waters of the State” by the Washington Department of Ecology (Ecology), and locally by Bainbridge Island.

To determine the current presence or absence of wetlands on this property, ELS biologists collected data on vegetation, hydrology, and soils. During the site visit, one wetland was identified across 75 to 85 percent of the property. The wetland is contained completely onsite with a drainage entering the east side via a culvert under the gravel road. The wetland outlets via a culvert under Pine Way near its northwest corner. The southern and eastern boundaries of the wetland were delineated using consecutively numbered fluorescent flagging labeled “WETLAND BOUNDARY”. Wetland boundaries were determined through breaks in topography, changes in vegetation, and evidence of surface hydrology. Vegetation, hydrology, and soil data was collected at eight test plots to verify the wetland boundary delineation (Appendix A). The wetland boundary was mapped using a Trimble handheld Global Positioning System (GPS) unit to show the extent of the wetland on the site map (Figure 2).

SITE DESCRIPTION

The property is located south of Pine Way in the Eagledale area of Bainbridge Island (Figure 1). It is a rectangular-shaped, undeveloped property that is composed of both upland and wetland forest (Figure 2). The property is generally level to undulating with a gradual slope up to the east property line. Residential development lies on all sides of the property with homes to the east and west accessed via existing gravel roads along the east and west property lines.

The delineated wetland lies in a shallow depression that occupies most of the property and is bordered by Pine Way to the north, level upland forest to the south, sloping upland forest to the east, and gravel road to the west. It is composed of both forested and scrub/shrub vegetation communities with a seasonally flooded hydroperiod in the low depressional area and saturated hydroperiod on the gradual eastern slope. There is a culvert under the gravel road to the east that drains from the residential development offsite and flows via a shallow channel across the sloping area. There is a culvert outlet under Pine Way along the north line.

VEGETATION

The wetland is composed of a forested and scrub/shrub system with the scrub/shrub community located in the western portion of the wetland. The forested community comprises most of the wetland area surrounding the scrub/shrub community. Data was collected only along the outer edge of the wetland so includes the forested community. The forested portion of the wetland is dominated by red alder (*Alnus rubra*, FAC) and western red cedar (*Thuja plicata*, FAC) in the forest canopy. The density of the shrub layer depends on the dominant overstory. The shrub layer where red alder makes up the canopy, the dominant shrub species includes salmonberry (*Rubus spectabilis*, FAC), red huckleberry (*Vaccinium parvifolium*, FACU), Indian plum (*Oemleria cerasiformis*, FACU), and evergreen blackberry (*Rubus laciniatus*, FACU). The shrub layer beneath the western red cedar canopy is sparsely vegetated with salal (*Gaultheria shallon*, FACU). The herbaceous layer is sparsely to densely vegetated and is generally dominated by two-leafed false Solomon's seal (*Maianthemum dilatatum*, FAC), trailing blackberry (*Rubus ursinus*, FACU), sword fern (*Polystichum munitum*, FACU), skunk cabbage (*Lysichiton americanus*, OBL), wood fern (*Dryopteris expansa*, FACW), and lady fern (*Athyrium filix-femina*, FAC).

The upland areas around the wetland are dominated by a mixed deciduous and coniferous forest with a mostly sparse high shrub layer and a mostly dense herbaceous layer. The forest canopy is dominated by a deciduous community with red alder, western red cedar, Douglas fir (*Pseudotsuga menziesii*, FACU), and western hemlock (*Tsuga heterophylla*, FACU). The shrub layer is dominated by salmonberry, salal, and holly (*Ilex opaca*, FACU) with lower percentages of red huckleberry and red elderberry (*Sambucus racemosa*, FACU) also present. The herbaceous layer is dominated by trailing blackberry, sword fern (*Polystichum munitum*, FACU), bracken fern (*Pteridium aquilinum*, FACU), deer fern (*Blechnum spicant*, FAC), wood fern, and lady fern.

The dominant vegetation found onsite is recorded on the attached wetland determination data forms (Appendix A). The indicator status, following the common and scientific names, indicates how likely a species is to be found in wetlands. Listed from most likely to least likely to be found in wetlands, the indicator status categories are:

- **OBL** (obligate wetland) – Almost always occur in wetlands.
- **FACW** (facultative wetland) – Usually occur in wetlands, but may occur in non-wetlands.
- **FAC** (facultative) – Occur in wetlands and non-wetlands.
- **FACU** (facultative upland) – Usually occur in non-wetlands, but may occur in wetlands.
- **UPL** (obligate upland) – Almost never occur in wetlands.
- **NI** (no indicator) – Status not yet determined.

SOILS

As referenced on the U.S.D.A. Natural Resources Conservation Service (NRCS 2015) website, Kapowsin gravelly ashy loam, 0-6 percent slopes (22) is mapped on the east, northwest, and southwest portions of the property and McKenna gravelly loam (32) on the remainder of the property (Figure 3). Kapowsin soil is not classified as hydric and McKenna gravelly loam is a common hydric soil of Kitsap County and Bainbridge Island (NRCS 2014). Areas mapped as hydric soils do not necessarily mean that an area is or is not a wetland—hydrology, hydrophytic vegetation, and hydric soils must all be present to classify an area as a wetland.

The evaluated wetland soil at Test Plots 2, 3, and 7 were composed of silt loam to silty clay loam with black to gray (10YR 2/1 to 2.5Y 7/1) soil matrix color. The soil profiles meet the criteria for hydric soil indicator A11 because of the dark surface layer over a depleted matrix in the low soil layers. The evaluated upland soils consisted of gravelly sandy loam with black to reddish-brown (10YR 2/1 to 2.5Y 4/4) soil matrix colors. The high matrix chroma soils in the upland do not meet any of the hydric soil indicators.

HYDROLOGY

Surface water was not present in the wetland test plots and there was no standing water in the soil hole at Test Plots 2 and 7 but the soil was saturated at a depth of 9 inches in Test Plot 3. Water marks are present at all three wetland test plots to indicate the presence of surface water in the wetland during a portion of the growing season. The wetland is seasonally flooded through the lower portions with areas of saturated soil on the eastern slope of the wetland. The sources of hydrology to the wetland appears to be a perched water table, surface water from the culvert under the eastern gravel road, direct rainfall, and areas of groundwater discharge on the east side. The wetland outlets via a culvert under Pine Way at the northwest corner into a ditch that flows into a wetland offsite to the north. There is no stream associated with this wetland. Hydrology was not present and there was no evidence of wetland hydrology in the upland areas.

NATIONAL WETLAND INVENTORY

The National Wetlands Inventory (NWI) map does not show wetlands on or within 250 feet of the property (Figure 4). The findings of the ELS delineation do not agree with the NWI mapping because wetland is present on most of the property. The NWI maps should be used with discretion because they are used to gather general wetland information about a regional area and therefore are limited in accuracy for smaller areas because of their large scale.

BAINBRIDGE ISLAND CRITICAL AREAS

The Bainbridge Island Critical Areas map (BI 2015) shows a large wetland on the property that extends south on the west end (Figure 5). The ELS biologist agrees with the BI map because the wetland was identified in the mapped area but does not extend offsite to the south as shown.

CONCLUSIONS

WETLAND CATEGORIZATION

The wetland system is situated in a depression that begins at High School Road to the north and ends just west of this property. The wetland was rated according to *Washington State Wetlands Rating System for Western Washington-2014 Update* (Rating System) (Hruby 2014). It scored 18 points on the rating form and is considered a Depressional, Category III wetland based on functions (Appendix B). It has moderate value for habitat functions scoring a total of 6 points.

CRITICAL AREA REGULATIONS

The *BIMC Chapter 16.20.160* specifies buffers based wetland category, scores for habitat functions on the rating form, and the intensity of the proposed land use in accordance with the 2004 wetland rating system. Water quality buffers are required for all wetlands with habitat buffer widths added for wetlands that score moderate to high for habitat functions on the rating form. The *BIMC* has not been revised to meet the 2014 rating system scores so does not reflect the new point totals for determining the buffer based on habitat scores. However, Ecology has developed conversion charts that convert the scores for habitat using the 2004 rating system to the scores using the 2014 rating system. The required buffers for Category III wetlands that have moderate scores for habitat and for projects proposing moderate intensity land uses include a 50-foot water quality buffer and a 60-foot habitat buffer for a total buffer width of 110 feet. A 15-foot building and impervious surface setback is specified from the edge of the wetland buffer.

Buffer reductions are permitted by the *BIMC Section 16.20.050* through the buffer averaging process wherein the buffer is reduced in one location and increased in another by the same square footage to create a buffer that averages the required buffer width. The *BIMC* also permits reductions of the habitat buffers for wetlands if it can be documented that the reduction will provide a buffer that provides adequate protection for the wetland. A habitat management plan and buffer mitigation is required as part of this reduction process. Buffer averaging is not feasible on this property because the 110-foot buffer width extends beyond the property boundaries so there are no areas available outside the buffer to compensate for buffer reduction. The reduction of the habitat buffer alone will not result in a width that makes it feasible to construct a single-family

residence. Therefore, the project is proposing a reduction to 25 feet through the reasonable economic use exception.

LIMITATIONS

The conclusions listed above are based on standard scientific methodology and best professional judgment. In our opinion, local, state, and federal regulatory agencies should agree with our conclusions; however, this should be considered a preliminary jurisdictional determination and should be used at your own risk until it has been reviewed and approved in writing by the appropriate regulatory agencies.



Photo 1 was taken from the west end of the property where the driveway will cross to the proposed single-family home. It is taken near where Test Plot 5 was conducted. This photo looks east toward the future homesite.



Photo 2 was taken from the same location as Photo 1. It looks southeasterly across the future driveway and homesite. This area is dominated by young conifer trees growing amongst dense salmonberry and holly.

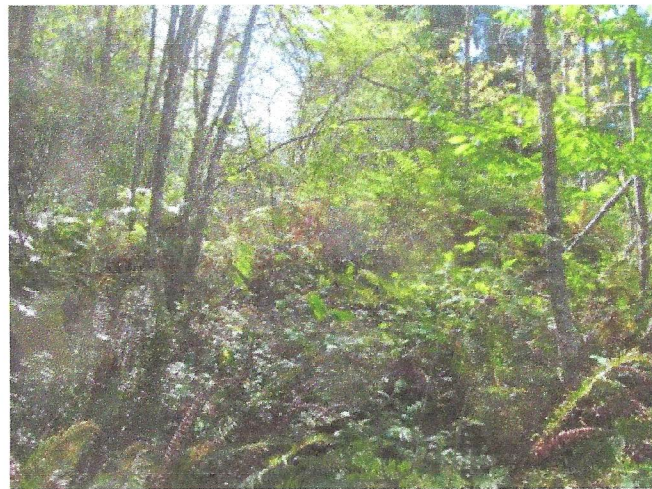


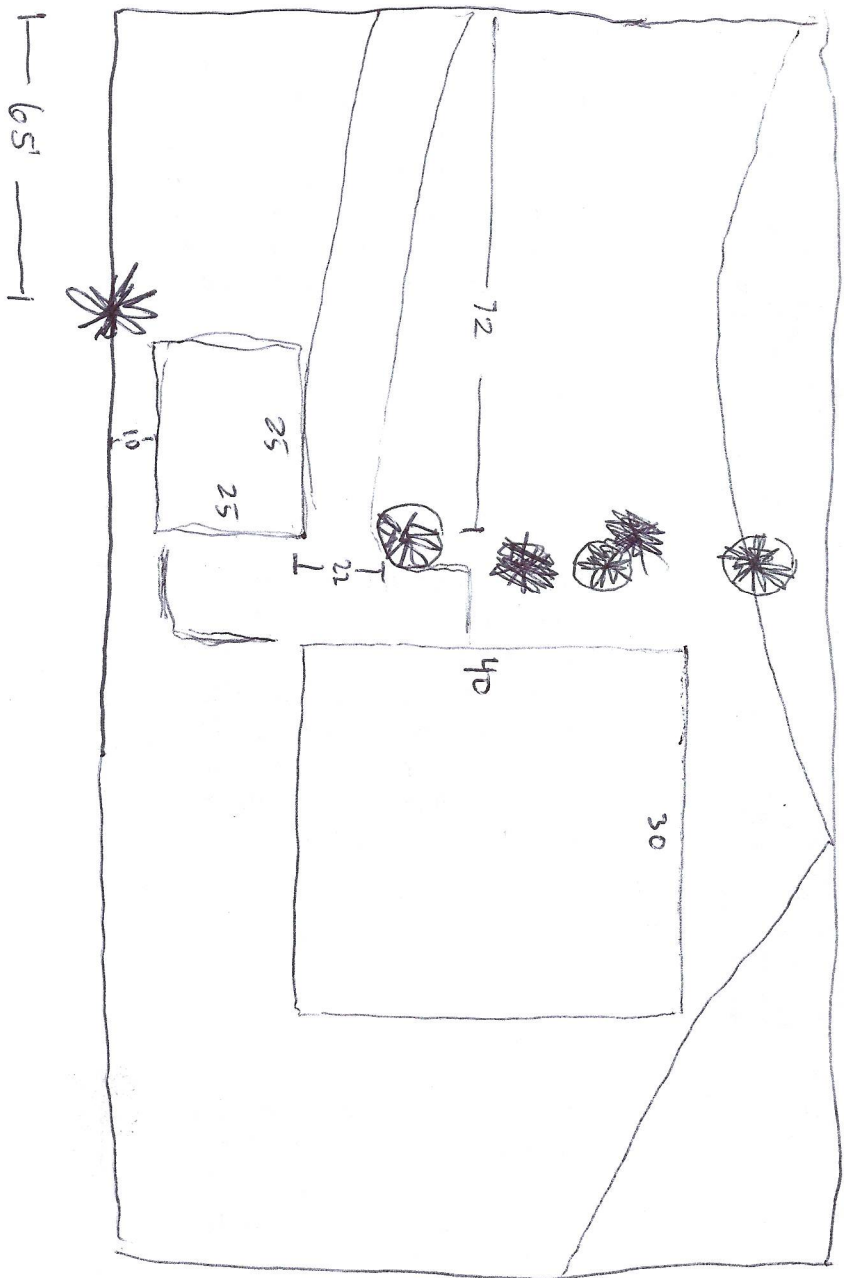
Photo 3 was taken from the same location as Photos 1 and 2. It looks south across the upland area that occupies the southwest corner.



1157 3rd Ave., Suite 220A
Longview, WA 98632
(360) 578-1371
Fax: (360) 414-9305

DATE: 12/14/15
DWN: JB
PRJ. MGR JB
PROJ.#: 2313.01

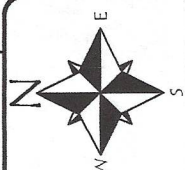
Photoplate 1
Project Name: Pine Way
Property Buffer Mitigation
Client: Zwicker
Kitsap County, Washington





NOTE(S):

1. Aerial from Google Earth™.
2. Site plan provided by Miller Bay Water Company 10-29-15.

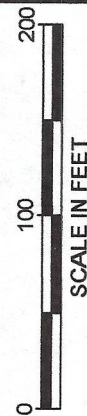
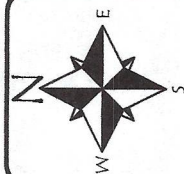


Ecological Land Services

1157 3rd Ave., Suite 220A
Longview, WA 98632
Phone: (360) 578-1371
Fax: (360) 414-9305
www.eco-land.com

DATE: 3/15/16
DWN: JLL
REQ. BY: PRJ. MGR: JB
CHK: PROJECT NO: 2313.01

Figure 3
SITE PLAN
Pine Way Property
Bruce Zwicker
Bainbridge Island, Kitsap County, WA
Section 2, Township 24N, Range 2E, W.M.



1157 3rd Ave., Suite 220A
 Longview, WA 98632
 Phone: (360) 578-1371
 Fax: (360) 414-9305
www.eco-land.com

DATE: 3/15/16
 DWN: JLL
 REQ. BY:
 PRJ. MGR: JB
 CHK:
 PROJECT NO:
 2313.01

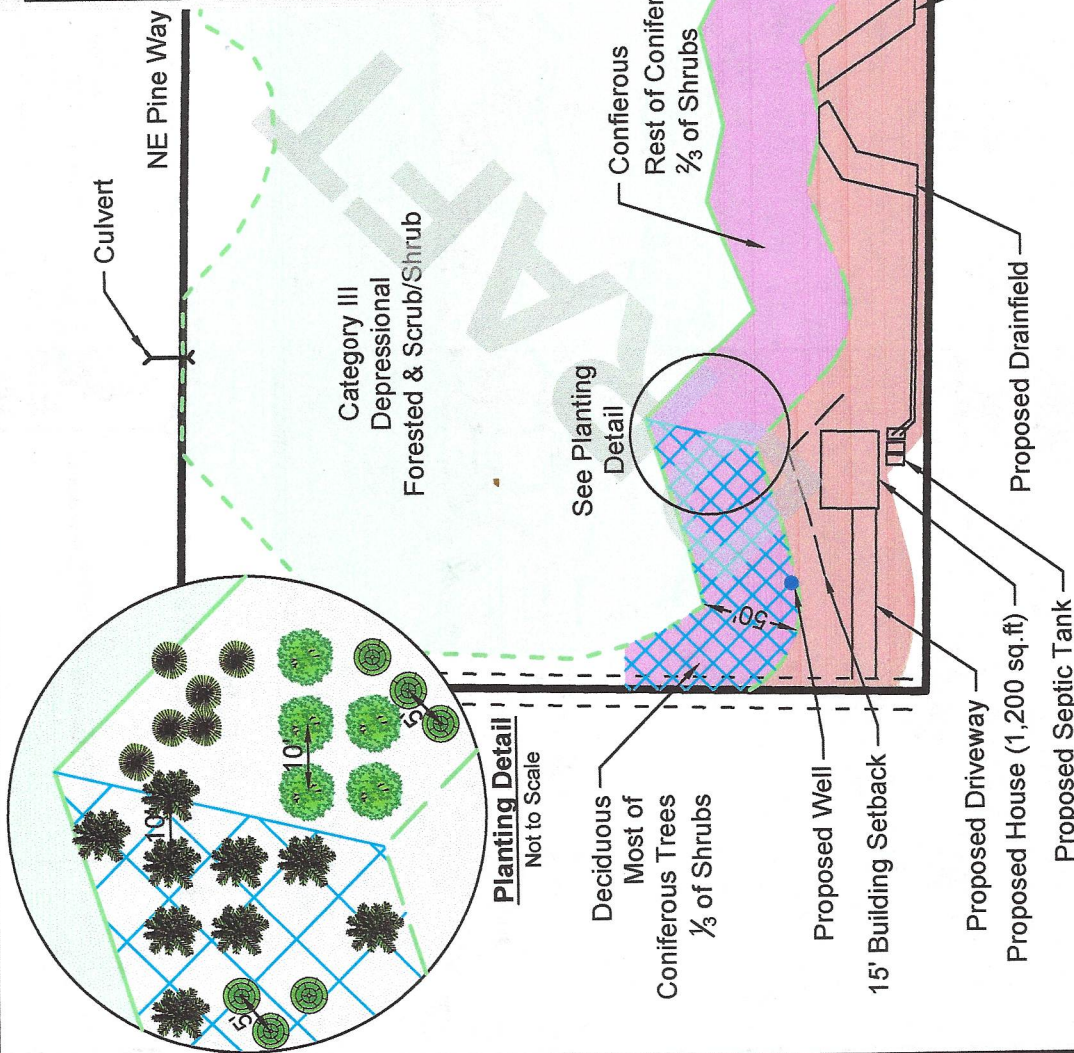
Figure 2
SITE MAP
 Pine Way Property
 Bruce Zwicker
 Bainbridge Island, Kitsap County, WA
 Section 2, Township 24N, Range 2E, W.M.

Tree Stratum

Common Name	Scientific Name	Spacing	Quantity	Size
Douglas Fir	<i>Pseudotsuga menziesii</i>	10' o.c.	60	1-Gallon
Western Red Cedar	<i>Thuja plicata</i>	10' o.c.	60	1-Gallon
Sitka Spruce	<i>Picea sitchensis</i>	10' o.c.	60	1-Gallon

Shrub Stratum

Common Name	Scientific Name	Spacing	Quantity	Size
Oceanspray	<i>Holodiscus discolor</i>	5' o.c.	25	1-Gallon
Beaked Hazelnut	<i>Corylus cornuta</i>	5' o.c.	25	1-Gallon
Indian Plum	<i>Oemleria cerasiformis</i>	5' o.c.	25	1-Gallon
Pacific Ninebark	<i>Physocarpus capitatus</i>	5' o.c.	25	1-Gallon
Oregon Grape	<i>Mahonia nervosa</i>	5' o.c.	25	1-Gallon
			Total	305



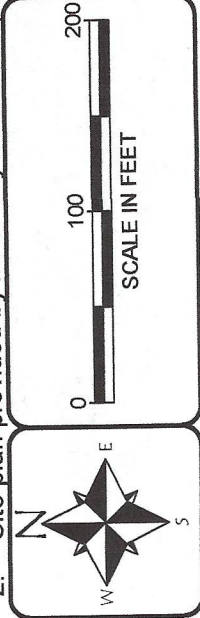
LEGEND:

- Site Boundary
- Wetland Boundary
- Approximate Undelineated Wetland Boundary
- Wetland Buffer
- Buffer Mitigation Area (22,239 sq.ft.)
- Buffer Impact Area (22,239 sq.ft.)

NOTE(S):

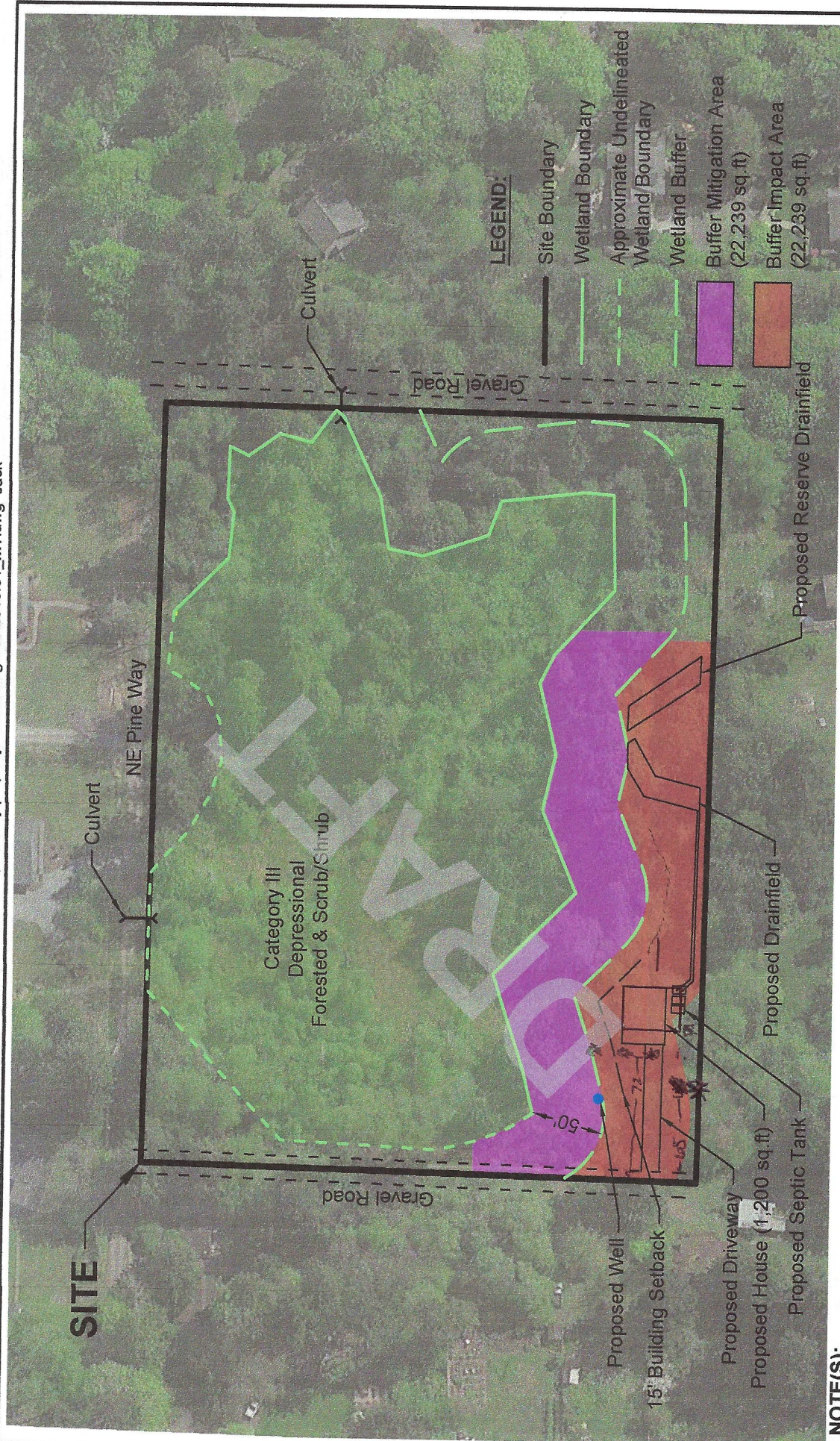
- Aerial from Google Earth™.
- Site plan provided by Miller Bay Water Company 10-29-15.

NOTE: Plants are not to scale and location are approximate as shown. Actual planting locations will be determined in the field, with consideration to the listed spacing and density to produce the most natural appearance possible.



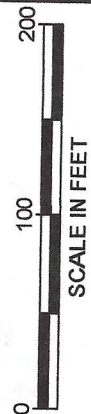
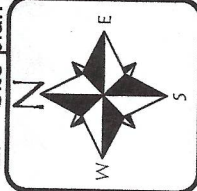
DATE: 3/15/16
DWN: JLL
REQ. BY:
PRJ. MGR: JB
CHK:
PROJECT NO: 2313.01

Figure 5
PLANTING PLAN
Pine Way Property
Bruce Zwicker
Bainbridge Island, Kitsap County, WA
Section 2, Township 24N, Range 2E, W.M.



NOTE(S):

1. Aerial from Google Earth™.
2. Site plan provided by Miller Bay Water Company 10-29-15.



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Fax: (360) 414-9305
www.eco-land.com

DATE: 3/15/16
DWN: JLL
REQ. BY:
PRJ. MGR: JB
CHK:
PROJECT NO:
2313.01

Figure 4
MITIGATION PLAN
Pine Way Property
Bruce Zwicker
Bainbridge Island, Kitsap County, WA
Section 2, Township 24N, Range 2E, W.M.

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

Project Site: Pine Way City/County: Bainbridge Island/Kitsap Sampling Date: 8-21-15
 Applicant/Owner: B Zwicker State: WA Sampling Point: TP 1
 Investigator(s): J. Bartlett Section, Township, Range: S 2 T24N R2 EWM
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 0
 Subregion (LRR): MRLA 2 Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: 22 Kapowsin ashy gravelly loam, 0-6% slopes NWI classification: UPL
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐, Soil ☐, or Hydrology ☐, significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐, Soil ☐, or Hydrology ☐, naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Remarks: Test Plot 1 is located in the upland forest east of the wetland near the southeast corner of the property. This upland area slopes gradually down to the wetland boundary from the east property line. The area is forested and there is no shrub layer with partially bare herbaceous layer.			

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size: 20' diameter)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1. <u>Thuja plicata</u>	<u>15</u>	<u>yes</u>	<u>FAC</u>		Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)	
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67</u> (A/B)	
4. _____	_____	_____	_____		
50% = <u>7.5</u> , 20% = <u>3</u>	<u>15</u>	= Total Cover			
Sapling/Shrub Stratum (Plot size: 20' diameter)				Prevalence Index worksheet:	
1. _____	_____	_____	_____		Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species _____ x1 = _____	
3. _____	_____	_____	_____	FACW species _____ x2 = _____	
4. _____	_____	_____	_____	FAC species _____ x3 = _____	
5. _____	_____	_____	_____	FACU species _____ x4 = _____	
50% = _____, 20% = _____	_____	= Total Cover		UPL species _____ x5 = _____	
Herb Stratum (Plot size: 20' diameter)				Column Totals: _____ (A) _____ (B)	
1. <u>Polystichum munitum</u>	<u>15</u>	<u>yes</u>	<u>FACU</u>	Prevalence Index = B/A = _____	
2. <u>Blechnum spicant</u>	<u>15</u>	<u>yes</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators:	
3. <u>Dryopteris expansa</u>	<u>10</u>	<u>yes</u>	<u>FACW</u>		<input type="checkbox"/> 1 – Rapid Test for Hydrophytic Vegetation
4. <u>Rubus ursinus</u>	<u>5</u>	<u>no</u>	<u>FACU</u>		<input checked="" type="checkbox"/> 2 - Dominance Test is >50%
5. <u>Tiarella trifoliata</u>	<u>5</u>	<u>no</u>	<u>FAC</u>		<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹
6. _____	_____	_____	_____		<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
7. _____	_____	_____	_____		<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹
8. _____	_____	_____	_____		<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
9. _____	_____	_____	_____		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
50% = <u>25</u> , 20% = <u>10</u>	<u>50</u>	= Total Cover			
Woody Vine Stratum (Plot size: _____)				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
50% = _____, 20% = _____	_____	= Total Cover			
% Bare Ground in Herb Stratum _____					
Remarks: The vegetation community in this area has greater than 50% dominance by FAC species so the hydrophytic vegetation criterion is met.					

Project Site: Zwicker-Pine Way

SOIL

Sampling Point: IP 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 2/1	100					silt loam	
4-16	2.5Y 4/3	90	10YR 4/4	10	C	M	silt loam	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix, RC=Root Channel

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soils Present?

Yes ☐ No ☒

Remarks: The soil profile meets none of the hydric soil indicators because the subsurface layer does not meet the definition of a depleted or gleyed matrix even with the presence of redoximorphic features.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) |
| <input type="checkbox"/> High Water Table (A2) | (except MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Stunted or Stresses Plants (D1) (LRR A) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9)
- (MLRA 1, 2, 4A, and 4B)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): _____

Water Table Present? Yes ☐ No ☒ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: There was no water present in this area during the field visit or evidence of water at any time during the growing season so the wetland hydrology criterion is not met.

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

Project Site: Pine Way City/County: Bainbridge Island/Kitsap Sampling Date: 8-21-15
 Applicant/Owner: B Zwicker State: WA Sampling Point: TP 2
 Investigator(s): J. Bartlett Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 0
 Subregion (LRR): MRLA 2 Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: 32 McKenna gravelly loam NWI classification: PFOSS
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐, Soil ☐, or Hydrology ☐, significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐, Soil ☐, or Hydrology ☐, naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Remarks: Test Plot 2 is located along the east boundary of the delineated wetland. The wetland is a depressional system with forested and scrub/shrub communities and a seasonally flooded hydroperiod. This area is within the forested portion of the wetland where there is no high shrub layer and a mostly bare herbaceous understory.			

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size: 20' diameter)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1. <u>Thuja plicata</u>	<u>15</u>	<u>yes</u>	<u>FAC</u>		Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>6</u> (B)	
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67</u> (A/B)	
4. _____	_____	_____	_____		
50% = <u>7.5</u> , 20% = <u>3</u>	<u>15</u>	= Total Cover			
Sapling/Shrub Stratum (Plot size: 20' diameter)					
1. <u>Gaultheria shallon</u>	<u>10</u>	<u>yes</u>	<u>FACU</u>	Prevalence Index worksheet:	
2. _____	_____	_____	_____		
3. _____	_____	_____	_____	Total % Cover of:	
4. _____	_____	_____	_____	OBL species _____ x1 = _____	
5. _____	_____	_____	_____	FACW species _____ x2 = _____	
50% = <u>5</u> , 20% = <u>2</u>	<u>10</u>	= Total Cover		FAC species _____ x3 = _____	
Herb Stratum (Plot size: 20' diameter)					
1. <u>Athyrium filix-femina</u>	<u>10</u>	<u>yes</u>	<u>FAC</u>	FACU species _____ x4 = _____	
2. <u>Blechnum spicant</u>	<u>5</u>	<u>yes</u>	<u>FAC</u>	UPL species _____ x5 = _____	
3. <u>Polystichum munitum</u>	<u>5</u>	<u>yes</u>	<u>FACU</u>	Column Totals: _____ (A) _____ (B)	
4. <u>Tiarella trifoliata</u>	<u>5</u>	<u>yes</u>	<u>FAC</u>	Prevalence Index = B/A = _____	
5. _____	_____	_____	_____	Hydrophytic Vegetation Indicators:	
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
50% = <u>12.5</u> , 20% = <u>5</u>	<u>25</u>	= Total Cover			
Woody Vine Stratum (Plot size: _____)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
50% = _____, 20% = _____	_____	= Total Cover			
% Bare Ground in Herb Stratum _____					
Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					

Remarks: The vegetation community in this area has greater than 50% dominance by FAC species so the hydrophytic vegetation criterion is met.

SOILSampling Point: TP 2**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-5	10YR 2/1	100					fi sa loam	
5-16	2.5Y 7/1	75	10YR 5/6	25	C	M	sa cl loam	

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix, RC=Root Channel**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- | | |
|---|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input checked="" type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

Indicators for Problematic Hydric Soils³:

- | |
|---|
| <input type="checkbox"/> 2 cm Muck (A10) |
| <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Other (Explain in Remarks) |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**

Type: _____

Depth (inches): _____

Hydric Soils Present?Yes ☒ No ☐

Remarks: The soil profile meets hydric soil indicator A11 because there is a depleted matrix with redoximorphic features in the subsurface layer with a dark surface layer less than 12 inches thick.

HYDROLOGY**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) |
| <input type="checkbox"/> High Water Table (A2) | (except MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Salt Crust (B11) |
| <input checked="" type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Stunted or Stresses Plants (D1) (LRR A) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- | |
|--|
| <input type="checkbox"/> Water-Stained Leaves (B9) |
| (MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) |
| <input type="checkbox"/> Frost-Heave Hummocks (D7) |

Field Observations:Surface Water Present? Yes ☐ No ☒ Depth (inches): _____Water Table Present? Yes ☐ No ☒ Depth (inches): _____Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____**Wetland Hydrology Present?**Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: There was no water present in this area during the field visit but there was evidence of surface water for a portion of the growing season so the wetland hydrology criterion is met.

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

Project Site: Pine Way City/County: Bainbridge Island/Kitsap Sampling Date: 8-21-15
 Applicant/Owner: B Zwicker State: WA Sampling Point: TP 3
 Investigator(s): J. Bartlett Section, Township, Range: S 2 T24N R2 EWM
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 0
 Subregion (LRR): MRLA 2 Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: 32 McKenna gravelly loam NWI classification: UPL
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐, Soil ☐, or Hydrology ☐, significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐, Soil ☐, or Hydrology ☐, naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Remarks: Test Plot 3 is located along the east boundary of the delineated wetland and within the forested area. It is downslope of the culvert that crosses the gravel road along the east edge of the property so was very wet during the field visits.			

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size: 20' diameter)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1. <u>Thuja plicata</u>	<u>20</u>	<u>yes</u>	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC:	<u>4</u> (A)
2. <u>Alnus rubra</u>	<u>15</u>	<u>yes</u>	<u>FAC</u>	Total Number of Dominant Species Across All Strata:	<u>9</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>44</u> (A/B)
4. _____	_____	_____	_____		
50% = <u>7.5</u> , 20% = <u>3</u>	<u>15</u>	= Total Cover			
Sapling/Shrub Stratum (Plot size: 20' diameter)				Prevalence Index worksheet:	
1. <u>Rubus spectabilis</u>	<u>20</u>	<u>yes</u>	<u>FAC</u>	Total % Cover of:	Multiply by:
2. <u>Vaccinium parvifolium</u>	<u>10</u>	<u>yes</u>	<u>FACU</u>	OBL species _____	x1 = _____
3. <u>Oemleria cerasiformis</u>	<u>10</u>	<u>yes</u>	<u>FACU</u>	FACW species _____	x2 = _____
4. <u>Rubus laciniatus</u>	<u>10</u>	<u>yes</u>	<u>FACU</u>	FAC species _____	x3 = _____
5. _____	_____	_____	_____	FACU species _____	x4 = _____
50% = <u>25</u> , 20% = <u>10</u>	<u>50</u>	= Total Cover		UPL species _____	x5 = _____
Herb Stratum (Plot size: 20' diameter)				Column Totals: _____ (A)	_____ (B)
1. <u>Lysichiton americanus</u>	<u>20</u>	<u>yes</u>	<u>OBL</u>	Prevalence Index = B/A = _____	
2. <u>Rubus ursinus</u>	<u>20</u>	<u>yes</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators:	
3. <u>Athyrium filix-femina</u>	<u>10</u>	<u>yes</u>	<u>FACU</u>	<input type="checkbox"/> 1 – Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 – Dominance Test is >50% <input type="checkbox"/> 3 – Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 – Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 – Wetland Non-Vascular Plants ¹ <input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)	
4. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
50% = <u>25</u> , 20% = <u>10</u>	<u>50</u>	= Total Cover			
Woody Vine Stratum (Plot size: _____)				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
50% = _____, 20% = _____	_____	= Total Cover			
% Bare Ground in Herb Stratum <u>50</u>					
Remarks: The vegetation community at Test Plot 3 has greater than 50% dominance by FACU species that are growing on low hummocks within this forested mosaic section of the wetland. The dominance by FACU species makes the vegetation problematic but they are considered hydrophytic plants because they are growing with skunk cabbage. The hydric soil and wetland hydrology parameters are both met at this test plot.					

SOILSampling Point: TP 3**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-9	10YR 2/1	100					silt loam	
9-16	2.5Y 2.5/1	90	7.5YR 4/4	10	C	M	sa si loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix, RC=Root Channel**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- | | |
|---|--|
| <input type="checkbox"/> Histic Sol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input checked="" type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**

Type: _____

Depth (inches): _____

Hydric Soils Present?Yes ☒ No ☐

Remarks: The soil profile meets hydric soil indicator A11 because there is a depleted matrix with redoximorphic features in the subsurface layer with a dark surface layer less than 12 inches thick.

HYDROLOGY**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) |
| <input type="checkbox"/> High Water Table (A2) | (except MLRA 1, 2, 4A, and 4B) |
| <input checked="" type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Stunted or Stresses Plants (D1) (LRR A) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9)
(MLRA 1, 2, 4A, and 4B)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) **(LRR A)**
☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): _____
 Water Table Present? Yes ☐ No ☒ Depth (inches): _____
 Saturation Present? (includes capillary fringe) Yes ☒ No ☐ Depth (inches): 9

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Soil saturation was present within 12 inches of the soil surface so the wetland hydrology criterion is met. A shallow water table was not visible in the soil hole.

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

Project Site: Pine Way City/County: Bainbridge Island/Kitsap Sampling Date: 8-21-15
 Applicant/Owner: B Zwicker State: WA Sampling Point: TP 4
 Investigator(s): J. Bartlett Section, Township, Range: S 2 T24N R2 EWM
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 0
 Subregion (LRR): MRLA 2 Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: 22 Kapowsin gravelly ashy loam, 0-6% slopes NWI classification: UPL
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐, Soil ☐, or Hydrology ☐, significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐, Soil ☐, or Hydrology ☐, naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Remarks: Test Plot 4 is located in the upland east of the delineated wetland and south of WB 8. This area is composed of sloping upland that begins at the gravel road to the east and ends at the wetland boundary. The finger of wetland delineated between WB 7 and WB 10 is partially fed by a culvert under the gravel road.			

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size: 20' diameter)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:
1. <u><i>Alnus rubra</i></u>	<u>20</u>	<u>yes</u>	<u>FAC</u>	
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>6</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
4. _____	_____	_____	_____	
50% = <u>10</u> , 20% = <u>4</u>	<u>20</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: 20' diameter)				Prevalence Index worksheet:
1. <u><i>Rubus spectabilis</i></u>	<u>35</u>	<u>yes</u>	<u>FAC</u>	
2. <u><i>Gaultheria shallon</i></u>	<u>30</u>	<u>yes</u>	<u>FACU</u>	OBL species _____ x1 = _____
3. <u><i>Vaccinium parvifolium</i></u>	<u>10</u>	<u>no</u>	<u>FACU</u>	FACW species _____ x2 = _____
4. <u><i>Sambucus racemosa</i></u>	<u>5</u>	<u>no</u>	<u>FACU</u>	FAC species _____ x3 = _____
5. _____	_____	_____	_____	FACU species _____ x4 = _____
50% = <u>40</u> , 20% = <u>16</u>	<u>80</u>	= Total Cover		UPL species _____ x5 = _____
Herb Stratum (Plot size: 20' diameter)				Column Totals: _____ (A) _____ (B)
1. <u><i>Rubus ursinus</i></u>	<u>25</u>	<u>yes</u>	<u>FACU</u>	Prevalence Index = B/A = _____
2. <u><i>Polystichum munitum</i></u>	<u>20</u>	<u>yes</u>	<u>FACU</u>	
3. <u><i>Dryopteris expansa</i></u>	<u>15</u>	<u>yes</u>	<u>FACW</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
50% = <u>30</u> , 20% = <u>12</u>	<u>60</u>	= Total Cover		
Woody Vine Stratum (Plot size: _____)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
50% = _____, 20% = _____	_____	= Total Cover		
% Bare Ground in Herb Stratum <u>40</u>				

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
☐ 2 - Dominance Test is >50%
☐ 3 - Prevalence Index is $\leq 3.0^1$
☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
☐ 5 - Wetland Non-Vascular Plants¹
☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present?

Yes ☐ No ☒

Remarks: The dominance by FAC and FACW species is not greater than 50% so the hydrophytic vegetation criterion is not met.

SOILSampling Point: TP 4**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 2/2	100	_____	_____	_____	_____	duff	with roots
4-10	10YR 2/2	100	_____	_____	_____	_____	sandy loam	_____
0-16	10YR 4/3	100	_____	_____	_____	_____	sandy loam	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix, RC=Root Channel**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

Indicators for Problematic Hydric Soils³:

- | |
|---|
| <input type="checkbox"/> 2 cm Muck (A10) |
| <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Other (Explain in Remarks) |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**

Type: _____

Depth (inches): _____

Hydric Soils Present?Yes ☐ No ☒

Remarks: The soil profile has high matrix chromas in both of the subsurface layers so meets none of the hydric soil indicators.

HYDROLOGY**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) |
| <input type="checkbox"/> High Water Table (A2) | (except MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Stunted or Stresses Plants (D1) (LRR A) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- | |
|--|
| <input type="checkbox"/> Water-Stained Leaves (B9) |
| (MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) |
| <input type="checkbox"/> Frost-Heave Hummocks (D7) |

Field Observations:

Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____

Wetland Hydrology Present?Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: There was no water present in this area during the field visit and there was no evidence of wetland hydrology.

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

Project Site: Pine Way City/County: Bainbridge Island/Kitsap Sampling Date: 8-21-15
 Applicant/Owner: B Zwicker State: WA Sampling Point: TP 5
 Investigator(s): J. Bartlett Section, Township, Range: S 2 T24N R2 EWM
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 0
 Subregion (LRR): MRLA 2 Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: 22 Kapowsin gravelly ashy loam, 0-6% slopes NWI classification: UPL
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐, Soil ☐, or Hydrology ☐, significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐, Soil ☐, or Hydrology ☐, naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Remarks: Test Plot 5 is located in the upland near the southwest corner of the property. This area is about 5 feet above the elevation of the wetland and is dominated by a forested community.		

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size: 20' diameter)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:
1. <u>Thuja plicata</u>	<u>35</u>	<u>yes</u>	<u>FAC</u>	
2. <u>Pseudotsuga menziesii</u>	<u>10</u>	<u>yes</u>	<u>FACU</u>	Total Number of Dominant Species Across All Strata: <u>5</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>40</u> (A/B)
4. _____	_____	_____	_____	
50% = <u>22.5</u> , 20% = <u>9</u>	<u>45</u>	= Total Cover		
Sapling/Shrub Stratum (Plot size: 20' diameter)				Prevalence Index worksheet:
1. <u>Rubus spectabilis</u>	<u>35</u>	<u>yes</u>	<u>FAC</u>	
2. <u>Ilex opaca</u>	<u>5</u>	<u>no</u>	<u>FACU</u>	OBL species _____ x1 = _____
3. _____	_____	_____	_____	FACW species _____ x2 = _____
4. _____	_____	_____	_____	FAC species _____ x3 = _____
5. _____	_____	_____	_____	FACU species _____ x4 = _____
50% = <u>20</u> , 20% = <u>8</u>	<u>40</u>	= Total Cover		UPL species _____ x5 = _____
Herb Stratum (Plot size: 20' diameter)				Column Totals: _____ (A) _____ (B)
1. <u>Polystichum munitum</u>	<u>30</u>	<u>yes</u>	<u>FACU</u>	Prevalence Index = B/A = _____
2. <u>Rubus ursinus</u>	<u>20</u>	<u>yes</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 – Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3. <u>Pteridium aquilinum</u>	<u>10</u>	<u>no</u>	<u>FACU</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
50% = <u>30</u> , 20% = <u>12</u>	<u>60</u>	= Total Cover		
Woody Vine Stratum (Plot size: _____)				Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
50% = _____, 20% = _____	_____	= Total Cover		
% Bare Ground in Herb Stratum <u>40</u>				
Remarks: There is less than 50% dominance by FAC species so the hydrophytic vegetation criterion is not met.				

SOILSampling Point: TP 5**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2	10YR 2/2	100	_____	_____	_____	_____	duff	with roots
2-8	10YR 2/1	100	_____	_____	_____	_____	silt loam	_____
6-16	2.5Y 3/3	90	10YR 4/6	10	C	M	silt loam	slightly compacted
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix, RC=Root Channel**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**

Type: _____

Depth (inches): _____

Hydric Soils Present?

Yes

☐

No

☒

Remarks: The soil profile does not meet any of the hydric soil indicators because there is no depleted or gleyed matrix in the subsurface layer.

HYDROLOGY**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) |
| <input type="checkbox"/> High Water Table (A2) | (except MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Stunted or Stresses Plants (D1) (LRR A) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9)
- (MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:Surface Water Present? Yes ☐ No ☒ Depth (inches): _____Water Table Present? Yes ☐ No ☒ Depth (inches): _____Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____**Wetland Hydrology Present?**

Yes

☐

No

☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: There was no water present in this area during the field visit and there was no evidence of wetland hydrology.

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

Project Site: Pine Way City/County: Bainbridge Island/Kitsap Sampling Date: 8-21-15
 Applicant/Owner: B Zwicker State: WA Sampling Point: TP 6
 Investigator(s): J. Bartlett Section, Township, Range: S 2 T24N R 2 EWM
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 0
 Subregion (LRR): MRLA 2 Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: 22 Kapowsin gravelly ashy loam, 0-6% slopes NWI classification: UPL
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐, Soil ☐, or Hydrology ☐, significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐, Soil ☐, or Hydrology ☐, naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Remarks: Test Plot 6 is located in the upland in the southern 1/3 of the property. It is situated in a shallow depression surrounded by cedar trees with scattered upland herbaceous plants.			

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size: 20' diameter)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1. <u>Thuja plicata</u>	35	yes	FAC	Number of Dominant Species That Are OBL, FACW, or FAC:	1 (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata:	5 (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC:	20 (A/B)
4. _____	_____	_____	_____		
50% = 17.5, 20% = 7	35	= Total Cover			
Sapling/Shrub Stratum (Plot size: 20' diameter)				Prevalence Index worksheet:	
1. <u>Gaultheria shallon</u>	10	yes	FACU	Total % Cover of:	Multiply by:
2. <u>Ilex opaca</u>	10	yes	FACU	OBL species _____	x1 = _____
3. _____	_____	_____	_____	FACW species _____	x2 = _____
4. _____	_____	_____	_____	FAC species _____	x3 = _____
5. _____	_____	_____	_____	FACU species _____	x4 = _____
50% = 10, 20% = 8	20	= Total Cover		UPL species _____	x5 = _____
Herb Stratum (Plot size: 20' diameter)				Column Totals: _____ (A)	_____ (B)
1. <u>Polystichum munitum</u>	35	yes	FACU	Prevalence Index = B/A = _____	
2. <u>Pteridium aquilinum</u>	5	no	FACU		
3. _____	_____	_____	_____	Hydrophytic Vegetation Indicators:	
4. _____	_____	_____	_____	<input type="checkbox"/> 1 – Rapid Test for Hydrophytic Vegetation	
5. _____	_____	_____	_____	<input type="checkbox"/> 2 - Dominance Test is >50%	
6. _____	_____	_____	_____	<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹	
7. _____	_____	_____	_____	<input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
8. _____	_____	_____	_____	<input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹	
9. _____	_____	_____	_____	<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)	
10. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
11. _____	_____	_____	_____		
50% = 20, 20% = 8	40	= Total Cover		Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Woody Vine Stratum (Plot size: 20')					
1. <u>Hedera helix</u>	5	yes	FACU		
2. _____	_____	_____	_____		
50% = 2.5, 20% = 1	5	= Total Cover			
% Bare Ground in Herb Stratum 60					

Remarks: There is less than 50% dominance by FAC species so the hydrophytic vegetation criterion is not met.

SOILSampling Point: TP 6**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2	10YR 2/2	100	_____	_____	_____	_____	duff	with roots
2-16	2.5Y 4/3	100	_____	_____	_____	_____	sa si loam	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix, RC=Root Channel**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

Indicators for Problematic Hydric Soils³:

- | |
|---|
| <input type="checkbox"/> 2 cm Muck (A10) |
| <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Other (Explain in Remarks) |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**

Type: _____

Depth (inches): _____

Hydric Soils Present?

Yes

☐

No

☒

Remarks: The soil profile does not meet any of the hydric soil indicators because there is no depleted or gleyed matrix in the subsurface layer.

HYDROLOGY**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) |
| <input type="checkbox"/> High Water Table (A2) | (except MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Stunted or Stresses Plants (D1) (LRR A) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- | |
|--|
| <input type="checkbox"/> Water-Stained Leaves (B9) |
| (MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) |
| <input type="checkbox"/> Frost-Heave Hummocks (D7) |

Field Observations:Surface Water Present? Yes ☐ No ☒ Depth (inches): _____Water Table Present? Yes ☐ No ☒ Depth (inches): _____Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____**Wetland Hydrology Present?**

Yes

☐

No

☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: There was no water present in this area during the field visit and there was no evidence of wetland hydrology.

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

Project Site: Pine Way City/County: Bainbridge Island/Kitsap Sampling Date: 8-21-15
Applicant/Owner: B Zwicker State: WA Sampling Point: TP 7
Investigator(s): J. Bartlett Section, Township, Range: S 2 T24N R2 EWM
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 0
Subregion (LRR): MRLA 2 Lat: _____ Long: _____ Datum: _____
Soil Map Unit Name: 32 McKenna gravelly loam NWI classification: PFOSS
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐, Soil ☐, or Hydrology ☐, significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐, Soil ☐, or Hydrology ☐, naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Hydric Soil Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>					
Wetland Hydrology Present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>					
Remarks: Test Plot 7 is located at the south end of the delineated wetland. The area is composed of saturated depression wetland dominated by forested vegetation.									

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size: 20' diameter)				Dominance Test Worksheet:	
	Absolute % Cover	Dominant Species?	Indicator Status		
1. <u><i>Alnus rubra</i></u>	20	yes	FAC	Number of Dominant Species That Are OBL, FACW, or FAC:	3 (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata:	5 (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC:	60 (A/B)
4. _____	_____	_____	_____		
50% = 10, 20% = 4	20	= Total Cover			
Sapling/Shrub Stratum (Plot size: 20' diameter)				Prevalence Index worksheet:	
1. <u><i>Rubus spectabilis</i></u>	15	yes	FAC		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
50% = 7.5, 20% = 3	15	= Total Cover			
Herb Stratum (Plot size: 20' diameter)				Hydrophytic Vegetation Indicators:	
1. <u><i>Maianthemum dilatatum</i></u>	30	yes	FAC		
2. <u><i>Rubus ursinus</i></u>	20	yes	FACU		
3. <u><i>Polystichum munitum</i></u>	20	yes	FACU		
4. <u><i>Athyrium filix-femina</i></u>	10	no	FAC		
5. <u><i>Polypodium glycyrrhiza</i></u>	5	no	NL (UPL)		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
50% = 42.5, 20% = 17	85	= Total Cover			
Woody Vine Stratum (Plot size: _____)				Prevalence Index = B/A = _____	
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
50% = _____, 20% = _____	_____	= Total Cover			
% Bare Ground in Herb Stratum _____				<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)	
Remarks: _____				Hydrophytic Vegetation Present? <div style="display: flex; justify-content: space-between;"> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> </div>	

SOILSampling Point: TP 8**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	10YR 2/1	100	_____	_____	_____	_____	duff loam	_____
3-6	10YR 4/1	100	_____	_____	_____	_____	sa si loam	_____
6-16	2.5Y 4/1	90	10YR 4/4	10	C	M	sandy loam	slightly compacted
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix, RC=Root Channel**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- | | |
|---|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input checked="" type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

Indicators for Problematic Hydric Soils³:

- | |
|---|
| <input type="checkbox"/> 2 cm Muck (A10) |
| <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Other (Explain in Remarks) |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**

Type: _____

Depth (inches): _____

Hydric Soils Present?Yes ☒ No ☐

Remarks: The soil profile meets hydric soil indicator A11 because there is a depleted matrix with redoximorphic features in the subsurface layer with a dark surface layer less than 12 inches thick.

HYDROLOGY**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) |
| <input type="checkbox"/> High Water Table (A2) | (except MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Salt Crust (B11) |
| <input checked="" type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Stunted or Stresses Plants (D1) (LRR A) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- | |
|--|
| <input type="checkbox"/> Water-Stained Leaves (B9) |
| (MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) |
| <input type="checkbox"/> Frost-Heave Hummocks (D7) |

Field Observations:

Surface Water Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): _____
Water Table Present?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Depth (inches): _____

Wetland Hydrology Present?Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: There was no water present in this area during the field visit but there was evidence of surface water for a portion of the growing season so the wetland hydrology criterion is met.

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

Project Site: Pine Way City/County: Bainbridge Island/Kitsap Sampling Date: 8-21-15
 Applicant/Owner: B Zwicker State: WA Sampling Point: TP 8
 Investigator(s): J. Bartlett Section, Township, Range: S 2 T24N R2 EWM
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 0
 Subregion (LRR): MRLA 2 Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: 32 McKenna gravelly loam NWI classification: UPL
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Remarks: Test Plot 8 is located in the upland in the southern 1/3 of the property, which is composed of a conifer forest so there is a sparse shrub layer and a sparsely vegetated herbaceous layer. This area lies within the hydric soil map unit.			

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size: 20' diameter)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33</u> (A/B)																
1. <u>Thuja plicata</u>	<u>15</u>	<u>yes</u>	<u>FAC</u>																	
2. <u>Tsuga heterophylla</u>	<u>15</u>	<u>yes</u>	<u>FACU</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
50% = <u>15</u> , 20% = <u>6</u>	<u>30</u>	= Total Cover																		
Sapling/Shrub Stratum (Plot size: 20' diameter)																				
1. <u>Gaultheria shallon</u>	<u>20</u>	<u>yes</u>	<u>FACU</u>	Prevalence Index worksheet: <table border="0"> <tr> <td>Total % Cover of:</td> <td>Multiply by:</td> </tr> <tr> <td>OBL species _____</td> <td>x1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x2 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x3 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x5 = _____</td> </tr> <tr> <td>Column Totals: _____ (A)</td> <td>_____ (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = _____</td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species _____	x1 = _____	FACW species _____	x2 = _____	FACU species _____	x3 = _____	UPL species _____	x4 = _____	UPL species _____	x5 = _____	Column Totals: _____ (A)	_____ (B)	Prevalence Index = B/A = _____	
Total % Cover of:	Multiply by:																			
OBL species _____	x1 = _____																			
FACW species _____	x2 = _____																			
FACU species _____	x3 = _____																			
UPL species _____	x4 = _____																			
UPL species _____	x5 = _____																			
Column Totals: _____ (A)	_____ (B)																			
Prevalence Index = B/A = _____																				
2. <u>Ilex opaca</u>	<u>10</u>	<u>yes</u>	<u>FACU</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
50% = <u>15</u> , 20% = <u>6</u>	<u>30</u>	= Total Cover																		
Herb Stratum (Plot size: 20' diameter)																				
1. <u>Rubus ursinus</u>	<u>20</u>	<u>yes</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 – Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Polystichum munitum</u>	<u>15</u>	<u>yes</u>	<u>FACU</u>																	
3. <u>Athyrium filix-femina</u>	<u>10</u>	<u>yes</u>	<u>FAC</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
50% = <u>22.5</u> , 20% = <u>9</u>	<u>45</u>	= Total Cover																		
Woody Vine Stratum (Plot size: 20)																				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>																
2. _____	_____	_____	_____																	
50% = _____, 20% = _____	_____	= Total Cover																		
% Bare Ground in Herb Stratum <u>55</u>																				

Remarks: There is less than 50% dominance by FAC species so the hydrophytic vegetation criterion is not met.

SOILSampling Point: TP 8**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 2/1	100					duff loam	with roots
6-16	2.5Y 4/3	95	10YR 4/4	5	C	M	sandy loam	slightly compacted

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix, RC=Root Channel**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**

Type: _____

Depth (inches): _____

Hydric Soils Present?Yes ☐ No ☒

Remarks: The soil profile does not meet any of the hydric soil indicators because there is no depleted or gleyed matrix in the subsurface layer.

HYDROLOGY**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- | | |
|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) |
| <input type="checkbox"/> High Water Table (A2) | (except MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Stunted or Stresses Plants (D1) (LRR A) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9)
- (MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:Surface Water Present? Yes ☐ No ☒ Depth (inches): _____Water Table Present? Yes ☐ No ☒ Depth (inches): _____Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): _____**Wetland Hydrology Present?** Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: There was no water present in this area during the field visit and there was no evidence of wetland hydrology.

APPENDIX B

Wetland name or number _____

RATING SUMMARY – Western Washington

Name of wetland (or ID #): _____ Date of site visit: 8-21-15

Rated by J. Bartlett Trained by Ecology? X Yes ___ No Date of training 11/14

HGM Class used for rating Depressional Wetland has multiple HGM classes? X Y ___ N

NOTE: Form is not complete without the figures requested (*figures can be combined*).

Source of base aerial photo/map Google Earth

OVERALL WETLAND CATEGORY III (based on functions X or special characteristics ___)

1. Category of wetland based on FUNCTIONS

_____ Category I – Total score = 23 – 27

_____ Category II – Total score = 20 – 22

X Category III – Total score = 16 – 19

_____ Category IV – Total score = 9 – 15

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
<i>Circle the appropriate ratings</i>				
Site Potential	H <u>M</u> L	H <u>M</u> L	H <u>M</u> L	
Landscape Potential	<u>H</u> M L	H <u>M</u> L	<u>H</u> M L	
Value	H M <u>L</u>	H <u>M</u> L	H M <u>L</u>	TOTAL
Score Based on Ratings	6	6	6	18

Score for each
function based
on three
ratings
(order of ratings
is not
important)

9 = H,H,H

8 = H,H,M

7 = H,H,L

7 = H,M,M

6 = H,M,L

6 = M,M,M

5 = H,L,L

5 = M,M,L

4 = M,L,L

3 = L,L,L

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY
Estuarine	I II
Wetland of High Conservation Value	I
Bog	I
Mature Forest	I
Old Growth Forest	I
Coastal Lagoon	I II
Interdunal	I II III IV
None of the above	X

Wetland name or number _____

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	2, 6
Hydroperiods	D 1.4, H 1.2	2, 6
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	2, 6
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 5.2	6
Map of the contributing basin	D 4.3, D 5.3	7
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	7
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	8
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	8

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (<i>can be added to another figure</i>)	R 4.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R 3.1	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	R 3.2, R 3.3	

Lake Fringe Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants (<i>can be added to figure above</i>)	S 4.1	
Boundary of 150 ft buffer (<i>can be added to another figure</i>)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

HGM Classification of Wetlands in Western Washington

For questions 1-7, the criteria described must apply to the entire unit being rated.

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in questions 1-7 apply, and go to Question 8.

1. Are the water levels in the entire unit usually controlled by tides except during floods?

NO – go to 2

YES – the wetland class is **Tidal Fringe** – go to 1.1

- 1.1 Is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

NO – **Saltwater Tidal Fringe (Estuarine)**

YES – **Freshwater Tidal Fringe**

*If your wetland can be classified as a Freshwater Tidal Fringe use the forms for **Riverine** wetlands. If it is Saltwater Tidal Fringe it is an **Estuarine** wetland and is not scored. This method **cannot** be used to score functions for estuarine wetlands.*

2. The entire wetland unit is flat and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit.

NO – go to 3

YES – The wetland class is **Flats**

*If your wetland can be classified as a Flats wetland, use the form for **Depressional** wetlands.*

3. Does the entire wetland unit **meet all** of the following criteria?

- ☐ The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size;
☐ At least 30% of the open water area is deeper than 6.6 ft (2 m).

NO – go to 4

YES – The wetland class is **Lake Fringe** (Lacustrine Fringe)

4. Does the entire wetland unit **meet all** of the following criteria?

- ☒ The wetland is on a slope (*slope can be very gradual*),
☒ The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks,
☐ The water leaves the wetland **without being impounded**.

NO – go to 5

YES – The wetland class is **Slope**

NOTE: Surface water does not pond in these type of wetlands except occasionally in very small and shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 ft deep).

5. Does the entire wetland unit **meet all** of the following criteria?

- ☐ The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river,
☐ The overbank flooding occurs at least once every 2 years.

Wetland name or number _____

NO – go to 6

YES – The wetland class is **Riverine**

NOTE: The Riverine unit can contain depressions that are filled with water when the river is not flooding

6. Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the surface, at some time during the year? *This means that any outlet, if present, is higher than the interior of the wetland.*

NO – go to 7

YES – The wetland class is **Depressional**

7. Is the entire wetland unit located in a very flat area with no obvious depression and no overbank flooding? The unit does not pond surface water more than a few inches. The unit seems to be maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

NO – go to 8

YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a Depressional wetland has a zone of flooding along its sides. **GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT** (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the wetland unit being scored.

NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the total area.

HGM classes within the wetland unit being rated	HGM class to use in rating
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake Fringe	Lake Fringe
Depressional + Riverine along stream within boundary of depression	Depressional
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as ESTUARINE

*If you are still unable to determine which of the above criteria apply to your wetland, or if you have **more than 2 HGM classes** within a wetland boundary, classify the wetland as Depressional for the rating.*

Wetland name or number _____

DEPRESSIONAL AND FLATS WETLANDS

Water Quality Functions - Indicators that the site functions to improve water quality

D 1.0. Does the site have the potential to improve water quality?		
D 1.1. <u>Characteristics of surface water outflows from the wetland:</u> Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch.		2 points = 3 points = 2 points = 1 points = 1
D 1.2. <u>The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions).</u> Yes = 4 No = 0		0
D 1.3. <u>Characteristics and distribution of persistent plants</u> (Emergent, Scrub-shrub, and/or Forested Cowardin classes): Wetland has persistent, ungrazed, plants > 95% of area Wetland has persistent, ungrazed, plants > 1/2 of area Wetland has persistent, ungrazed plants > 1/10 of area Wetland has persistent, ungrazed plants < 1/10 of area		3 points = 5 points = 3 points = 1 points = 0
D 1.4. <u>Characteristics of seasonal ponding or inundation:</u> <i>This is the area that is ponded for at least 2 months. See description in manual.</i> Area seasonally ponded is > 1/2 total area of wetland Area seasonally ponded is > 1/4 total area of wetland Area seasonally ponded is < 1/4 total area of wetland		4 points = 4 points = 2 points = 0
Total for D 1		9

Rating of Site Potential If score is: 12-16 = H X 6-11 = M 0-5 = L Record the rating on the first page

D 2.0. Does the landscape have the potential to support the water quality function of the site?		
D 2.1. Does the wetland unit receive stormwater discharges?	Yes = 1 No = 0	1
D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants?	Yes = 1 No = 0	1
D 2.3. Are there septic systems within 250 ft of the wetland?	Yes = 1 No = 0	1
D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1-D 2.3?	Yes = 1 No = 0	0
Source		
Total for D 2		3

Rating of Landscape Potential If score is: X 3 or 4 = H 1 or 2 = M 0 = L Record the rating on the first page

D 3.0. Is the water quality improvement provided by the site valuable to society?		
D 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list?	Yes = 1 No = 0	0
D 3.2. Is the wetland in a basin or sub-basin where an aquatic resource is on the 303(d) list?	Yes = 1 No = 0	0
D 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality (answer YES if there is a TMDL for the basin in which the unit is found)?	Yes = 2 No = 0	0
Total for D 3		0

Rating of Value If score is: 2-4 = H 1 = M X 0 = L Record the rating on the first page

Wetland name or number _____

DEPRESSIONAL AND FLATS WETLANDS

Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation

D 4.0. Does the site have the potential to reduce flooding and erosion?

D 4.1. Characteristics of surface water outflows from the wetland:

2

- Wetland is a depression or flat depression with no surface water leaving it (no outlet) points = 4
 Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet points = 2
 Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch points = 1
 Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points = 0

D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part.

3

- Marks of ponding are 3 ft or more above the surface or bottom of outlet points = 7
 Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet points = 5
 Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet points = 3
 The wetland is a "headwater" wetland points = 3
 Wetland is flat but has small depressions on the surface that trap water points = 1
 Marks of ponding less than 0.5 ft (6 in) points = 0

D 4.3. Contribution of the wetland to storage in the watershed: Estimate the ratio of the area of upstream basin contributing surface water to the wetland to the area of the wetland unit itself.

3

- The area of the basin is less than 10 times the area of the unit points = 5
 The area of the basin is 10 to 100 times the area of the unit points = 3
 The area of the basin is more than 100 times the area of the unit points = 0
 Entire wetland is in the Flats class points = 5

Total for D 4

Add the points in the boxes above

8

Rating of Site Potential If score is: 12-16 = H X 6-11 = M 0-5 = L

Record the rating on the first page

D 5.0. Does the landscape have the potential to support hydrologic functions of the site?

D 5.1. Does the wetland receive stormwater discharges?

Yes = 1 No = 0

1

D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff?

Yes = 1 No = 0

1

D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)?

Yes = 1 No = 0

0

Total for D 5

Add the points in the boxes above

2

Rating of Landscape Potential If score is: 3 = H X 1 or 2 = M 0 = L

Record the rating on the first page

D 6.0. Are the hydrologic functions provided by the site valuable to society?

D 6.1. The unit is in a landscape that has flooding problems. Choose the description that best matches conditions around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met.

0

The wetland captures surface water that would otherwise flow down-gradient into areas where flooding has damaged human or natural resources (e.g., houses or salmon redds):

- Flooding occurs in a sub-basin that is immediately down-gradient of unit. points = 2
 - Surface flooding problems are in a sub-basin farther down-gradient. points = 1
- Flooding from groundwater is an issue in the sub-basin. points = 1

The existing or potential outflow from the wetland is so constrained by human or natural conditions that the water stored by the wetland cannot reach areas that flood. *Explain why* _____ points = 0

There are no problems with flooding downstream of the wetland. points = 0

D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan?

Yes = 2 No = 0

0

Total for D 6

Add the points in the boxes above

0

Rating of Value If score is: 2-4 = H 1 = M X 0 = L

Record the rating on the first page

Wetland name or number _____

These questions apply to wetlands of all HGM classes.

HABITAT FUNCTIONS - Indicators that site functions to provide important habitat

H 1.0. Does the site have the potential to provide habitat?

H 1.1. Structure of plant community: *Indicators are Cowardin classes and strata within the Forested class.* Check the Cowardin plant classes in the wetland. *Up to 10 patches may be combined for each class to meet the threshold of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked.*

- | | |
|--|----------------------------------|
| <input type="checkbox"/> Aquatic bed | 4 structures or more: points = 4 |
| <input type="checkbox"/> Emergent | 3 structures: points = 2 |
| <input checked="" type="checkbox"/> Scrub-shrub (areas where shrubs have > 30% cover) | 2 structures: points = 1 |
| <input checked="" type="checkbox"/> Forested (areas where trees have > 30% cover) | 1 structure: points = 0 |
| <i>If the unit has a Forested class, check if:</i> | |
| <input checked="" type="checkbox"/> The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon | |

2

H 1.2. Hydroperiods

Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or ¼ ac to count (*see text for descriptions of hydroperiods*).

- | | |
|--|-------------------------------------|
| <input type="checkbox"/> Permanently flooded or inundated | 4 or more types present: points = 3 |
| <input checked="" type="checkbox"/> Seasonally flooded or inundated | 3 types present: points = 2 |
| <input type="checkbox"/> Occasionally flooded or inundated | 2 types present: points = 1 |
| <input checked="" type="checkbox"/> Saturated only | 1 type present: points = 0 |
| <input type="checkbox"/> Permanently flowing stream or river in, or adjacent to, the wetland | |
| <input type="checkbox"/> Seasonally flowing stream in, or adjacent to, the wetland | |
| <input type="checkbox"/> Lake Fringe wetland | 2 points |
| <input type="checkbox"/> Freshwater tidal wetland | 2 points |

1

H 1.3. Richness of plant species

Count the number of plant species in the wetland that cover at least 10 ft².

Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle

- | | |
|------------------------------|------------|
| If you counted: > 19 species | points = 2 |
| 5 - 19 species | points = 1 |
| < 5 species | points = 0 |

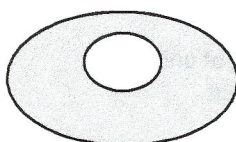
2

H 1.4. Interspersion of habitats

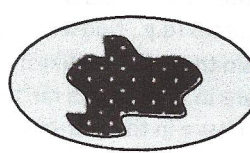
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always high.*



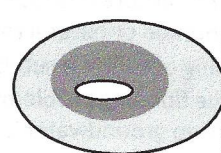
None = 0 points



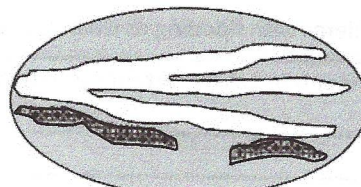
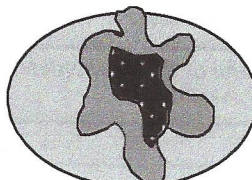
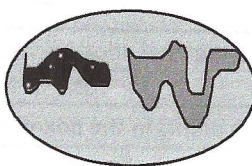
Low = 1 point



Moderate = 2 points



All three diagrams in this row are HIGH = 3points



1

Wetland name or number _____

<p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i></p> <p><input checked="" type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).</p> <p><input checked="" type="checkbox"/> Standing snags (dbh > 4 in) within the wetland</p> <p><input type="checkbox"/> Undercut banks are present for at least 6.6 ft (2 m) and/or overhanging plants extends at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m)</p> <p><input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (<i>cut shrubs or trees that have not yet weathered where wood is exposed</i>)</p> <p><input checked="" type="checkbox"/> At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (<i>structures for egg-laying by amphibians</i>)</p> <p><input checked="" type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (<i>see H 1.1 for list of strata</i>)</p>	4
<p>Total for H 1</p>	<p>Add the points in the boxes above</p> <p>10</p>

Rating of Site Potential If score is: 15-18 = H X 7-14 = M 0-6 = L *Record the rating on the first page*

H 2.0. Does the landscape have the potential to support the habitat functions of the site?

<p>H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>).</p> <p><i>Calculate:</i> % undisturbed habitat <u>0.3</u> + [(% moderate and low intensity land uses)/2] <u>23.7</u> = 24.0%</p> <p>If total accessible habitat is:</p> <p>> 1/3 (33.3%) of 1 km Polygon points = 3</p> <p>20-33% of 1 km Polygon points = 2</p> <p>10-19% of 1 km Polygon points = 1</p> <p>< 10% of 1 km Polygon points = 0</p>	2
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p><i>Calculate:</i> % undisturbed habitat <u>35.4</u> + [(% moderate and low intensity land uses)/2] <u>23.7</u> = 59.1%</p> <p>Undisturbed habitat > 50% of Polygon points = 3</p> <p>Undisturbed habitat 10-50% and in 1-3 patches points = 2</p> <p>Undisturbed habitat 10-50% and > 3 patches points = 1</p> <p>Undisturbed habitat < 10% of 1 km Polygon points = 0</p>	3
<p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>> 50% of 1 km Polygon is high intensity land use points = (- 2)</p> <p>≤ 50% of 1 km Polygon is high intensity points = 0</p>	0
<p>Total for H 2</p>	<p>Add the points in the boxes above</p> <p>5</p>

Rating of Landscape Potential If score is: X 4-6 = H 1-3 = M < 1 = L *Record the rating on the first page*

H 3.0. Is the habitat provided by the site valuable to society?

H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? *Choose only the highest score that applies to the wetland being rated.*

Site meets ANY of the following criteria: points = 2

- It has 3 or more priority habitats within 100 m (see next page)
- It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)
- It is mapped as a location for an individual WDFW priority species
- It is a Wetland of High Conservation Value as determined by the Department of Natural Resources
- It has been categorized as an important habitat site in a local or regional comprehensive plan, in a Shoreline Master Plan, or in a watershed plan

Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1

Site does not meet any of the criteria above points = 0

Rating of Value If score is: 2 = H 1 = M X 0 = L *Record the rating on the first page*

Wetland name or number _____

WDFW Priority Habitats

Priority habitats listed by WDFW (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Washington Department of Fish and Wildlife. 2008. Priority Habitat and Species List. Olympia, Washington. 177 pp. <http://wdfw.wa.gov/publications/00165/wdfw00165.pdf> or access the list from here: <http://wdfw.wa.gov/conservation/phs/list/>)

Count how many of the following priority habitats are within 330 ft (100 m) of the wetland unit: **NOTE:** *This question is independent of the land use between the wetland unit and the priority habitat.*

- **Aspen Stands:** Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
- **Biodiversity Areas and Corridors:** Areas of habitat that are relatively important to various species of native fish and wildlife (*full descriptions in WDFW PHS report*).
- **Herbaceous Balds:** Variable size patches of grass and forbs on shallow soils over bedrock.
- **Old-growth/Mature forests:** Old-growth west of Cascade crest – Stands of at least 2 tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; crown cover may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Cascade crest.
- **Oregon White Oak:** Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (*full descriptions in WDFW PHS report p. 158 – see web link above*).
- **Riparian:** The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.
- **Westside Prairies:** Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (*full descriptions in WDFW PHS report p. 161 – see web link above*).
- **Instream:** The combination of physical, biological, and chemical processes and conditions that interact to provide functional life history requirements for instream fish and wildlife resources.
- **Nearshore:** Relatively undisturbed nearshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and Puget Sound Nearshore. (*full descriptions of habitats and the definition of relatively undisturbed are in WDFW report – see web link on previous page*).
- **Caves:** A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human.
- **Cliffs:** Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.
- **Talus:** Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs.
- **Snags and Logs:** Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 20 in (51 cm) in western Washington and are > 6.5 ft (2 m) in height. Priority logs are > 12 in (30 cm) in diameter at the largest end, and > 20 ft (6 m) long.

Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed elsewhere.

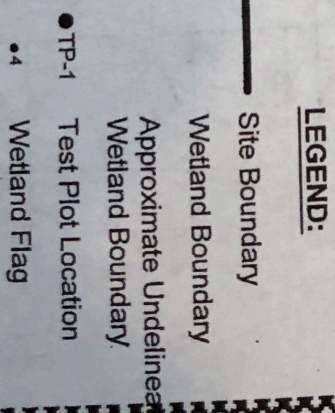
Wetland name or number _____

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
<i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>	
SC 1.0. Estuarine wetlands Does the wetland meet the following criteria for Estuarine wetlands? — The dominant water regime is tidal, — Vegetated, and — With a salinity greater than 0.5 ppt <div style="text-align: right;"> Yes – Go to SC 1.1 No = Not an estuarine wetland </div>	
SC 1.1. Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151? <div style="text-align: right;"> Yes = Category I No - Go to SC 1.2 </div>	Cat. I
SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions? — The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has less than 10% cover of non-native plant species. (If non-native species are <i>Spartina</i> , see page 25) — At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland. — The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. <div style="text-align: right;"> Yes = Category I No = Category II </div>	Cat. I Cat. II
SC 2.0. Wetlands of High Conservation Value (WHCV) SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value? <div style="text-align: right;"> Yes – Go to SC 2.2 No – Go to SC 2.3 </div> SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value? <div style="text-align: right;"> Yes = Category I No = Not a WHCV </div> SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf <div style="text-align: right;"> Yes – Contact WNHP/WDNR and go to SC 2.4 No = Not a WHCV </div> SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website? <div style="text-align: right;"> Yes = Category I No = Not a WHCV </div>	Cat. I
SC 3.0. Bogs Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i> SC 3.1. Does an area within the wetland unit have organic soil horizons, either peats or mucks, that compose 16 in or more of the first 32 in of the soil profile? <div style="text-align: right;"> Yes – Go to SC 3.3 No – Go to SC 3.2 </div> SC 3.2. Does an area within the wetland unit have organic soils, either peats or mucks, that are less than 16 in deep over bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond? <div style="text-align: right;"> Yes – Go to SC 3.3 No = Is not a bog </div> SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4? <div style="text-align: right;"> Yes = Is a Category I bog No – Go to SC 3.4 </div> NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that criterion by measuring the pH of the water that seeps into a hole dug at least 16 in deep. If the pH is less than 5.0 and the plant species in Table 4 are present, the wetland is a bog. SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, western red cedar, western hemlock, lodgepole pine, quaking aspen, Engelmann spruce, or western white pine, AND any of the species (or combination of species) listed in Table 4 provide more than 30% of the cover under the canopy? <div style="text-align: right;"> Yes = Is a Category I bog No = Is not a bog </div>	Cat. I

Wetland name or number _____

<p>SC 4.0. Forested Wetlands</p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> — Old-growth forests (west of Cascade crest): Stands of at least two tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) that are at least 200 years of age OR have a diameter at breast height (dbh) of 32 in (81 cm) or more. — Mature forests (west of the Cascade Crest): Stands where the largest trees are 80- 200 years old OR the species that make up the canopy have an average diameter (dbh) exceeding 21 in (53 cm). <p style="text-align: right;">Yes = Category I <u>No</u> = Not a forested wetland for this section</p>	Cat. I
<p>SC 5.0. Wetlands in Coastal Lagoons</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> — The wetland lies in a depression adjacent to marine waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently, rocks — The lagoon in which the wetland is located contains ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>) <p style="text-align: right;">Yes – Go to SC 5.1 <u>No</u> = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <ul style="list-style-type: none"> — The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). — At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland. — The wetland is larger than 1/10 ac (4350 ft²) <p style="text-align: right;">Yes = Category I No = Category II</p>	<div style="text-align: center;">Cat. I</div> <div style="text-align: center;">Cat. II</div>
<p>SC 6.0. Interdunal Wetlands</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 <p style="text-align: right;">Yes – Go to SC 6.1 <u>No</u> = not an interdunal wetland for rating</p> <p>SC 6.1. Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form (rates H,H,H or H,H,M for the three aspects of function)?</p> <p style="text-align: right;">Yes = Category I No – Go to SC 6.2</p> <p>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger?</p> <p style="text-align: right;">Yes = Category II No – Go to SC 6.3</p> <p>SC 6.3. Is the unit between 0.1 and 1 ac, or is it in a mosaic of wetlands that is between 0.1 and 1 ac?</p> <p style="text-align: right;">Yes = Category III No = Category IV</p>	<div style="text-align: center;">Cat I</div> <div style="text-align: center;">Cat. II</div> <div style="text-align: center;">Cat. III</div> <div style="text-align: center;">Cat. IV</div>
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	



Higher
 Schooling
 Degree/Postgraduate
 Degree Holder
 Bachelor's Degree
 Associate's Degree
 High School Graduate
 High School
 Less Than High School



Cobalt Geosciences, LLC
P.O. Box 82243
Kenmore, Washington 98028

August 12, 2020

Vance Rehder
rehdervance@gmail.com

RE: Geotechnical Evaluation
Proposed Residence
Parcel No. 02240210052007
Bainbridge Island, Washington

In accordance with your authorization, Cobalt Geosciences, LLC has prepared this letter to discuss the results of our limited evaluation of the shallow soil conditions at the site. We visited the site on August 9, 2020.

The site consists of one rectangular parcel that is heavily vegetated with trees and understory. The site is nearly level to gently sloping downward from east to west with relief of about 10 feet.

We understand that the proposed development includes a new residence within the parcel. We also understand that portions of the property are likely or known wetland areas.

The site is mapped as being underlain by Vashon Glacial Till and Blakely Formation. These deposits are typically medium dense to very dense or hard below a weathered zone. There are mapped wetland or bog deposits relatively close to the subject property. Wetland areas can include variable-thick zones of peat and organic debris.

We advanced several hand borings and used a steel probe to penetrate through forest duff at numerous locations within the parcel. In general, topsoil thicknesses were 6 to 18 inches and silty-sand with gravel were encountered below this zone. Probe penetrations were generally less than 2.5 feet below existing site grades. In upland portions of the property, we did not encounter large wetland areas or peat.

Conclusions and Recommendations

We observed variable thicknesses of topsoil and vegetation underlain by weathered glacial till and possibly weathered Blakely Formation in some locations. In general, the depth to bearing soils in non-wetland areas should vary between 2 and 4 feet below grade. Local overexcavation or re-compaction of loose soils may be required, depending on the final location and planned elevations of the building and other features.

The geotechnical engineer should verify soil bearing conditions in foundation areas when they have been excavated. We should be provided with the final plans when they become available so that we may confirm the location and elevation of the new residence.

Foundation Design

The proposed residence may be supported on a shallow spread footing foundation system bearing on undisturbed medium dense or firmer native soils or on properly compacted structural fill placed on the suitable native soils. If structural fill is used to support foundations, then the zone of structural fill should extend beyond the faces of the footing a lateral distance at least equal to the thickness of the structural fill.

For shallow foundation support, we recommend widths of at least 16 and 24 inches, respectively, for continuous wall and isolated column footings supporting the proposed structure. Provided that the footings are supported as recommended above, a net allowable bearing pressure of 2,000 pounds per square foot (psf) may be used for design.

A 1/3 increase in the above value may be used for short duration loads, such as those imposed by wind and seismic events. Structural fill placed on bearing, native subgrade should be compacted to at least 95 percent of the maximum dry density based on ASTM Test Method D1557. Footing excavations should be inspected to verify that the foundations will bear on suitable material.

Exterior footings should have a minimum depth of 18 inches below pad subgrade (soil grade) or adjacent exterior grade, whichever is lower. Interior footings should have a minimum depth of 12 inches below pad subgrade (soil grade) or adjacent exterior grade, whichever is lower.

If constructed as recommended, the total foundation settlement is not expected to exceed 1 inch. Differential settlement, along a 25-foot exterior wall footing, or between adjoining column footings, should be less than 1/2 inch. This translates to an angular distortion of 0.002. Most settlement is expected to occur during construction, as the loads are applied. However, additional post-construction settlement may occur if the foundation soils are flooded or saturated. All footing excavations should be observed by a qualified geotechnical consultant.

Resistance to lateral footing displacement can be determined using an allowable friction factor of 0.35 acting between the base of foundations and the supporting subgrades. Lateral resistance for footings can also be developed using an allowable equivalent fluid passive pressure of 225 pounds per cubic foot (pcf) acting against the appropriate vertical footing faces (neglect the upper 12 inches below grade in exterior areas). The allowable friction factor and allowable equivalent fluid passive pressure values include a factor of safety of 1.5. The frictional and passive resistance of the soil may be combined without reduction in determining the total lateral resistance.

Care should be taken to prevent wetting or drying of the bearing materials during construction. Any extremely wet or dry materials, or any loose or disturbed materials at the bottom of the footing excavations, should be removed prior to placing concrete. The potential for wetting or drying of the bearing materials can be reduced by pouring concrete as soon as possible after completing the footing excavation and evaluating the bearing surface by the geotechnical engineer or his representative.

Closure

The information presented herein is based upon professional interpretation utilizing standard practices and a degree of conservatism deemed proper for this project. We emphasize that this report is valid for this project as outlined above and for the current site conditions and should not be used for any other site.

Sincerely,

Cobalt Geosciences, LLC



8/12/2020

Phil Haberman, PE, LG, LEG
Principal

#B109 STORMWATER MANAGEMENT



For City Use Only:
Date Stamp

Applicant's Name: VANCE RENDER Address: Box 10880 B-1. WA
 Applicant Phone #: (206) 384-8837 e-mail: V4VANCE@AOL.COM
 Site Assessor Tax Parcel #: 02240210052007
 Site Address: _____

All information in this worksheet is required to be filled out for your permit application to be accepted.

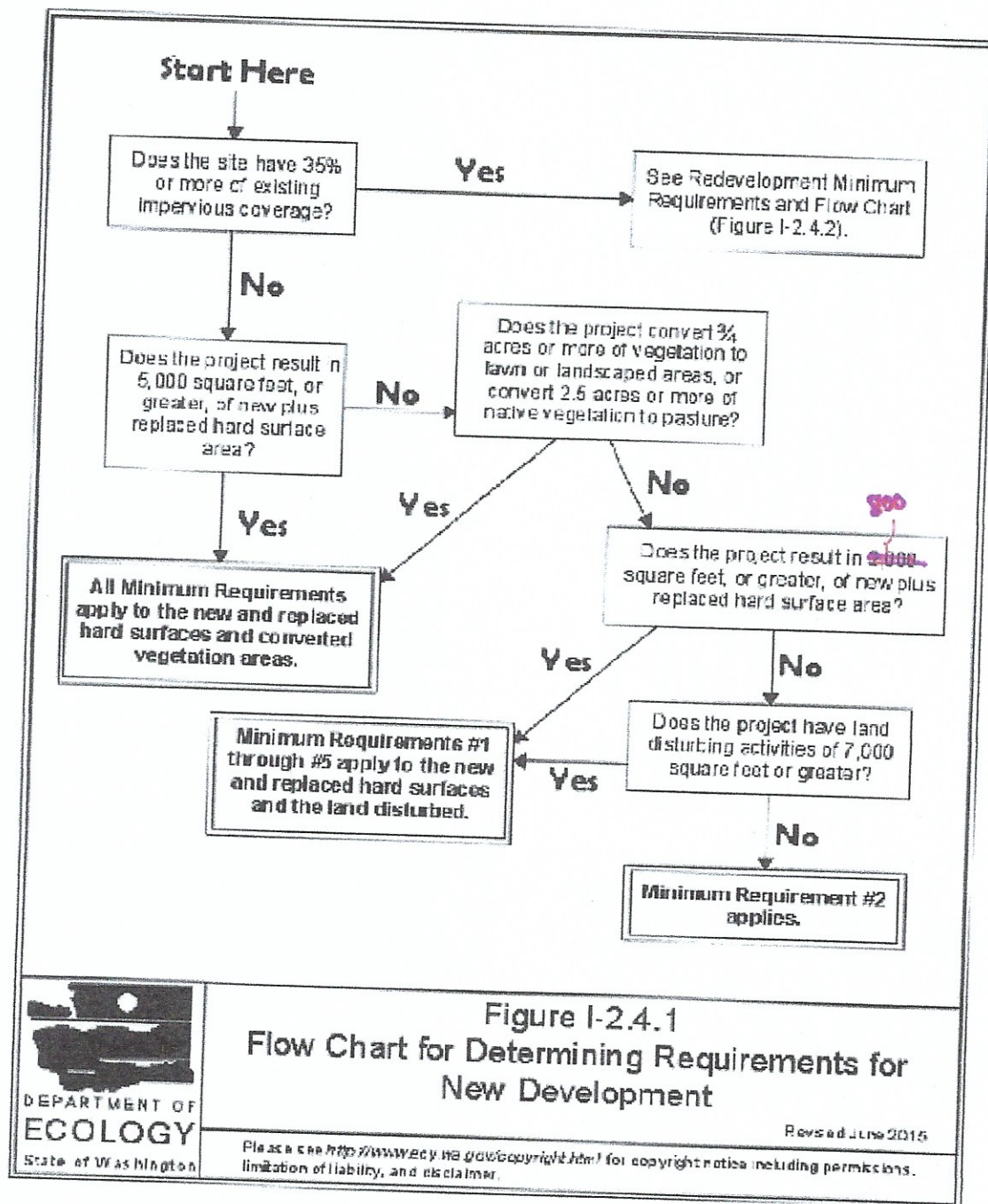
Section 1 General Information

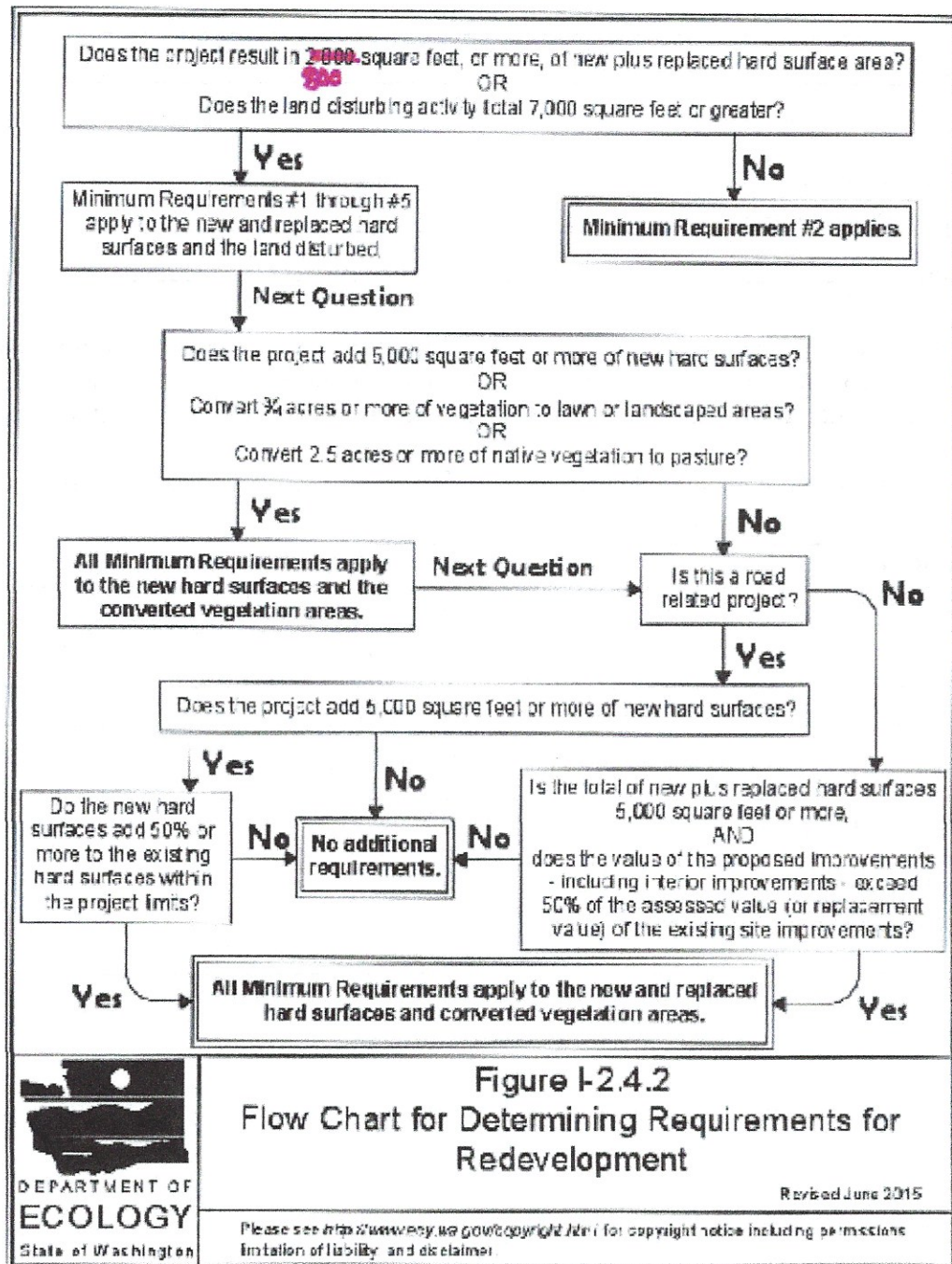
1. Existing Site Conditions: UNDEVELOPED LAND
2. Proposed Site Development Activity: BUILD SINGLE FAMILY DWELLING & DRAINFIELD
3. Total Size of property: 4.75 AC (206,910 SQ FT)
4. Existing hard coverage on the site (%): 960 SQ FT
5. Proposed (new + replaced) hard surface area on site: 1,200 SQ FT square feet.
6. Total proposed land disturbance area: 2,000 square feet.
7. Area converted from native vegetation to lawn, landscaping or pasture: 0 square feet.
8. Water Purveyor (if applicable): KPUD
9. Sanitary Sewer Purveyor (if applicable): _____
10. Adjacent or onsite water bodies: pond ☒ wetland stream/creek shoreline

Review flow charts attached and determine what Minimum Requirements apply to your project?

Minimum Requirements:

- ☐ #1-#9 go to Section 2 – An engineered plan will be required
- ☐ #1-#5 go to Section 2
- ☐ #2 go to Section 4





Section 2 – Site Assessment

Site assessment shall follow the steps outlined in the “2012 Low Impact Development Technical Guidance Manual for Puget Sound”

Surveyor (Registered land surveyor required): _____

Soil Report Prepared by: _____

Certification: _____

Native Vegetation and Soil Plan Prepared by: _____

Certification: _____

Preliminary Drainage Report Prepared by: _____

Certification: _____

Submittals

This submittal checklist is intended to assist you in preparing and submitting a complete application. Once your application is determined to be counter complete, a review for technical completeness is conducted and you may be required to submit additional information in order to proceed with further review of your application.

Submittal Requirements

Use the column to the left to check off items included with your application. More detailed submittal descriptions are provided on the following pages of this document.

✓	Required Submittal Items	Number
	1. Surveyed Existing Site Plan	2 original paper
	2. Soils Report	2 original paper
	3. Native Vegetation and Soil Protection Area Plan	2 original paper
	4. Drainage Report	2 original paper
	5. Site Plan	2 original paper
	6. Other technical reports as applicable, including but not limited to: <ul style="list-style-type: none">○ Geotechnical report○ Wetlands delineation report and mitigation plan○ Other	3 original paper

Site Assessment/ Analysis Requirements

Detailed application requirements are noted below; full details are not provided due to limited space. Please note that additional items or information may be required if the review process indicates more information is needed to evaluate the project. Follow and submit in accordance with “*Low Impact Development (LID) Technical Guidance Manual for Puget Sound*”, Chapter 2 Site Assessment.

Survey Site Plan Requirements:

- ☐ Project datum and two project benchmarks identified.
- ☐ Scale
- ☐ Existing topography, including existing structures, for the site and extending 50 feet beyond project boundaries. Existing topography for adjacent rights-of-way must be included for the full width of right-of-way. Contours as follows:
 - Up to 10 percent slopes, two-foot contours.
 - Over 10 percent to less than 20 percent slopes, 5-foot contours.
 - 20 percent or greater slopes, 10-foot contours.
 - Elevations shall be at 25-foot intervals.
- ☐ Property lines, right-of-way and easements are clearly identified.
- ☐ Existing public and private development, including utility infrastructure on and adjacent (if publicly available) to the site.
- ☐ Major hydrologic features with streams, wetland, and water body survey and classification report showing wetland and buffer boundaries consistent with COBI requirements.
- ☐ Flood hazard areas on or adjacent to the site, if present.
- ☐ Geologic hazard areas and associated buffer requirements.
- ☐ Aquifer and wellhead protection areas on or adjacent to the site, if present.
- ☐ Topographic features that may act as natural stormwater storage, infiltration or conveyance.

Soils Report:

- ☐ Soil Report prepared by a certified soil scientist, professional engineer, geologist, hydrogeologist or engineering geologist registered in the State of Washington or suitably trained persons working under the supervision of the above professionals. The report will identify:
 - Underlying soil texture and stratigraphy on the site. Tests for accessing and assessing on-site soil texture and stratigraphy include soil surveys, soil test pits, small-scale Pit Infiltration Test (PIT) or soil borings. Grain size analysis may be substituted for infiltration tests on soils unconsolidated by glacial advance.
 - Determine if depth to hydraulic restriction layer under rain gardens or permeable pavement is within one foot of the bottom (subgrade surface) of the infiltration areas, using a monitoring well or excavated pit. This analysis should be performed in the winter season (December 1 through April 1). The optimum time to test for depth to seasonally high groundwater is late winter (e.g. March) and shortly after an extended wet period. Historic site information and evidence of high groundwater can also be used.
 - **For Sites Required to Meet Minimum Requirements 1-5 per BIMC 15.20.060:** Infiltration rates of on-site soils. Infiltration rates for rain gardens, bioretention areas or permeable pavement installations must be assessed using septic style pit tests, small-scale PIT or grain size analysis (if unconsolidated soils). See 2012 LID Technical Guidance Manual for Puget Sound.
 - **For Sites Required to Meet Minimum Requirements 1-9 per BIMC 15.20.060:**
 - Saturated hydraulic conductivity (Ksat) of site soils.
 - Detailed logs for each test pit or test hole and a map showing the location of the pits or holes.

- Location of monitoring wells if site assessment cannot confirm that seasonal high groundwater or hydraulic restricting layer is greater than 5 feet below the bottom of the bioretention or permeable pavement.
- Analysis of interflow potential and conveyance.
- Follow *2012 LID Technical Guidance Manual for Puget Sound* for additional requirements.

Native Vegetation or Soil Protection Area:

- ☐ Include a survey of native protection areas proposed for the site, if any. Survey of existing native vegetation cover will be prepared by a licensed landscape architect, arborist, qualified biologist.
- ☐ Identify any forest areas on the site.
- ☐ Provide a plan for protection of the area.

Drainage Report:

- ☐ Proposed plan for permanent stormwater management.
- ☐ Proposed staging to minimize site disturbance and impacts.
- ☐ Proposed stormwater management plan during construction.

Site Plan:

- ☐ Plan sheet size 18"x24" or 24"x36"
- ☐ All items provided in survey site plan.
- ☐ Proposed structure.
- ☐ Proposed utilities.
- ☐ Other proposed hard surfaces (driveway, parking, sidewalks and pathways).
- ☐ Proposed access points.
- ☐ Location of proposed stormwater facilities.

Section 3 - Stormwater Management Requirements

(Underline text corresponds to the 2012 (Rev. 2014) Stormwater Management Manual for Western Washington (SWMMWW))

Projects triggering only Minimum Requirements #1 through #5 shall either:

- a. Use On-site Stormwater Management BMPs from List #1 for all surfaces within each type of surface in List #1; or
- b. Demonstrate compliance with the LID Performance Standard. Projects selecting this option cannot use Rain Gardens. They may choose to use Bioretention BMPs as described in Chapter V-7 - Infiltration and Bioretention Treatment Facilities to achieve the LID Performance Standard.

Projects triggering Minimum Requirements #1 through #9, must

- a. meet the requirements in [I-2.5.5 Minimum Requirement #5: On-site Stormwater Management](#); and
- b. either
 1. Low Impact Development Performance Standard and [BMP T5.13: Post-Construction Soil Quality and Depth](#); or
 2. List #2

Low Impact Development (LID) Performance Standard

Stormwater discharges shall match developed discharge durations to pre-developed durations for the range of pre-developed discharge rates from 8% of the 2-year peak flow to 50% of the 2-year peak flow. Refer to the Standard Flow Control Requirement section in Minimum Requirement #7 for information about the assignment of the pre-developed condition. Project sites that must also meet minimum requirement #7 – flow control - must match flow durations between 8% of the 2-year flow through the full 50-year flow.

List #1: On-site Stormwater Management BMPs for Projects Triggering Minimum Requirements #1 through #5

For each surface, consider the BMP's in the order listed for that type of surface. Use the first BMP that is considered feasible. No other On-site Stormwater Management BMP is necessary for that surface. Feasibility shall be determined by evaluation against:

1. Design criteria, limitations, and infeasibility criteria identified for each BMP in the SWMMWW; and
2. Competing Needs Criteria listed in [Chapter V-5 - On-Site Stormwater Management](#).

Lawn and landscaped areas:

- Post-Construction Soil Quality and Depth in accordance with [BMP T5.13: Post-Construction Soil Quality and Depth](#).

Roofs:

1. Full Dispersion in accordance with [BMP T5.30: Full Dispersion](#), or Downspout Full Infiltration Systems in accordance with [BMP T5.10A: Downspout Full Infiltration](#)

2. Rain Gardens in accordance with [BMP T5.14A: Rain Gardens](#), or Bioretention in accordance with [BMP T7.30: Bioretention Cells, Swales, and Planter Boxes](#). The rain garden or bioretention facility must have a minimum horizontal projected surface area below the overflow which is at least 5% of the area draining to it.
3. Downspout Dispersion Systems in accordance with [BMP T5.10B: Downspout Dispersion Systems](#)
4. Perforated Stub-out Connections in accordance with [BMP T5.10C: Perforated Stub-out Connections](#)

Other Hard Surfaces:

1. Full Dispersion in accordance with [BMP T5.30: Full Dispersion](#)
2. Permeable pavement⁴ in accordance with [BMP T5.15: Permeable Pavements](#), or Rain Gardens in accordance with [BMP T5.14A: Rain Gardens](#), or Bioretention in accordance with [BMP T7.30: Bioretention Cells, Swales, and Planter Boxes](#). The rain garden or bioretention facility must have a minimum horizontal projected surface area below the overflow which is at least 5% of the area draining to it.
3. Sheet Flow Dispersion in accordance with [BMP T5.12: Sheet Flow Dispersion](#), or Concentrated Flow Dispersion in accordance with [BMP T5.11: Concentrated Flow Dispersion](#).

List #2: On-site Stormwater Management BMPs for Projects Triggering Minimum Requirements #1 through #9 – A registered professional engineer must complete this plan.

For each surface, consider the BMPs in the order listed for that type of surface. Use the first BMP that is considered feasible. No other On-site Stormwater Management BMP is necessary for that surface. Feasibility shall be determined by evaluation against:

1. Design criteria, limitations, and infeasibility criteria identified for each BMP in this manual; and
2. Competing Needs Criteria listed in [Chapter V-5 - On-Site Stormwater Management](#).

Lawn and landscaped areas:

- Post-Construction Soil Quality and Depth in accordance with [BMP T5.13: Post-Construction Soil Quality and Depth](#).

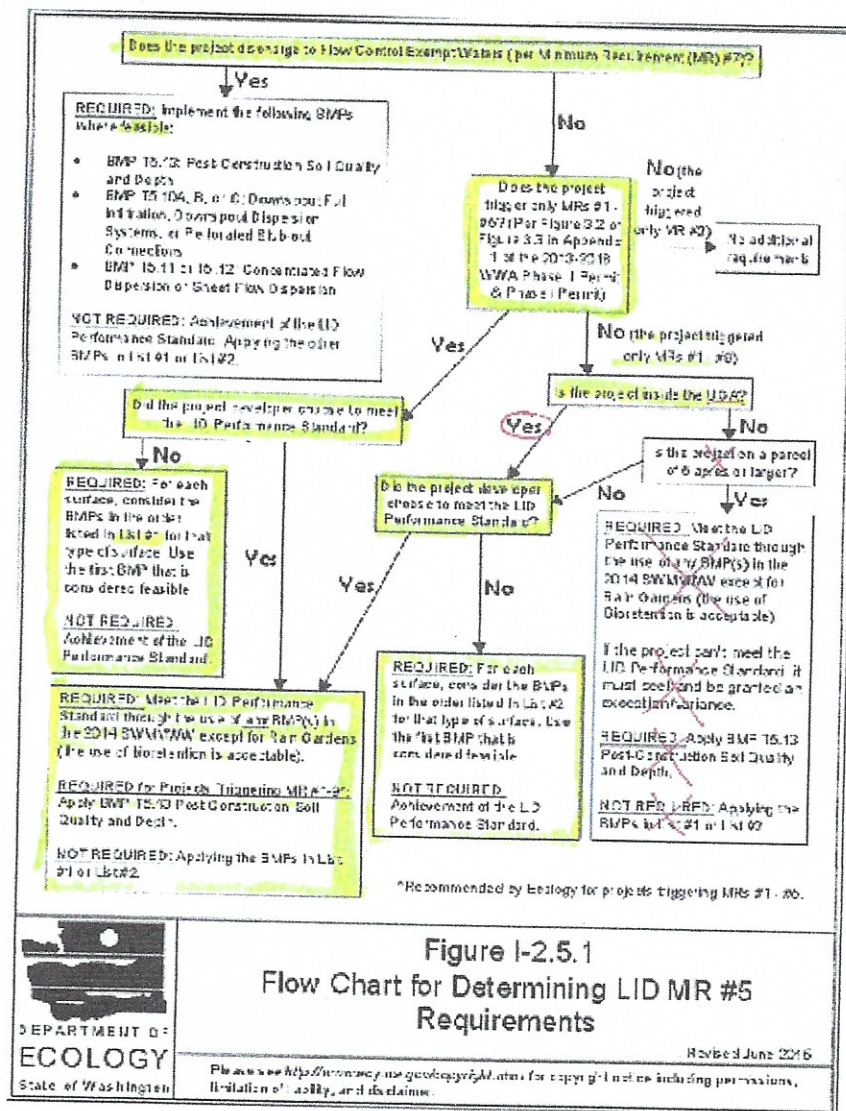
Roofs:

1. Full Dispersion in accordance with [BMP T5.30: Full Dispersion](#), or Downspout Full Infiltration Systems in accordance with [BMP T5.10A: Downspout Full Infiltration](#).
2. Bioretention (See [BMP T7.30: Bioretention Cells, Swales, and Planter Boxes](#)) facilities that have a minimum horizontally projected surface area below the overflow which is at least 5% of the total surface area draining to it.
3. Downspout Dispersion Systems in accordance with [BMP T5.10B: Downspout Dispersion Systems](#)
4. Perforated Stub-out Connections in accordance with [BMP T5.10C: Perforated Stub-out Connections](#)

Other Hard Surfaces:

1. Full Dispersion in accordance with [BMP T5.30: Full Dispersion](#)
2. Permeable pavement¹ in accordance with [BMP T5.15: Permeable Pavements](#)
3. Bioretention BMP's ([BMP T7.30: Bioretention Cells, Swales, and Planter Boxes](#)) that have a minimum horizontally projected surface area below the overflow which is at least 5% of the total surface area draining to it.
4. Sheet Flow Dispersion in accordance with [BMP T5.12: Sheet Flow Dispersion](#), or Concentrated Flow Dispersion in accordance with [BMP T5.11: Concentrated Flow Dispersion](#)

¹ This is not a requirement to pave these surfaces. Where pavement is proposed, it must be permeable to the extent feasible unless full dispersion is employed.



UGA - URBAN GROWTH AREA. ALL OF BARNBRIDGE ISLAND IN UGA.

Section 4 – MR #2 Stormwater Pollution Prevention Plan (SWPPP) Narrative

Every Construction Stormwater Pollution Prevention Plan (SWPPP) must address the 13 required elements from the Washington State Department of Ecology [SWMMWW](#).

Check the suggested BMP you will use to satisfy the required element and **identify location on the stormwater site plan**. If an element does not apply to your proposal, provide a written justification identifying the reason an element is not applicable to the proposal.

1. **Preserve Vegetation/Mark the Area Disturbed by Construction Activity.** Describe the total disturbed area (grading, building pad, driveway, septic installation, etc.) and reference how you will clearly mark the area of disturbance.

- ☒ BMP C101 – Preserving Natural Vegetation
 - ☐ BMP C102 - Buffer Zones
 - ☐ BMP C103 – High Visibility Plastic or Metal Fence
 - ☐ BMP C104 – Stake and Wire Fence
-
-

2. **Establish Construct Access.** Describe construction access.

- ☐ BMP C105 – Stabilized Construction Entrance
- ☐ BMP C106 – Wheel Wash
- ☐ BMP C107 – Construction Road/Parking Area Stabilization
- ☒ Not applicable – Existing access will prevent tracking of sediment onto public right-of-way

PROPERTY HAS LONG GRAVEL DRIVEWAY

3. **Control Flow Rates.** If there is substantial grading and/or the potential for stormwater runoff to flow off site during construction, then one of the two BMPs must be identified and shown on the site plan.

- ☐ BMP C240 – Sediment Trap
 - ☐ BMP C241 – Temporary Sediment Pond
 - ☒ Not applicable – Very little grading and/or site does not experience site runoff during storm events
-

4. **Install Sediment Controls.** When there is grading on a site and the site is sloped, there is a potential for sediment to leave the site during storm events. Please identify a BMP below if your site has any slope to it.

- ☐ BMP C231 – Brush Barrier
 - ☐ BMP C232 – Gravel Filter Berm
 - ☒ BMP C233 – Silt Fence
 - ☐ BMP C234 – Vegetated Strip
 - ☐ BMP C235 – Straw Wattles
 - ☐ Site is flat and no potential for sediment to leave the site exists
-
-
-

5. **Stabilize Soils.** All exposed soil must be protected from rainfall and wind erosion. From October 1 through April 30, no soil shall remain exposed and unworked for more than 2 days. From May 1 to September 30, no soils shall remain exposed and unworked for more than 7 days.

- ☐ BMP C120 – Temporary and Permanent Seeding
 - ☒ BMP C121 – Mulching
 - ☐ BMP C122 – Nets and Blankets
 - ☒ BMP C123 – Plastic Covering
-
-
-

6. **Project Slopes.** If the property has slopes, they must be protected from erosion if work is done on or near them.

- ☐ BMP C120- Temporary and Permanent Seeding
 - ☐ BMP C130 – Surface Roughening
 - ☐ BMP C131 Gradient Terraces
 - ☒ Not Applicable – The property does not have any slopes nor are there any slopes within 100 Feet of the project boundaries
-
-
-

7. **Protect Drain Inlets.** Storm drains shall be protected from sediment entering them.

- ☐ C220 – Storm Drain Inlet Protection
- ☒ Not Applicable – There are no storm drains on the property or within 100 feet of the stabilized construction access.

8. **Stabilize Channels and Outlets.** If temporary on-site conveyance channels are used, they must be stabilized to protect against erosion.

- ☐ BMP C202 – Channel Lining
- ☐ BMP C209 – Outlet Protection
- ☒ Not Applicable – Temporary on-site conveyance channels are not used for this project.

9. **Control Pollutants.** All pollutants shall be handled and disposed of in a manner that does not cause contamination of stormwater. Please identify any BMP used for the project.

- ☒ BMP C151 – Concrete Handling
- ☐ CMP C152 – Sawcutting and Surfacing Pollution Prevention
- ☐ Above BMP not expected to be necessary, however all necessary precautions will be taken to ensure pollutants are handled and disposed of in a safe manner

10. **Control De-Watering.** If the site is expected to experience ponding and/or foundation is left in a manner that encourages water ponding, then the applicant shall make necessary plans to discharge the water in a manner that ensures it is safely cleaned before being discharged. Describe the plan for dewatering below.

- ☒ Not applicable. Site does not experience ponding and foundation will be kept dry such that water accumulation does not occur.
-

12 Feb 2020

SWPPP Narrative

Pine Way/Vance Rehder

1. The building site is quite level with a slight slope away from site, both to the south and towards the wet land to the north. The water table is pretty close to the surface in the lowest areas during the wet season. My plan is to excavate to minimal depth (16" to bottom of footing) and import backfill to raise the finish grade one to two feet depending on existing grade. Consequently, there should not be any spoil piles to maintain, leaving much of the natural vegetation intact. I will be doing the site work so know which areas to avoid, and have installed stakes with flags and string lines along the natural vegetation delineating the wetland buffer, water quality buffer, and property line to the south. BMP C101
2. Not applicable. Property has existing long gravel driveway right to the front of house that should prevent any tracking of sediment to public right of way. Will be prepared to sweep off paved street if ever necessary.
3. Not applicable. As noted the site is level and minimal grading will be done. If an unusually high runoff event occurs, straw bales will be used to control.
4. A vegetative strip should be sufficient to keep sediment from leaving as the slope is slight. If more is needed a silt fence will be installed. BMPs C234, C233
5. Any stockpiles will be covered with plastic sheeting. Disturbed soils will be mulched with straw. BMPs C123, C121
6. Not applicable, no significant slopes on property.
7. Not applicable on this project.
8. Not applicable. No channels to be used on this project. If something is found to be occurring naturally straw barriers will be used.
9. Concrete washout will take place in garage slab area and construction entrance BMP C151
10. Ponding should not occur on this project, however, all dirt and concrete work will be performed during the dry months to protect the wetland. If at any point it becomes necessary to dewater the site water will be pumped to the east toward the higher ground near the drainfield. If water accumulation is overwhelming work will be halted until natural absorption takes place.
11. Bmps will be maintained daily.
12. There is little need for phasing on this project as it is so small little disturbance will take place. There is little clearing besides a few alders. The foundation and septic work will take place during the dry soil conditions. Construction of residence will take place upon completion of all backfilling.
13. See all above.

Project Description

The onsite development proposes construction of a single family home and drainfield along the south edge of property. The home will be situated near the southwest corner and will be accessed via a short driveway. The drainfield will be located east of the house along the south property line. Because the property is composed of wetland and buffer, there is no area available outside the buffer in which to construct a home. A Reasonable Use Exemption is necessary to allow construction of the home.

A 1200 square foot house and garage is proposed at the southwest corner where the largest area of upland is available. This portion of the buffer is composed of level to undulating forested upland that includes coniferous and deciduous portions with sparsely vegetated shrub and somewhat dense herbaceous layers.

Decision Criteria/ Project Narrative

1. Due to size and position of wetland there are no areas available on this property to avoid impacting wetland and buffer to construct a single family home.
2. No alternative available. Proposed home is situated in the southwest corner of property which represents the largest area of upland on the property and furthest from the wetland.
3. Impacts on critical areas will be minimized in accordance with mitigation sequencing through locating home and drainfield in southwest corner and southern edge of property respectively. The foot print of the home will be limited to 1200sq. ft. for minimal impact on habitat. Best management practices will be utilized through out construction.
4. A small footprint along with minimal lawns and use of native plants in landscaping will ensure the smallest impact necessary to allow reasonable use of property.
5. The property is raw land with natural hydrology. No actions taken by me or the previous owner have affected the usability of the property.
6. The proposed home is limited to 1200sq. ft. and the proposed area represents around 1% of total property.
7. There is no threat to public health or safety due to proposal.
8. Any alterations to the critical area will be in accordance with permits received and through use of best management practices and mitigation sequencing.
9. Proposal represents minimal affects on habitat value by retaining as much buffer as possible and no effect on the function of the area.
10. Cumulative impacts are addressed through locating home in an area with least impact and through responsible handling of storm water.
11. Proposal is consistent with similar situations in the area according to wetland biologist report and geotech survey.

Avoiding Impacts

This property is 4.75 acres in size and composed almost entirely of a Category III wetland and required buffer. Because of the position and size of the wetland, there are no areas available on this property to avoid impacting wetland buffer to construct a single family home.

Minimizing Impacts

The project is minimizing the impacts by proposing the home in the upland at the southwest corner which represents the greatest area of upland on the property and by proposing a 1,200 sq. ft. footprint. To minimize the temporary construction impacts, best management practices shall be utilized during construction activities.

Rectifying Impacts

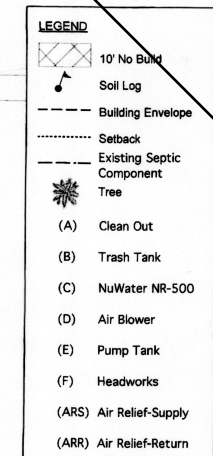
The project represents a permanent impact to the wetland buffer so cannot rectify the impacts to the affected habitat.

Reducing or Eliminating Impacts

The project cannot reduce or eliminate the impacts by preservation and maintenance

Compensating for the Impacts

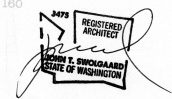
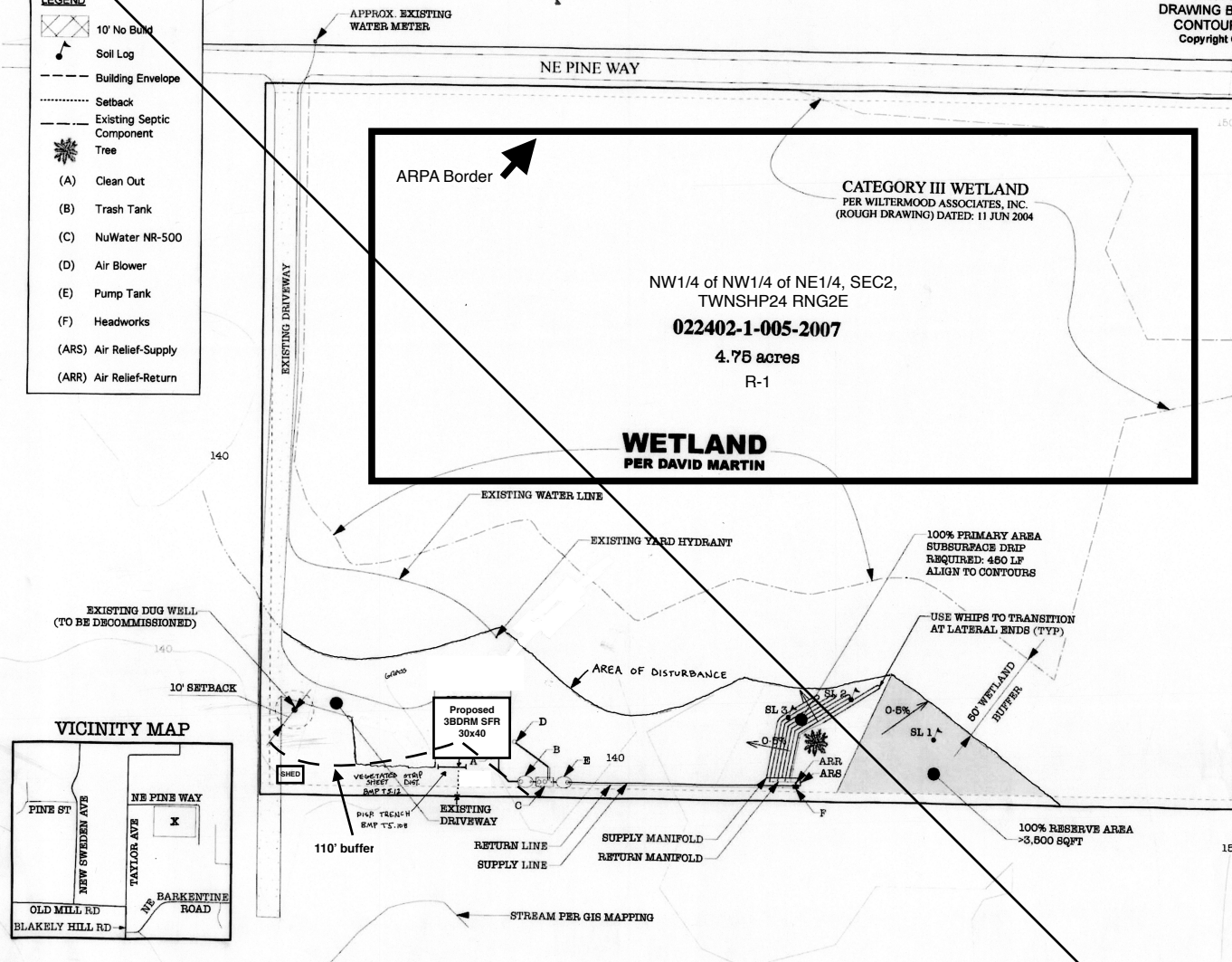
The project cannot avoid, rectify, or reduce the impact to the buffer, but has minimized the impact to the extent possible by proposing to retain as much buffer as possible. Buffer enhancement is proposed by removal of invasive plant species and use of native plant species in landscaping.



PROPERTY LINES BASED ON
DRAWING BY DAVID MARTIN: 11-11-2015
CONTOUR LINES SOURCED FROM:
Copyright © 1995-2013 Kitsap County GIS.
All rights reserved.



SCALE: 1" = 50'
THIS IS NOT A SURVEY



Nathan Cleaver Septic Design, Inc.
Phone: (360) 598-6546, Fax: 360-598-6548
262 NW Thompson Road, Poulsbo, WA 98370
E-mail: nathan@nathancleaver.com

CUSTOMER: VANCE REHDER
TAX ID #: 022402-1-005-2007
LOCATION: PINE WAY
BAINBRIDGE ISLAND, WA 98110
DRAWN BY: ICS
DESIGN BY: NATHAN N. CLEAVER
DATE: 6 JUN 2018

From: [Linda Wohlsen](#)
To: [PCD](#)
Subject: Permit Number: PLN50583A RUE Project Name: Rehder RUE
Date: Thursday, September 17, 2020 2:32:35 PM

CAUTION: This email originated from outside the City of Bainbridge Island organization. DO NOT click links or open attachments unless you recognize the sender and know the content is safe.

Questions regarding Notice of Application PLN50583A RUE

I spoke with the owner on 9/17/20 regarding his home building proposal.

I am not clear on the following regarding the proposed building plan in a Reasonable Use Exception (RUE) acreage.

- Two buildings were constructed on the site since the owner purchased the land. Does the 1200 sq. ft. footprint include the two existing buildings or are those in addition to the 1200 sq ft maximum?
- What is the maximum height that can be built in that area?
- Are there restrictions on the type of foundation that can be built in a wetland area? (Pillars versus flat foundation.)
- After the house has been built, where will the water drain in the rainy season when that area becomes saturated? What impact will it have on neighbors especially those who already have wet areas around their homes? We have had times when the water from that area went up and over the Pine Way road in winter and spring.

Thank you for addressing the above questions.

Linda Wohlsen
10459 NE Pine Way

Linda Wohlsen, MS, CMC
Care Manager, Certified

650-814-4826 (cell)

From: [LINDA BLEVINS](#)
To: [PCD](#)
Subject: PLN50583A Rehder RUE
Date: Friday, September 18, 2020 2:51:29 PM

CAUTION: This email originated from outside the City of Bainbridge Island organization. DO NOT click links or open attachments unless you recognize the sender and know the content is safe.

To COBI, Planning and Community Development:

Hello. I'd like greater clarity on a couple of items on this project - Rehder RUE.

Regarding water/drainage in general for the neighboring properties due to the development. Will this have any impacts (e.g., more or different flooding) on an area already very wet during certain times? planned mitigations?

Based on what I undertand from reviewing the documents, because of the large wetland and wetland buffer the septic/drainfield will be near the property line we share. Please confirm there are no negative impacts from that development.

The Geotechnical Evaluation from last month discusses the foundation in detail. Is the footprint for the house under construction changing or will it remain as is?

Thank you for the time and for helping guide a successful building process.

Linda Blevins



KPUD

CONNECTING KITSAP

KITSAP PUBLIC UTILITY DISTRICT
1431 FINN HILL RD
PO Box 1989
POULSBORO, WA 98370
OFFICE 360-779-7656
FAX 360-779-3284

DATE 8/18/16

BRUCE ZWICKER
5280 ROSE AVE NE
BAINBRIDGE ISLAND WA 98110

Re: Address: LOT 5 NE PINE WAY (RTS)
Tax ID #: 02240210052007
Reference #: 70
Account #: 33313
Owner: ZWICKER
Water System:

To Whom It May Concern:

This "Proof of Service" letter is meant to inform you that the above referenced property is currently served with a single water connection by PUD #1 of Kitsap County. This water connection is for a lot serving one equivalent residential unit (ERU), and may not be used to serve additional lots or be used to guarantee water service to more than an ERU if the lot is subdivided.

If you have any questions or need anything further regarding this matter please do not hesitate to contact our office.

Sincerely,

KPUD Customer Service
360-779-7656

I.U.C. LLC
Island Utility Company

13116 134th Ave KPN
Gig Harbor, WA 98329
Ph: (206) 319-2656
Fax: (253) 857-8008

June 18, 2015

RE: Paid connections for Pine Rd

Dear Mr. Bruce Zwicker,


Below is a receipt from IUC LLC for the connections on your property at Pine Road Bainbridge Island.

Connections to the IUC system on Pine for three 5/8 by 3/4 inch meter residential services. The boxes are currently placed on the North edge of Pine Road.

IUC LLC is in receipt of your check number 4929 for the connections for 10370 and 10374 Pine Rd and Parcel number 022402-1-005-2007 also on Pine Road.

Please contact us when you are ready to start service and the meters will be installed.

Best Regards


Scott Shelton
I.U.C. LLC

KPU.D.org
P. 779.7656
Allison 8.18.2016
F. " 3284

Notice of Pending Building Site Application with Public Water Supply

10/16/2018

Vance Rehder
PO BOX 10880
BAINBRIDGE ISLAND, WA 98110

Tax ID: 022402-1-005-2007
Site Address: NE Pine Way
Memo #: 32461
Water Source Type: Public
Water System Name: S. Bainbridge

Dear Applicant,

This checklist expires on 11 / 09 / 2021.

Your Building Site Application has been reviewed and a determination made that the soils and/or septic system plans have been given preliminary approval. However, the items listed below need to be submitted for review prior to final approval of your application may be granted. Your application has been placed in our pending files.

1. A current Proof-Of-Service letter, or three-year water availability letter from an approved public water system must be submitted. The water availability letter must be for a **Binding** commitment for water service, and must not expire 90 days prior to the building site application expiration date.
2. The existing well located on the parcel must be decommissioned by a licensed well driller, in accordance with local Board of Health Ordinance 1999-6 and Department of Ecology Chapter 173-160 WAC.

Please be aware that further review of your application cannot proceed until these items are submitted to the Health District. Additional information may be requested in the future based upon continued review.

You may track the status of your application online at www.kitsappublichealth.org; click on the "Application status" button on the bottom of the page.

If you have any questions regarding this pending letter you may contact me at (360) 728-2277 or steve.brown@kitsappublichealth.org.

Thank you for your cooperation.

Sincerely,



Steven Brown, RS
Senior Environmental Health Specialist
Drinking Water and Onsite Sewage Program

cc: Nathan Cleaver Septic Design



Department of Public Works - Engineering

Memorandum

Date: November 4, 2020
To: Kelly Tayara, Senior Planner
From: Paul Nylund, P.E., Development Engineer
Subject: PLN50803A – Rehder RUE PW-DE Conditions of Approval
Memorandum

Project Description:

The proposal seeks a reasonable use exception (RUE) to construct a single-family residence (SFR) on a 4.75 acre lot that is burdened entirely by a mapped Category III wetland and associated buffer with no opportunity for administrative buffer reductions. The subject parcel is identified by tax parcel number 022402-1-005-2007 and is located on the south side of Pine Way in the City of Bainbridge Island.

Recommendation

I have completed a review of the above-referenced project materials received by the City on August 12, 2020 and deemed complete on August 28, 2020. The reasonable use exception is recommended for **APPROVAL** based on the following findings pursuant to Bainbridge Island Municipal Code (BIMC) 16.20.080 and subject to the conditions that follow.

1. The proposal is consistent with applicable regulations and standards as it pertains to surface stormwater drainage per BIMC 15.20 and 15.21.
2. The proposal protects the critical area functions and values consistent with the best available science as it pertains to the incorporation of low impact development (LID) for the purpose of handling of stormwater, retaining vegetation, and mimicking natural hydrology to the maximum extent feasible;
3. The site plan as submitted conforms to the City of Bainbridge Island Design and Construction Standards and Specifications, “the Standards” where applicable or unless otherwise noted.

Comments:

1. Existing access to the COBI ROW at Pine Way shall be improved to the standard paved residential driveway approach detail DWG 8-170. A waiver to this condition may be requested during building permit review if the applicant demonstrates to the City Engineer’s satisfaction that the adverse effect of additional hard surface from a paved road approach in a wetland buffer would justify

overriding COBI policy on paved road approaches in the Public Right of Way. In this case, the existing gravel approach could remain but would be subject to potential grading requirements to ensure a standard road approach connection that protects/ballasts the existing COBI maintained asphalt roadway surface in Pine Way ROW.

2. All underground utilities (well water, septic transport, power, etc.) shall be routed to minimize site disturbances to the maximum extent feasible.
3. Use of soil sterilant to construct the driveway shall be strictly prohibited.
4. Consideration shall be given to utilizing minimal excavation foundation systems per the 2012 Low Impact Development Guidance Manual for Puget Sound as means of minimizing impacts to the proposed home site and the adjacent critical area (wetland) and its buffer. A bid comparison/analysis shall be submitted demonstrating the applicant has engaged an appropriate design and construction professional to explore alternative foundation systems including stilts, helical piers, and pin piles with grade beams. The bid(s) shall be obtained from a designer or installer with documented experience building with minimal excavation technology and submitted with the building permit for COBI engineering review prior to BLD permit review, approval, and issuance.
5. Areas outside the building footprint, driveway, septic components and associated drain field and any necessary construction setbacks shall be protected from soil stripping, stockpiling, and compaction by construction equipment through installation of resilient, high visibility clearing limits fencing or equivalent, subject to inspection by the City prior to clearing and construction.
6. Hardscaping should be constructed of permeable materials or contain wide permeable jointing where feasible to allow infiltration or shallow subsurface filtration of surface stormwater.
7. In addition to complying with BIMC 15.20 and 15.21, surface stormwater from the proposed structures and the developed driveway shall discharge and disperse at a location and in a manner consistent with BMP T5.10B – Downspout Dispersion Systems and BMP T5.12 – Sheet Flow Dispersion. Strong priority shall be given to diffuse flow methods (i.e. BMP C206: Level Spreader, pop-up emitters, diffuser tee or engineered equivalent) to minimize point discharges of surface stormwater into or towards the wetland on site.