



CRITICAL AREA STUDY

FOR

**Gill Development Company – 91XX SE 64th St
City of Mercer Island, WA**

Wetland Resources, Inc. Project #25351

Prepared By

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Date: December 24, 2025

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Executive Summary

Project Name: Gill Development Company – 91XX SE 64th St

Project Purpose: To support the applicant’s request for Critical Areas Review 1 (delineation verification and watercourse type).

Location: The subject property is accessed via SE 64th Street and has no assigned address. The property is between 9173 SE 64th Street and Engstrom Open Space (King County tax parcel 3024059107).

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Wetland Resources Staff: Niels Pedersen, PWS (Senior Ecologist)

Critical Areas Determination: Observed critical areas within the subject property include one watercourse (Stream A). Critical areas in nearby off-site areas include Stream B, a mapped Biodiversity Area in Engstrom Open Space and Pioneer Park, and one bald eagle nest in Engstrom Open Space.

Stream A is a Type Np watercourse that requires a 60-foot protective buffer. Stream B is also a Type Np watercourse that requires a 60-foot buffer. The eagle nest is within 660 feet of the subject property. The mapped Biodiversity Area does not constrain development (e.g. clearing, grading, residential structures) within the subject property.

Proposed Project: This report is intended to support the delineation and boundary verification process only. If buffer modification or impacts are deemed unavoidable during the subsequent residential development phase of the project, this report will be revised to document critical areas code compliance.

1.0 INTRODUCTION

1.1 SITE DESCRIPTION

The proposed project occurs within a 0.43-acre parcel with no assigned address (King County tax parcel 3024059213). Access to the site is from the north via SE 64th Street or from Creek Trail. Vegetation within the subject property mostly consists of typical native Puget Lowlands second-growth forest species including red alder, black cottonwood, bigleaf maple, western red cedar, salmonberry, sword fern, and red huckleberry, except that aggressive non-native English ivy is the dominant species in the understory.

The property is bisected by Creek Trail and a perennial watercourse (Stream A). The site has a moderate southwest-aspect slope from SE 64th St down to Creek Trail. Stream A is bound by a steep ravine immediately south of Creek Trail, and the site has a moderate northeast-aspect slope in the southern third.

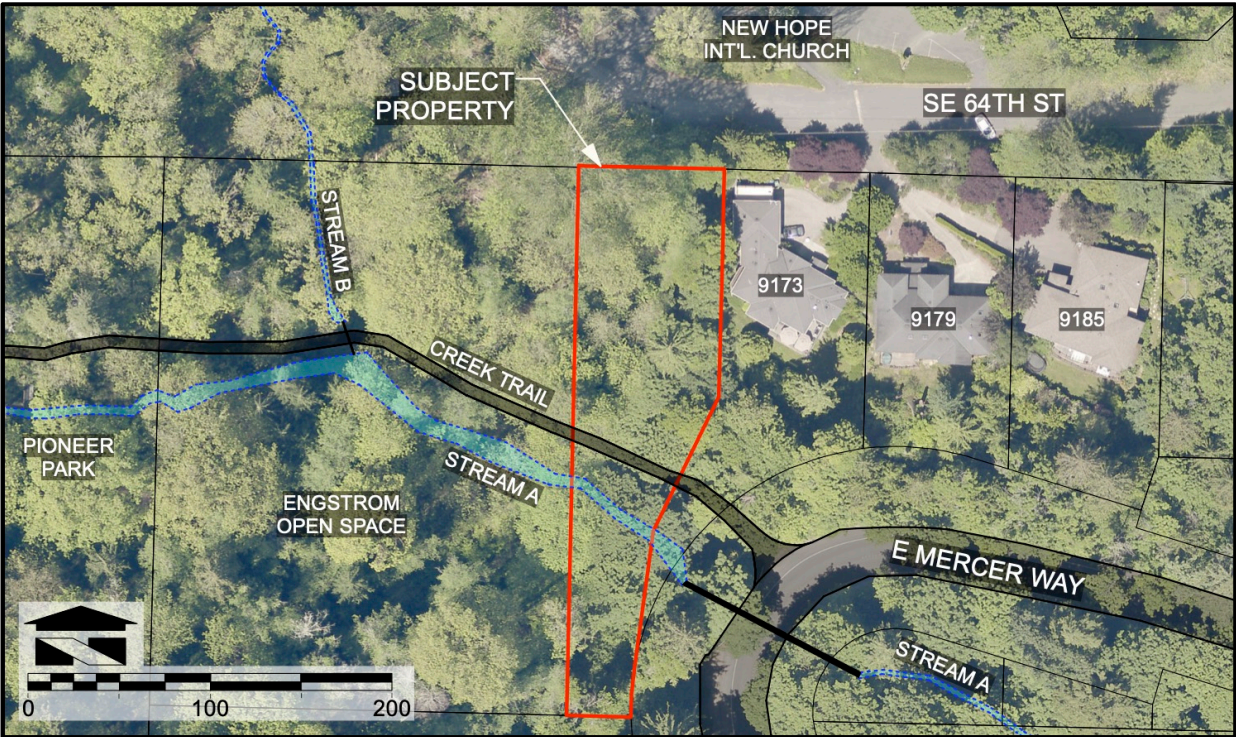


Figure 1: Aerial Overview of Subject Property

1.2 CRITICAL AREAS SUMMARY FINDINGS

Two streams (Stream A and Stream B) were observed. One bald eagle nest was observed. No wetlands, other watercourses, or additional fish and wildlife habitat conservation areas (FWHCA) were observed on or near the property. Geologic hazard areas are outside the scope of this report.

Table 1: Critical Areas Summary Findings

Feature Name	Critical Area Type	Distance from Property
Stream A	Type Np Watercourse	0 feet (on site)
Stream B	Type Np Watercourse	~130 feet
Bald Eagle Nest	Fish and Wildlife Habitat Conservation Area	~200 feet
Biodiversity Area	Fish and Wildlife Habitat Conservation Area	0 feet (along west boundary)

1.3 PROJECT PURPOSE

The applicant seeks confirmation from the City related to critical area boundaries and classifications prior to developing a site plan for future residential development. This report is intended to support an application for Critical Area Review 1. Detailed site planning has not occurred, and no critical area impacts or buffer modifications are anticipated at this time.

2.0 CRITICAL AREAS DELINEATION METHODOLOGY

2.1 LIMITS OF STUDY

Wetland Resources, Inc. (WRI) performed a site reconnaissance on November 24, 2025 and a field delineation on December 22, 2025. The purpose of the initial site visit was to approximately locate critical areas on and near the property. The purpose of the delineation site visit was to collect data and flag/locate the boundaries of legally accessible critical areas identified during the initial site visit. Field delineation occurred within the subject property and also within the northern Engstrom Open Space property (King County tax parcel 3024059107). Field observation of the bald eagle nest occurred within the southern Engstrom Open Space property (3024059067).

2.2 GENERAL CRITICAL AREAS CLASSIFICATION

Critical areas were classified in accordance with the standards set forth in section 19.07.170 of the Mercer Island City Code (MICC) for fish and wildlife habitat conservation areas, section 19.07.180 for watercourses, and section 19.07.190 for wetlands. Identification of geologic hazard areas is beyond the scope of this report. Buffers are measured horizontally in a landward direction from the critical area boundary.

2.3 WETLAND DELINEATION METHODOLOGY

Wetland boundaries were determined using the routine determination approach described in the Corps of Engineers Wetlands 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 Corps of Engineers 2010), as required by MICC 19.07.080(A). Under the routine methodology, the process for making a wetland determination is based on three steps:

- 1.) Examination of the site for hydrophytic vegetation (species present and percent cover);
- 2.) Examination of the site for hydric soils;
- 3.) Determining the presence of wetland hydrology

The following criteria must be met to make a positive wetland determination.

Vegetation Criteria

The Corps Manual and 2010 Regional Supplement define hydrophytic vegetation as “*the assemblage of macrophytes that occurs in areas where inundation or soil saturation is either permanent or of sufficient frequency and duration to influence plant occurrence.*” Field indicators are used to determine whether the hydrophytic vegetation criteria have been met. Examples of these indicators include, but are not limited to, the rapid test for hydrophytic vegetation, a dominance test result of greater than 50%, and/or a prevalence index score less than or equal to 3.0.

Soils Criteria

The 2010 Regional Supplement (per the National Technical Committee for Hydric Soils) defines hydric soils as soils “that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part.” Field indicators are used to determine whether a given soil meets the definition for hydric soils. Indicators are numerous and include, but are not limited to, presence of a histosol or histic epipedon, a sandy gleyed matrix, depleted matrix, and redoximorphic depressions.

Hydrology Criteria

Wetland hydrology encompasses all hydrologic characteristics of areas that are periodically inundated or have soils saturated to the surface for a sufficient duration during the growing season. Areas with evident characteristics of wetland hydrology are those where the presence of water has an overriding influence on the characteristics of vegetation and soils due to anaerobic and chemically reducing conditions, respectively. The strongest indicators include the presence of surface water, a high water table, and/or soil saturation within at least 12 inches of the soil surface.

2.4 WATERCOURSE DELINEATION METHODOLOGY

The OHWM of Stream A and Stream B was determined based on the Ecology guidance document titled *Determining the Ordinary High Water Mark for Shoreline Management Act Compliance in Washington State*.

The boundaries of Stream A were delineated within the subject property and within Engstrom Open Space and were located using high-accuracy GPS. The left bank is hand numbered on pink flag material labeled OHWM as follows: AL1 – AL12. The right bank is hand numbered on pink flag material labeled OHWM as follows: AR1 – AR10. See Appendix B – Sheet 2/2.

The left bank of Stream B was delineated in off-site areas to establish that the stream does not constrain the subject property. No flags were physically hung, but the OHWM of the left bank was delineated to approximately 40 feet upslope of the culvert inlet that conveys the stream beneath Creek Trail and located using high-accuracy GPS.

3.0 CRITICAL AREAS DELINEATION REPORT

3.1 REVIEW OF EXISTING INFORMATION

Prior to conducting the on-site investigations, public resources information was reviewed to gather background information on the project study area and surrounding areas regarding wetlands, watercourses, and other critical areas.

USFWS National Wetlands Inventory

The National Wetlands Inventory (NWI) does not identify any wetlands on or near the site.

King County Soils

The Natural Resources Conservation Service (NRCS) web soil survey was used to identify soil types in the project area. Kitsap silt loam, 15 to 30 percent slopes, is the only mapped soil type in the project area. The following table describes the hydric component percentage found in the mapped soil type. The likelihood that a given map unit is a hydric soil is partly based on the percentage of hydric components found in the soil type.

Table 2: Mapped Soils in the Project Area

Map Unit Name	Hydric Component	Component Percentage
Kitsap silt loam, 15 to 30 percent slopes	Bellingham	1
	Tukwila	1
	Seattle	1

Fish Presence

The Washington Department of Fish and Wildlife (WDFW) and the Washington Dept. of Natural Resources (WADNR) are the primary state agencies that provide publicly available information used for making fish presence determinations. Stream classification decisions made by state agencies are based on the water typing rules set forth in section 222-16-031 of the Washington Administrative Code (WAC). Notably, the MICC does not require stream classification in accordance with the WAC. The following information represents the findings from each source.

WDFW SalmonScape Map Tool

SalmonScape is an online GIS database that contains publicly available resource information for fish population studies and general species distribution (both documented and modeled presence). SalmonScape identifies Stream A as a seasonal non-fish bearing stream that outlets directly to Lake Washington. Stream B is mapped as a seasonal non-fish bearing stream that outlets to Stream A. One total fish passage barrier is mapped at the culvert outlet that conveys Stream A beneath E Mercer Way. Another total fish passage barrier is mapped at the confluence of Stream A and Stream B.

WADNR Forest Practices Activity Mapping Tool (FPAMT)

FPAMT is an online GIS database that aids the process of submitting a Forest Practices Permit application. WADNR models fish presence based on WAC 222-016-031. Stream A and Stream B are shown by FPAMT. The tool shows the streams passing through the subject property and meeting at the culvert inlet that drains Stream A beneath E Mercer Way. Stream A is shown approximately in the actual location, but Stream B is shown incorrectly passing through the subject property. Stream A is depicted by FPAMT as Type F (fish-bearing) from Lake Washington to a point approximately 700 feet west of the subject property within Pioneer Park. Stream B is depicted as Type N (non-fish).

City of Mercer Island Critical Areas

The City of Mercer Island depicts critical areas via an interactive web map - City of Mercer Island GIS Portal. Streams A and B are classified as Type Np watercourses from the confluence with Lake Washington up to areas west of the subject property. A bald eagle nest is depicted approximately 125 feet southeast of the subject property. Several geologic hazards are identified but are outside the scope of this report.

WDFW Priority Habitat and Species (PHS) Maps

WDFW PHS identifies Pioneer Park, Engstrom Open Space, nearby residential backyards/tracts, and a portion of the subject property as a Biodiversity Area and Corridor. This resource does not identify Stream A or Stream B.

3.2 WETLAND DETERMINATION DISCUSSION

No wetlands were observed within the subject property during the November or December site visits. 2.41 inches of rain were recorded at the nearest weather station (Seattle Boeing Field) in the seven days preceding the December site visit, and 4.46 inches were recorded in the two weeks preceding the December site visit. Although conditions early in the water year were drier than normal, the site is currently wetter than what would be expected in the early growing season of a normal year.

Hydrophytic Vegetation

Hydrophytic vegetation is limited to sparse salmonberry, red alder, black cottonwood, and western red cedar, all of which regularly occur in both wetland and upland areas. Bigleaf maple is the dominant canopy cover and English ivy is the dominant groundcover. Neither of these species are commonly associated with wetlands. Hydrophytic vegetation is generally not present.

Hydric Soils

Soils within the property are generally sandy with a chroma of three for at least six inches in the upper layer. Soils with high chroma in the upper part are not likely to occur in wetlands.

Wetland Hydrology

The absence of saturation or a high water table throughout the site following a very wet period supports the non-wetland determination for the property.

3.3 FISH AND WILDLIFE HABITAT CONSERVATION AREAS

Aquatic Habitat

Pursuant to MICC 19.07.170, Streams A and B are considered FWHCAs simply because they are watercourses. These features do not contain federally listed species, or species of local importance due to downstream fish passage barriers.

Wildlife Habitat

Two additional FWHCAs are located on or near the subject property: a bald eagle nest and a Biodiversity Area and Corridor.

Bald Eagle Habitat

Areas used by bald eagles for foraging, nesting, roosting, or within 660 feet of a bald eagle nest are collectively regulated as FWHCAs. The City of Mercer Island GIS Portal displays a bald eagle nest near the west shoulder of E Mercer Way in a dead-top old-growth Douglas fir tree. The tree and nest were observed during the November and December site inspections. The tree is slightly farther southeast from the City-mapped location, approximately 200 feet from the southeast corner of the subject property. See Appendix B – Sheet 1/2. The nest site appears to have been recently damaged by a fallen branch.

Due to nest proximity, future development of the subject property must implement requirements of the US Fish and Wildlife Service's National Bald Eagle Management Guidelines. If the nest is not actively used for breeding, then no construction timing restrictions would be required. If the nest is actively used for breeding, then construction activities that generate "short-term, obtrusive characteristics and more permanent impacts" (e.g. loud construction equipment operation, exterior work) should occur outside of the January 1st to August 31st breeding season.

Biodiversity Areas and Corridors

WDFW maps an approximately 150-acre Biodiversity Area and Corridor within Pioneer Park, Engstrom Open Space, and within residential properties located between Island Crest Way and E Mercer Way. The feature is a “terrestrial habitat” priority area and WDFW notes that the designation is based on the presence of “relatively densely forested tracts and some steep hillsides.” Approximately 0.3 acres of the 150-acre polygon overlaps the subject property.

MICC 19.07.170 regulates Biodiversity Areas as FWHCAs. The subject property is not a Biodiversity Area based on the definition presented in MICC 19.16.010.B because it is not publicly-owned land. The nearest regulated Biodiversity Area is adjacent to the subject property to the west in Engstrom Open Space.

WDFW management recommendations for Biodiversity Areas focus on limiting changes to habitat structure, configuration, and connectivity. Residential development of the subject property will require clearing and grading adjacent to the regulated Biodiversity Area, which will result in some loss of habitat structure and configuration (fragmentation) within the subject property.

Based on review of WDFW technical guidance for Biodiversity Areas and Corridors, “...mapped data is not well suited to address site-specific land use proposals (e.g. where to site building on a parcel)...” For this reason, no site development restrictions are anticipated to result from the presence of a nearby regulated Biodiversity Area within Engstrom Open Space.

3.4 WATERCOURSE DETERMINATION FINDINGS

Stream A

Jurisdiction: City of Mercer Island

Cowardin Classification: Riverine, Perennial, Streambed

Watercourse Classification: Type Np

Buffer Requirement: 60 feet



Figure 2: Stream A

Stream A is a natural watercourse that flows east through the center of the subject site. Bed material consists of sorted cobble, gravel, silt, and sand. No vegetation was observed within the channel, and the stream bank is sufficiently steep that overbank flooding appears to occur infrequently.

Stream A originates within 6250 89th Ave SE and flows through Pioneer Park and Engstrom Open Space before entering the subject property. The stream is conveyed beneath E Mercer Way in an open box culvert and flows as an open channel for approximately 1,000 feet southeast before entering approximately 500 lineal feet of buried culvert in the vicinity of 6614 E Mercer Way. The piped stream extends east along the common boundary between 6460 E Mercer Way and 6610 E Mercer Way before discharging directly to Lake Washington. See Figure 3.

Two complete fish passage barriers were identified downstream of the subject property. The WDFW Fish Passage Interactive Map displays a total fish passage barrier at the culvert that conveys Stream A beneath E Mercer Way (WDFW Site ID 920826), and the City of Mercer Island GIS Portal shows approximately 500 lineal feet of buried culvert immediately upstream of the outlet to Lake Washington. The City-mapped barrier prevents anadromous fish use within any portion of Stream A.

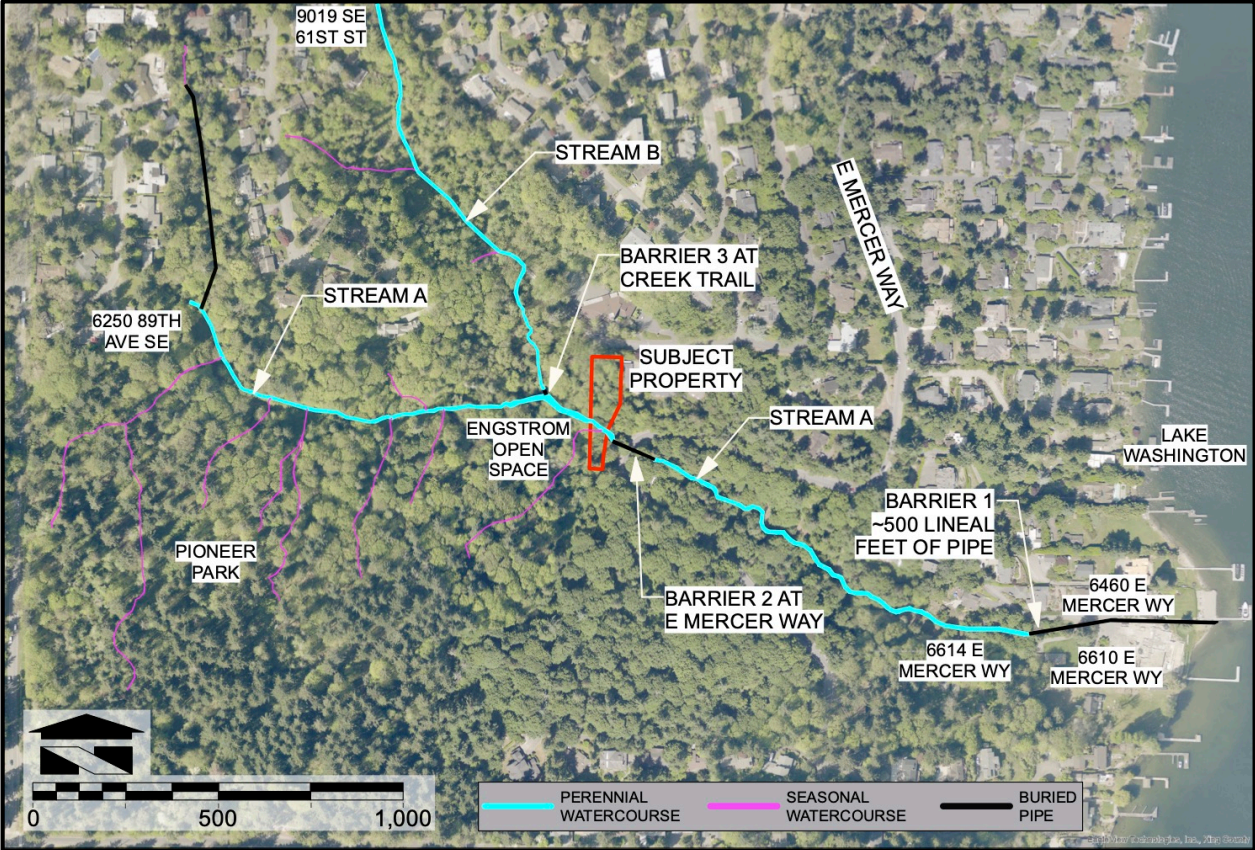


Figure 3: Basin Overview

Stream B

Jurisdiction: City of Mercer Island

Cowardin Classification: Riverine, Perennial, Streambed

Watercourse Classification: Type Np

Buffer Requirement: 60 feet



Figure 4: Stream B

Stream B is a natural watercourse that flows into Stream A approximately 130 feet west of the subject property. Bed material consists of sorted cobble, gravel, silt, and sand. No vegetation was observed within the channel, and the stream bank is sufficiently steep that overbank flooding appears to occur infrequently.

Stream B originates within 9019 SE 61st St and flows south through the New Hope International Church property (9170 SE 64th St) and into Engstrom Open Space before draining into Stream A. The stream is conveyed beneath Creek Trail to Stream A through a crushed round culvert.

Stream B is inaccessible to anadromous fish due to the previously discussed barriers and an additional barrier at the confluence of Stream A and Stream B (WDFW Site ID 920837).

3.5 WATERCOURSE CLASSIFICATION DISCUSSION

Stream classification is described in MICC 19.07.180 as either: Type S, F, Np, Ns, or piped. MICC 19.16.010 provides a specific definition for each of the aforementioned types. To meet criteria for designation as a Type F watercourse, a “natural channel” must “contain fish habitat.” Fish habitat is defined in MICC 19.16.010 as follows:

Habitat which is used by any fish at any life stage at any time of the year, including potential habitat likely to be used by fish which could be recovered by restoration or management and includes off-channel habitat.

It is the applicant's position that Streams A and B are not Type F watercourses because they do not contain fish habitat. This finding is consistent with the City of Mercer Island GIS classification, the 2006 watercourse inventory prepared by Herrera, and the 2020 watercourse inventory prepared by Herrera.

The culvert at the outlet to Lake Washington precludes "use by any fish at any life stage at any time of the year" due to its physical characteristics; no fish can travel upstream through 500 feet of pipe due to velocity and the lack of resting areas. The piped section of the culvert could not reasonably be "recovered by restoration" for several reasons. From a legal standpoint, the owners of the subject property cannot daylight the piped watercourse because they do not own the properties where the culvert is located. From a practical standpoint, 6610 E Mercer Way is currently under construction and the applicant did not elect to daylight the stream, presumably due to a combination of safety risk, property devaluation (due to reduced recreational use), and the potential for environmental damage (e.g. diminished water quality due to proximity to residential use and landscaping practices).

There are no known waterbodies that could support non-anadromous fish upstream of the subject property. The mapped seasonal tributaries to Stream A west of E Mercer Way are separated by slopes that exceed 40 percent, and the perennial reaches are supported by residential stormwater runoff. These physical conditions do not support the life history of any fish.

4.0 USE OF THIS REPORT

This Critical Area Study is supplied to Gill Development Company as a means of determining critical area conditions, as required by the City of Mercer Island during the permitting process. This report is based largely on readily observable conditions and, to a lesser extent, on readily ascertainable conditions. No attempt has been made to determine hidden or concealed conditions.

The laws applicable to wetlands are subject to varying interpretations and may be changed at any time by the courts or legislative bodies. This report is intended to provide information deemed relevant in the applicant's attempt to comply with the laws now in effect.

The work for this report has conformed to the standard of care employed by wetland ecologists. No other representation or warranty is made concerning the work or this report and any implied representation or warranty is disclaimed.

Wetland Resources, Inc.



Niels Pedersen
Senior Ecologist, PWS

5.0 REFERENCES

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Appendix A

Army Corps of Engineers Wetland Determination Data Forms (S1)

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

Project/Site: Gill Development Company/91XX SE 64th St City/County: Unincorporated/King Sampling Date: 12/22/2025
 Applicant/Owner: Gill Development Company/Benjamin Altman State: WA Sampling Point: S1
 Investigator(s): N. Pedersen Section, Township, Range: SEC30 TWP24N RGE05E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): none Slope (%): -2
 Subregion (LRR): A Lat: 47.545621 Long: -122.215257 Datum: WGS84
 Soil Map Unit Name: Kitsap silt loam (15-30%) NWI classification: None

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"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology 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"/>
Remarks:	

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>5m²</u>)				
1. <u>Acer macrophyllum</u>	<u>60</u>	<u>Y</u>	<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>25</u> (A/B)
2. <u>Populus balsamifera</u>	<u>10</u>	<u>N</u>	<u></u>	
3. <u>Alnus rubra</u>	<u>5</u>	<u>N</u>	<u></u>	
4. _____	<u>75</u>	<u>= Total Cover</u>		
Sapling/Shrub Stratum (Plot size: <u>3m²</u>)				
1. <u>Rubus armeniacus</u>	<u>15</u>	<u>Y</u>	<u>FAC</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC species _____ x 3 = <u>0</u> FACU species _____ x 4 = <u>0</u> UPL species _____ x 5 = <u>0</u> Column Totals: <u>0</u> (A) <u>0</u> (B) Prevalence Index = B/A = _____
2. _____	<u>15</u>	<u>Y</u>	<u>FACU</u>	
3. _____	<u>15</u>	<u>Y</u>	<u>FACU</u>	
4. _____	<u>15</u>	<u>Y</u>	<u>FACU</u>	
5. _____	<u>15</u>	<u>= Total Cover</u>		
Herb Stratum (Plot size: <u>1m²</u>)				
1. <u>Hedera helix</u>	<u>40</u>	<u>Y</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 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>Y</u>	<u>FACU</u>	
3. _____	<u>15</u>	<u>Y</u>	<u>FACU</u>	
4. _____	<u>15</u>	<u>Y</u>	<u>FACU</u>	
5. _____	<u>15</u>	<u>Y</u>	<u>FACU</u>	
6. _____	<u>15</u>	<u>Y</u>	<u>FACU</u>	
7. _____	<u>15</u>	<u>Y</u>	<u>FACU</u>	
8. _____	<u>15</u>	<u>Y</u>	<u>FACU</u>	
9. _____	<u>15</u>	<u>Y</u>	<u>FACU</u>	
10. _____	<u>15</u>	<u>Y</u>	<u>FACU</u>	
11. _____	<u>15</u>	<u>= Total Cover</u>		
Woody Vine Stratum (Plot size: <u>3m²</u>)				
1. <u>None</u>	<u>0</u>	<u>= Total Cover</u>		
2. _____	<u>0</u>	<u>= Total Cover</u>		
% Bare Ground in Herb Stratum <u>45</u>				
Remarks:				

SOIL

Sampling Point: S1

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

Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-11	10YR 3/3	100					Sandy Loam	dry throughout profile
11-18	10GY 6/1	85	10YR 4/6	15	C	M	Clay Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

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

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1) (except MLRA 1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- 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 Soil Present? Yes No

Remarks:

Soils do not meet any hydric soil indicator due to high chroma (3) for greater than six inches in the upper part.

HYDROLOGY

Wetland Hydrology Indicators:

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

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)

- Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
- Salt Crust (B11)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Stunted or Stressed Plants (D1) (LRR A)
- Other (Explain in Remarks)

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? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

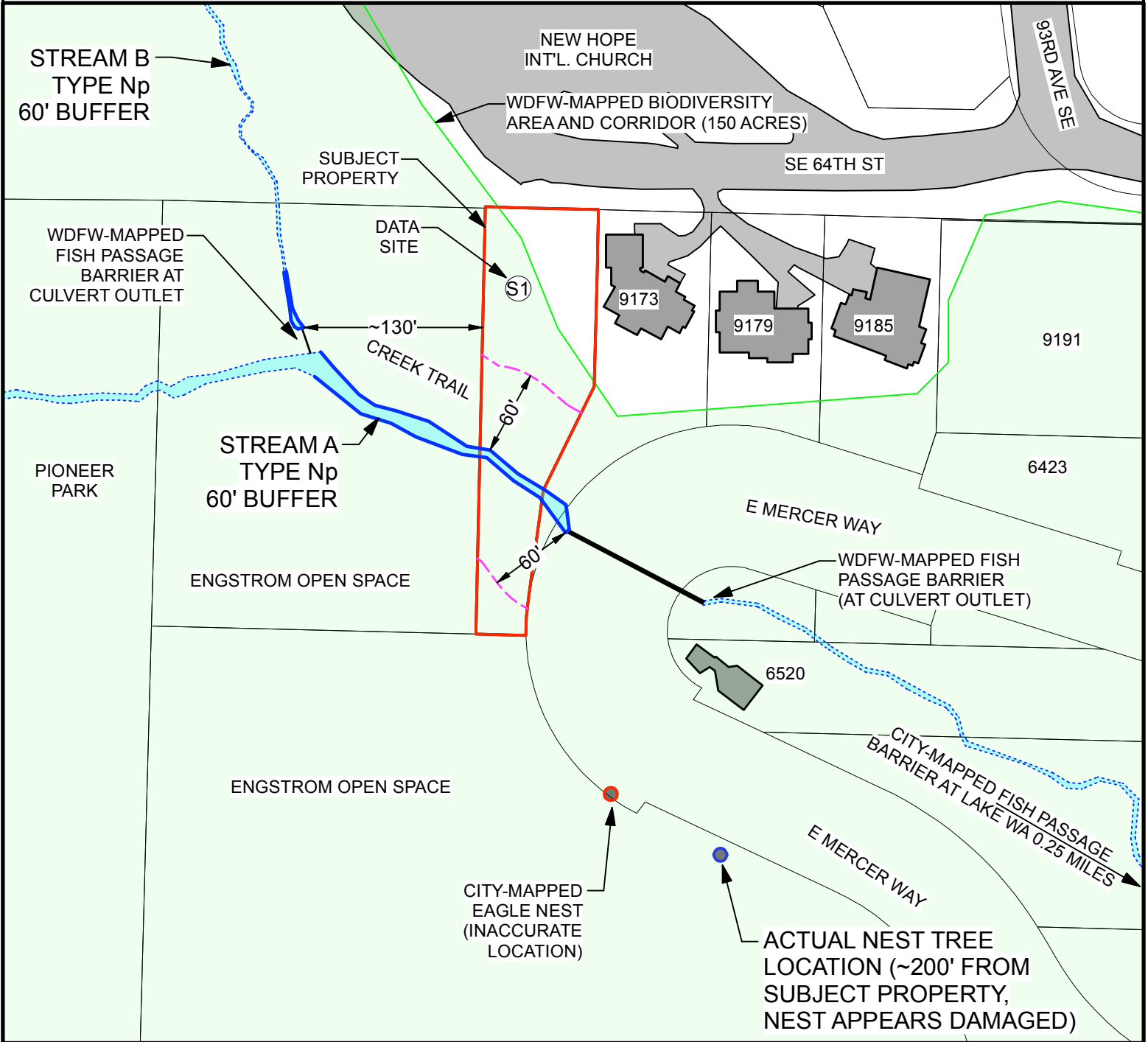
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Appendix B

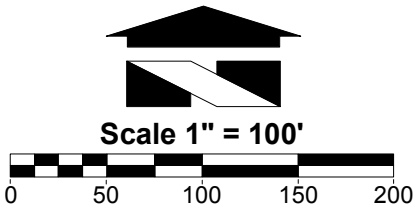
Critical Area Study Maps (Sheets 1/2 to 2/2)

CRITICAL AREA STUDY MAPS
GILL DEV. CO. - 91XX SE 64TH ST
 EXISTING CONDITIONS OVERVIEW



LEGEND

	DELINEATED STREAM		STREAM BUFFER		ADJACENT PARCELS		CITY-MAPPED EAGLE NEST		BIODIVERSITY AREA (WDFW)
	ESTIMATED STREAM		IMPERVIOUS/STRUCTURE		SUBJECT PROPERTY		OBSERVED EAGLE NEST		

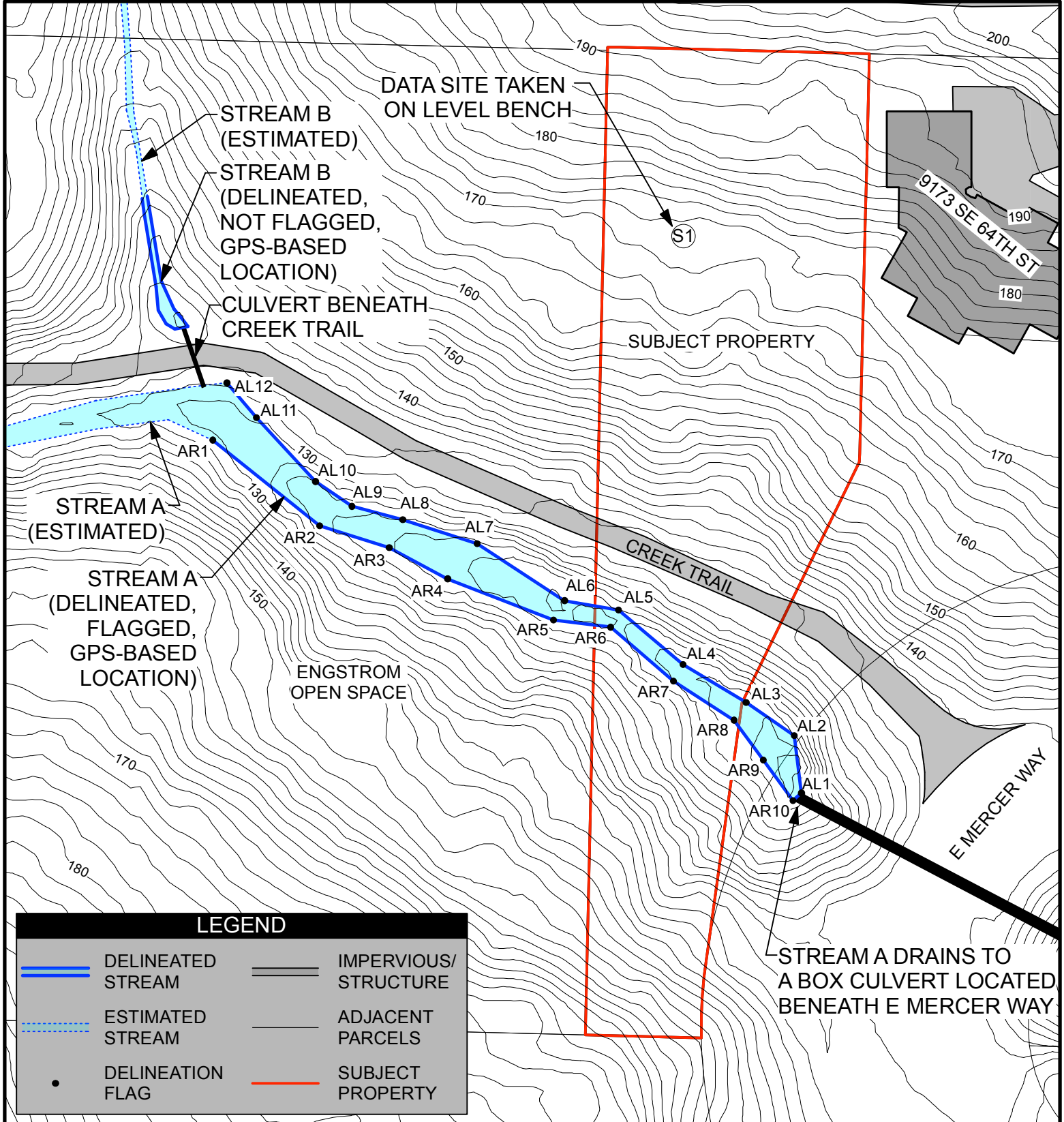


Wetland Resources, Inc.
 Delineation / Mitigation / Restoration / Habitat Creation / Permit Assistance
 9505 19th Avenue S.E. Suite 106 Everett, Washington 98208
 Phone: (425) 337-3174
 Fax: (425) 337-3045
 Email: mailbox@wetlandresources.com

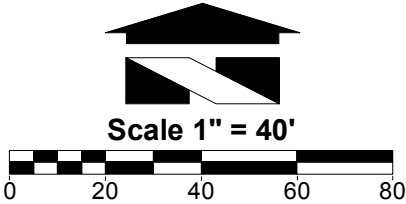
Critical Area Study Maps
Gill Dev. Co. - 97XX SE 64th St
 Tax Parcel 3024059213

Gill Development Company Sheet 1/2
 Attn: Jaspaul Gill WRI #: 25351
 5030 228th Ave SE Drawn by: NP
 Issaquah, WA 98029 Date: 12/24/2025

CRITICAL AREA STUDY MAPS
GILL DEV. CO. - 91XX SE 64TH ST
 FIELD DELINEATION OVERVIEW



LEGEND			
	DELINEATED STREAM		IMPERVIOUS/ STRUCTURE
	ESTIMATED STREAM		ADJACENT PARCELS
	DELINEATION FLAG		SUBJECT PROPERTY



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Critical Area Study Maps
Gill Dev. Co. - 97XX SE 64th St
 Tax Parcel 3024059213
 Gill Development Company Sheet 2/2
 Attn: Jaspaul Gill WRI #: 25351
 5030 228th Ave SE Drawn by: NP
 Issaquah, WA 98029 Date: 12/24/2025