

Critical Areas Report and Buffer Averaging Plan

White Center HUB

10821 8th Avenue SW

Seattle, WA 98146

Prepared for Community Roots Housing



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PBS Project No. 41308.027



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1 INTRODUCTION

Community Roots Housing is redeveloping a parcel in unincorporated King County near White Center, Washington. The property had previously been held by King County and housed a food bank and other community services. The proposed White Center Community Hub will include a community resource center, housing local nonprofits, as well as approximately 80 affordable apartments. This Critical Areas Report and Buffer Averaging Plan describes King County regulated critical areas in the vicinity of the project site, as well as proposed impacts.

2 SITE DESCRIPTION

2.1 Location

The property is located at 10821 8th Avenue SW, just outside the City limits of Seattle in unincorporated King County. It is in the NE $\frac{1}{4}$ of the SW $\frac{1}{4}$ of Section 6, Township 23 North, Range 04 East. The property consists of a single tax lot (King County tax parcel 0623049405) totaling approximately 2.81 acres (Figure 1). The approximate center of the site is at latitude 47.505920, longitude -122.345095.

The property borders 8th Avenue SW on the east side, SW 108th Street to the north and King County's Dick Thurnau Memorial Park (also known as Lakewood Park) to the south and west. A residential property abuts the property along the northern portion of the west property line. The topography at the project site is relatively flat with elevations ranging from 368 to 377 feet above sea level.

2.2 Site History

Prior to 1961, the property appears to have been undeveloped. King County iMap aerial from 1936 shows some trees present in the central portion of the property with extensive clearing of the surrounding area to the north and east. In 1961, King County developed the property in its current configuration as a community service center with approximately 0.45 acres of building and 1.35 acres of parking, sidewalks, etc. Fill material appears to have been placed in the southern portion of the property to create a level lot. The building configuration has changed slightly over the years, but the percent of the lot that is developed has remained relatively consistent.

2.3 Hydrology

The property is in the Salmon Creek/South Puget Sound watershed in the Duwamish-Green River Water Resource Inventory Area (WRIA 9). The property sits near the watershed divide between the Duwamish waterway to the east and Puget Sound to the west. Salmon Creek is shown on most maps as having its headwater tributaries beginning approximately 0.5 mile to the west. Hydrology at the site comes primarily from direct precipitation. Runoff from the buildings and parking lots is discharged to the south and west.

Just west of the property, a small stream flows out of a culvert on the north edge of King County park property and flows south through the park into Hicklin Lake. The stream is fed by a series of wetlands and small ponds to the north, and by stormwater runoff from the surrounding neighborhoods. Earlier topographic maps show a culvert connection from the High School just south of the park to the Salmon Creek tributaries but there is currently no apparent outflow from the Lake except for a constructed overflow pipe. This drainage is considered part of the Salmon Creek watershed, despite the lack of a surface connection to the creek, and Salmon Creek flows into Puget Sound.

2.4 Soils

The project parcel is mapped as Urban land-Alderwood complex, 0 – 5% slopes. Soils examined during the site visit fit the gravelly sandy loam description. The site is underlain by advance and recessional outwash from the Vashon Stage of the Fraser glaciation. Given the urban location, it is quite probable that the native soils have been disturbed and as mentioned above, fill material was likely placed at the south end to create a level lot.

2.5 Vegetation Communities

2.5.1 Historic Vegetation Communities

The property would have originally supported a mixed coniferous/deciduous forest dominated by Douglas-fir (*Pseudotsuga menziesii*), western red cedar (*Thuja plicata*), western hemlock (*Tsuga heterophylla*), big leaf maple (*Acer macrophyllum*), red alder (*Alnus rubra*), and Pacific madrone (*Arbutus menziesii*) in the overstory, and vine maple (*Acer circinatum*), Osoberry (*Oemlaria cerasiformis*), salmonberry (*Rubus spectabilis*), salal (*Gaultheria shallon*) and swordfern (*Polystichum munitum*) in the understory. Black cottonwood (*Populus balsamifera*) and Oregon ash (*Fraxinus latifolia*) would have been present in the wetter areas. The original forest was likely logged 80 to 100 years ago.

2.5.2 Existing Vegetation

Approximately 65% of the property was cleared and developed in 1961. Existing vegetation on the remainder of the parcel consists of a mix of native species, landscape plants, lawns and weedy species. Dominant native trees include Douglas-fir, western red cedar, and Pacific madrone. These are present along the north, east and west edges, mostly on the north half of the site. The dominant native understory species are salal and creeping blackberry (*Rubus ursinus*). The non-native Himalayan blackberry (*Rubus armeniacus*) is present throughout the site and forms a dense thicket along the fence on the west edge. Other weedy species include Scot's broom (*Cytisus scoparius*), cherry laurel (*Prunus laurocerasus*), English ivy (*Hedera helix*), and English holly (*Ilex aquifolium*).

3 CRITICAL AREAS

3.1 Wetlands

3.1.1 National and Local Wetland Inventories

The National Wetland Inventory (NWI) website shows two palustrine unconsolidated bottom, permanently flooded ponds (Figure 2). The larger pond is known as Hicklin Lake or Garrett Lake. The smaller pond is just north and west of Hicklin Lake. No other wetlands are mapped in the vicinity. King County also maps a Category II wetland that includes the two ponds and some of the surrounding area (Figure 3). No critical areas are mapped on the subject property.

3.1.2 Wetland Delineation Methods

3.1.2.1 Rationale for Use of the Routine Delineation Methods

Based upon guidance provided in the *Corps of Engineers 1987 Wetland Delineation Manual* (1987 Manual) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Supplement (Version 2.0) (WMVC Regional Supplement), it is the best professional judgment of the PBS delineation team that the current wetlands in the study area exist under "normal circumstances" as defined in the 1987 Manual and supplement. Therefore, we delineated waters and wetlands on the project using methods recommended in the manual for routine situations.

3.1.3 Office Methods

Office preparation for the delineation consisted of a review of online data sources including, but not limited to, aerial photographs, King County iMAP, soils maps and descriptions, and weather history.

3.1.4 Field Methods

Katharine Lee, a Professional Wetland Scientist, conducted a field reconnaissance visit on January 19, 2017 and a formal wetland delineation on March 30, 2018. Kristen Numata, a Wetland Professional in Training, conducted a field reconnaissance on December 14, 2020.

Wetlands were delineated using the three-parameter approach as required in the WMVC Regional Supplement. All wetlands within 250 feet of the property were evaluated. The King County mapped Category II wetland/pond to the south of the property is more than 350 feet from the edge of the property and maximum buffers for Category II wetlands are 250 feet. Therefore, the Category II wetland(s) were not evaluated as part of this delineation. Wetland flags and data plots were surveyed by a professional land surveyor in May 2018.

3.1.4.1 *Hydrology*

The presence of wetland hydrology was determined by evaluating a variety of direct and indirect indicators. In addition to direct hydrologic measurements, hydrologic indicators can be used to infer satisfaction of the wetland hydrology criterion. Field indicators of wetland hydrology listed in the Regional Supplement include, but are not limited to, visual observation of inundation or saturation, sediment deposition, hydric soil characteristics, watermarks, drift lines, oxidation around living roots and rhizomes, and water-stained leaves. To satisfy the hydrology criterion for wetlands, soils need to be inundated or saturated to the surface for at least 14 consecutive days during the growing season. The wetland delineation occurred during the growing season, as described below.

3.1.4.2 *Soils*

The presence of hydric soils was determined consistent with the WMVC Regional Supplement and current regulatory guidance. The supplement includes a number of hydric soil indicators specific to this region. Soils were evaluated based on these indicators.

3.1.4.3 *Vegetation*

The existing vegetation was characterized for wetlands and adjacent uplands. Species identifications and taxonomic nomenclature followed the USDA Plants Database. Each species' indicator status was assigned using the Western Mountains, Valleys, and Coast 2016 Regional Wetland Plant List (USACE 2016). A species indicator status refers to the relative frequency with which the species occurs in jurisdictional wetlands. An area satisfies the hydrophytic vegetation criteria when, under normal circumstances, more than 50% of the dominant species from each stratum are obligate wetland (OBL), facultative wetland (FACW), or facultative (FAC) species.

3.1.5 Growing Season

The growing season is generally defined as the portion of the year when soil temperatures at approximately 20 inches below the soil surface are above biological zero or 5 degrees Celsius (US Department of Agriculture Soil Conservation Service 1985). When soil temperature data are not available, the Wetland Delineation Manual allows using the closest and best available weather station data to estimate the length of the growing season based on a 50% probability of a temperature of 28°F or higher (Ecology 1997, paragraph 46). Using this approximation, the growing season in this region would be approximately 306 days long at least 50% of the time. Generally, this translates to the period between February 8th and December 11th. To meet the hydrology criteria at this site, soils would need to be saturated to the surface for at least 14 consecutive days during that interval. The site visits occurred at both the beginning and just after the growing season. Signs of plant growth were visible.

3.1.6 Climate

King County has a predominantly temperate marine climate typical of much of the Puget Sound area. The property is in the Puget Sound lowlands climatic region. Summers are warm and relatively dry, and winters tend to be mild, but rather wet. Mean high temperatures for the Seattle Tacoma Airport (4.0 miles south)

range from 46°F in December and January to 76°F in July and August. Mean low temperatures range from 36°F in December and January to 56°F in July and August (US Climate Normals 1912-2016). The wetland delineation occurred on March 30, 2018, and a field reconnaissance occurred on December 14, 2020. Precipitation before the formal delineation was below the normal range. Prior to the field reconnaissance in December 2020, precipitation was within the normal range. Precipitation levels are considered normal when the probability of that rainfall amount for a given month is greater than or equal to 30% either side of the mean, as displayed in the table below (Table 1).

Table 1. Monthly Precipitation for the Seattle Tacoma Airport, WA (1970 – 2020)

Month	30% Chance Precip Less Than	30% Chance Precip More Than	Monthly Total Rainfall	Condition	Value	Weight	Total Points ¹
Oct 2017	2.22	4.36	4.80	Wet			
Nov 2017	4.28	7.20	8.63	Wet			
Dec 2017	4.03	6.71	5.43	Normal			
Jan 2018	3.95	6.40	8.12	Wet	3	1	3
Feb 2018	2.56	4.67	2.16	Dry	1	2	2
Mar 2018	2.88	4.67	2.44	Dry	1	3	3
TOTAL							8
Sept 2020	0.74	2.03	2.48	Wet	3	1	3
Oct 2020	2.22	4.36	2.58	Normal	2	2	4
Nov 2020	4.28	7.40	5.58	Normal	2	3	6
Dec 1-13, 2020	4.03	6.71	1.17	-			
TOTAL							13

¹ Dry = 6-9 points; Normal = 10-14 points; Wet = 15-18 points

3.1.7 Wetland Delineation Results

PBS conducted a waters/wetland delineation in the vicinity of the Community Roots Housing property. No wetlands were found on the subject property, but we identified Wetland A on the adjacent parcel to the west. Wetland A sits in a slight depression between the fill slope at the edge of the subject property and the small stream to the west (Figure 4). It is possible that material was excavated from this area to create the level surface on the subject parcel or that it was constructed as a stormwater pond. The wetland does not appear to have a direct hydrologic connection to the stream. Wetland data sheets can be found in Appendix A. Wetland rating forms can be found in Appendix B.

3.1.7.1 Soils

During the formal delineation, soils were gravelly sandy loam in the upland plot with a dark surface horizon (7.5YR 2.5/1) in the top ten inches. Soils below 10 inches were 10YR 2/2 to 13 inches and 10YR 3/3 down to 18 inches. In the wetland, the upper 8 inches was mucky modified black loam (5YR2.5/1). From 8 to 13 inches was 10YR 3/1 and from 13 to 18 inches was 10YR 4/2. No redoximorphic features were identified.

During the second field reconnaissance, upland soils were gravelly silt loam with a dark surface horizon (10YR 2/1) in the top eight inches. Soils below eight inches were 7.5YR 3/3 to 18 inches. In the wetland, the upper nine inches was 7.5Y 2.5/1, and from nine to 14 inches the soil was 10YR 3/2. At 14 inches, compacted soil was present which likely prevents infiltration. The layer was 10YR 4/6 with 2.5Y 5/2 concentrations.

3.1.7.2 Hydrology

During the formal delineation, wetland hydrology was present in the form of shallow ponding, a high water table, and saturated soils. Water marks were present on some of the tree trunks in the ponded area and the center of the wetland was sparsely vegetated.

No hydrology was observed during the follow-up field reconnaissance.

3.1.7.3 Vegetation

An overstory of Oregon Ash (*Fraxinus latifolia*, FACW) was present in the wetland. Himalayan blackberry (FAC) was present both in the wetland and the surrounding upland and forms a dense thicket to the east of the wetland on the slope. Beaked hazelnut (*Corylus cornuta*, FACU) was present along the wetland edge and in the upland. Large cherry laurels (*Prunus laurocerasus*, NI) were present to the north of the wetland. Understory vegetation was sparse in the wetland due to ponding, but some slough sedge (*Carex obnupta*, OBL) was present. Upland understory vegetation consisted of Oregon Ash (FACW), beaked hazelnut (FACU), cherry laurel (NI), Himalayan blackberry (FAC), western swordfern (*Polystichum munitum*, FACU), and English ivy (*Hedera helix*, FACU).

3.1.8 Wetland Rating, Jurisdiction, and Buffers

Wetland A was rated as a Category III wetland (Appendix B) using the 2014 version of the Washington State Wetland Rating System for Western Washington (Hruby, 2014). The wetland rates relatively high for water quality, moderate for hydrology, and low for habitat functions. The wetland has the opportunity to improve water quality and reduce flooding. The habitat score is significantly reduced by the urban setting and lack of habitat diversity.

Wetland A is assumed to be under federal, state, and King County jurisdiction. Direct impacts to the wetland resulting from development would trigger both a King County permit and a federal Army Corps of Engineers permit and review by other agencies. Impacts to buffers are regulated only at the county level. King County buffers for Category III wetlands in a high land use area with a habitat score 5 or less requires a standard buffer of 80 feet. An additional 15-foot building setback line is also required. The buffer and setback extend onto the southwestern edge of the subject property and are currently maintained as asphalt parking lot. Table 2 lists the delineated wetland, its size, Cowardin classification, HGM classification, Washington State Wetland Rating Scores and Category, and probable buffer width. Figure 4 shows the wetland boundary, standard buffer, and setback. Wetland rating figures are included in Figures 5A through 5D.

Table 2. Waters/wetlands characteristics

Characteristic	Wetland A (Off-site)
Cowardin Classification	Palustrine Forested
Size –(Acres)	0.12
HGM Classes	Depression
WA State Wetland Rating Scores	
Water Quality	7
Hydrology	6
Habitat	5
Total Score	18
Wetland Category Based on Score	III
Special Characteristics Category	N/A
King County Base Buffer Width	80'
Urban Growth Area	
Building Setback	15'

3.2 Streams

3.2.1 Database Research

King County critical areas map (Figure 3) shows an unclassified stream on the King County park property to the west of the subject property that has its origins about a half mile northwest of the property at the White Center Pond. The stream is fed by a series of wetlands and small ponds to the north, and by stormwater runoff from the surrounding neighborhoods. Based on the critical areas map, the stream appears to flow through the mapped Category II wetland on the southern portion of the park property and continues to the southeast. The Washington Department of Natural Resources Stream Type maps do not show any streams in the vicinity of the subject property but does show Hicklin Lake as being a fish bearing lake.

3.2.2 Field Evaluation

During the site reconnaissance on January 19, 2017, no streams were identified on the subject property. A stream was identified in the King County park to the west of the subject property. The stream is likely a perennial stream but may occasionally dry up in the summer. It appears to be fed largely by stormwater runoff from urban areas to the north. It flows out of a culvert under SW 108th Street onto the middle west park boundary and then flows south into the smaller pond just northwest of Hicklin Lake and then continues to Hicklin Lake. The channel appears to be at least partially constructed. The ordinary high water width is approximately 12 to 15 feet and the eastern edge of the channel was mapped during field evaluation. Water levels in the stream were high during the site visit due to recent rains. Vegetation along the banks near the subject parcel consisted primarily of red alder (*Alnus rubra*), Himalayan blackberry and western swordfern. The stream channel is approximately 40 feet west of Wetland A does not appear to have a direct hydrologic connection to this wetland. Although earlier topographic maps identified a culvert connection from Hicklin Lake to Salmon Creek tributaries to the south, there is currently no apparent outflow from the lake except for a constructed overflow pipe.

3.2.3 Stream Classification and Buffers

The stream remains unclassified by King County and unmapped by WA DNR. However, due to the stream's surface connection with Hicklin Lake and the lake's classification as fish bearing, it is possible that the stream would also be considered fish bearing for regulatory purposes. King County buffers for fish bearing stream (Type F) inside the Urban Growth Boundary vary based on basin condition. The basin condition for the area is mapped as Low and the resulting buffer is 115 feet with an additional 15-foot building setback. The stream buffer does not extend onto the subject parcel and the 15-foot building setback crosses the southwest corner of the parcel property as shown in Figure 4. This building setback is currently maintained as asphalt parking lot.

3.3 Other Critical Areas

No other critical areas were identified on this property through either background research or site evaluation.

4 PROPOSED IMPACTS AND BUFFER AVERAGING PLAN

No impacts to stream buffers are anticipated for this project. However, the project would affect wetland buffers, and wetland buffer averaging is proposed. The justification for this buffer averaging is outlined below according to King County Code (KCC) 21A.24.325.B.2. The site plan is included in Appendix C.

- a. *The total area of the buffer after averaging is equivalent to or greater than the area of the buffer before averaging;*

The total amount of reduced buffer is 1,115 square feet (sf), and the added buffer to the north is 1,380 sf. The proposed project will result in a net increase of 265 sf. in regulated buffer.

- b. *The additional buffer is contiguous with the standard buffer;*

The added buffer is located along the northern boundary of the standard buffer. The wetland buffer edge will be delineated on the project site with a split rail fence and signage.

- c. *The buffer at its narrowest point is never less than either seventy-five percent of the required width or seventy-five feet for Category I and II, fifty feet for Category III, and twenty-five feet for Category IV, whichever is greater;*

Seventy-five percent of the standard buffer for Wetland A (80 feet) is 60 feet and is called out on the plan sheets. At its narrowest point, the Wetland A buffer width is 63 feet, which is well above the minimum buffer width.

- d. *The averaged buffer will not result in degradation of wetland functions and values as demonstrated by a critical area report from a qualified wetland professional; and*

The majority of the existing wetland buffer is maintained as an asphalt parking lot. Vegetated areas of the wetland buffer are dominated by invasive species such as Himalayan blackberry. A total of 3,435 sf of currently paved area will be replanted with native vegetation and monitored for a period of five years. The mitigation monitoring is outlined in Chapter 5.

Replacement of asphalt with native vegetation will result in a net increase of habitat diversity, water quality, and habitat function.

- e. *The buffer is increased adjacent to the higher functioning area of habitat or more sensitive portion of the wetland and decreased adjacent to the lower-functioning or less-sensitive portion as demonstrated by a critical area report from a qualified wetland professional.*

Due to the size and the existing condition, it is our opinion that the wetland is uniform in habitat functionality and sensitivity. Both buffer averaging and buffer restoration will result in a higher functioning wetland and buffer.

Each of the five conditions were met for the proposed project which would allow for buffer averaging of Wetland A.

5 MITIGATION/RESTORATION PLAN

5.1 Goals and Objectives

The purpose of the mitigation plan is to address the restoration of the Wetland A buffer in the southwest corner of the property. Through redevelopment of the property and wetland buffer averaging, a total of 3,435 sf of wetland buffer will be restored. The ultimate goals for the property is to restore buffer habitat and functionality.

5.2 Restoration Plantings

Native vegetation will be used to restore the wetland buffer and will be comprised of species listed in Table 3. Sizes, quantities, and spacing will be determined at a later date, but will be consistent with King County Critical Areas: Restoration and Enhancement Guidelines. Plant list is also provided on Landscape Schedule (Sheet L102.1).

Table 3. Restoration Planting Palette

Scientific Name	Common Name	Wetland Indicator Status¹
Wetland Buffer Groundcover		
<i>Tolmiea menziesii</i>	Piggy-back plant	FAC
<i>Petasites frigidus</i>	Coltsfoot	FACW
Wetland Buffer & Drier Buffer Shrubs		
<i>Acer circinatum</i>	Vine maple	FAC
<i>Cornus stolonifera</i>	Red-osier dogwood	FACW
<i>Oemleria cerasiformis</i>	Indian plum	FACU
<i>Philadelphus lewisii</i>	Mock orange	FAC
<i>Physocarpus capitatus</i>	Pacific ninebark	FACW
<i>Ribes sanguineum</i>	Red flowering currant	FACU
<i>Rubus spectabilis</i>	Salmonberry	FAC
<i>Salix lasiandra</i>	Pacific willow	FACW
<i>Sambucus racemosa</i>	Red elderberry	FACU
<i>Symphoricarpos albus</i>	Snowberry	FACU
Wetland Buffer & Drier Buffer Grasses & Ferns		
<i>Deschampsia caespitosa</i>	Tufted hairgrass	FACW
<i>Dryopteris expansa</i>	Shield fern	FACW
Drier Buffer Grasses & Ferns		
<i>Festuca idohensis</i>	Idaho fescue	FACU
<i>Polystichum munitum</i>	Sword fern	FACU
<i>Pteridium aquilinum</i>	Bracken fern	FACU
Drier Buffer Groundcover & Herbs		
<i>Arctostaphylos uva-ursi</i>	Kinnikinnick	FACU
<i>Epilobium angustifolium</i>	Fireweed	FACU

¹ OBL = obligate wetland; FACW = facultative wetland; FAC = facultative; FACU = facultative upland; UPL = obligate upland

5.3 Maintenance and Monitoring

Per KCC, the restoration plantings must be monitoring annually for at least 3 to 5 years or until performance standards have been met. We are proposing a baseline monitoring, yearly monitoring in years 1,2, and 3, and then a final monitoring in Year 5. Monitoring may need to be continued if performance standards are not being met. Conversely, early termination of monitoring may be requested if Year 5 performance standards are being met ahead of schedule, such as in Year 3.

When planting is complete, a Baseline Monitoring Report will be submitted to the County that includes an as-built drawing and a more detailed Monitoring Plan. Specific monitoring protocol will be provided in the Baseline Monitoring Report. Once approved by the County, this plan will form the basis for evaluating the success of the critical area plantings.

5.3.1 Performance Standards

Table 4 shows the performance standards that will be used to measure mitigation success.

Table 4. Performance Standards

Parameter	Thresholds		
	Year 1	Year 3	Year 5
Survival of planted species	85%	75%	75%
Percent cover of native species ¹	10%	15%	25%
Plant diversity - # of native species	> 10		
Percent cover invasives ²	< 10%		

¹ Includes volunteers.

² Invasives include Himalayan blackberry, and any other species listed on the King County noxious weed list.

5.3.2 Monitoring Protocols

Monitoring will occur annually during Years 1, 2, 3, and 5, with a report due to the County before the end of each calendar year in which monitoring occurs. The monitoring report will include the following basic information:

- A tally of all planted trees and shrubs to identify mortality or poor vigor
- Estimates of planted native cover
- Percent cover of invasive weed species
- Photographs at established photo points
- Recommended contingency measures to increase cover, replace mortality, control weeds or prevent erosion.
- Observations on the overall status of the restoration area

Because of the small number of species being planted, each plant can be individually assessed for mortality and vigor. The approximate location of the monitoring plots or transects will be included in the baseline monitoring report. Photographs will be taken as a series of photo points and will also be included in the baseline report.

5.3.3 Contingency Measures

Contingency measures will be triggered if the performance standard thresholds are not being met as documented during the yearly monitoring. All planted stock mortality in the first year will be replaced either in-kind or with a replacement species approved by the wetland biologist. Some species substitutions may be needed if the original species is not performing well. Any replacement plantings will occur either in the fall or spring. Additional weed control will be triggered if invasive species become established that threaten the success of the restoration. If erosion is occurring, additional stabilization methods will need to be employed.

6 CONCLUSIONS

Community Roots Housing is redeveloping a parcel in unincorporated King County near White Center, Washington. During a field evaluation, PBS did not find any Critical Areas on the subject property. In the adjacent King County's Dick Thurnau Memorial Park, PBS identified a 0.12-acre wetland and an unnamed stream with buffers and/or building setbacks that extend on to the subject property. The buffer and building setbacks for both the stream and wetland are currently maintained as asphalt parking lot.

Buffer averaging and wetland buffer restoration are proposed with the redevelopment of the property. Wetland buffer averaging will take place to the immediate north of Wetland A, and has met the five-criterion outlined by KCC. A total of 3,435 sf of wetland buffer will be restored through native plantings and monitored for a period of five years.

7 REFERENCES

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PHOTOGRAPHS



Photo 1. Birds-eye view of the property facing east.



Photo 2. View to north of parking lot east of buildings. A large madrone tree is visible on the right.



Photo 3. View to north of southeastern parking lot.



Photo 4. Runoff from the parking lot currently flows under the fence and downhill to the park property to the south.



Photo 5. Northwest corner of property with some larger conifers in background.



Photo 6. View to the northwest of wetland showing ponding.



Photo 7. View to southwest of wetland showing slough sedge, ash trees, woody debris, and ponding.



Photo 8. View to north of south end of wetland showing ponded water during high water.



Photo 9. View to south from north end of wetland showing heavy infestation by blackberry.



Photo 10. Stream due west of subject property, the stream channel appears constructed.



Photo 11. Stream just north of park drive entering culvert under driveway.



Photo 12. Stream flowing out of culvert south of park drive.



Photo 13. Stream flowing south through the park towards Hicklin Lake during high water.

Photos from December 14, 2020

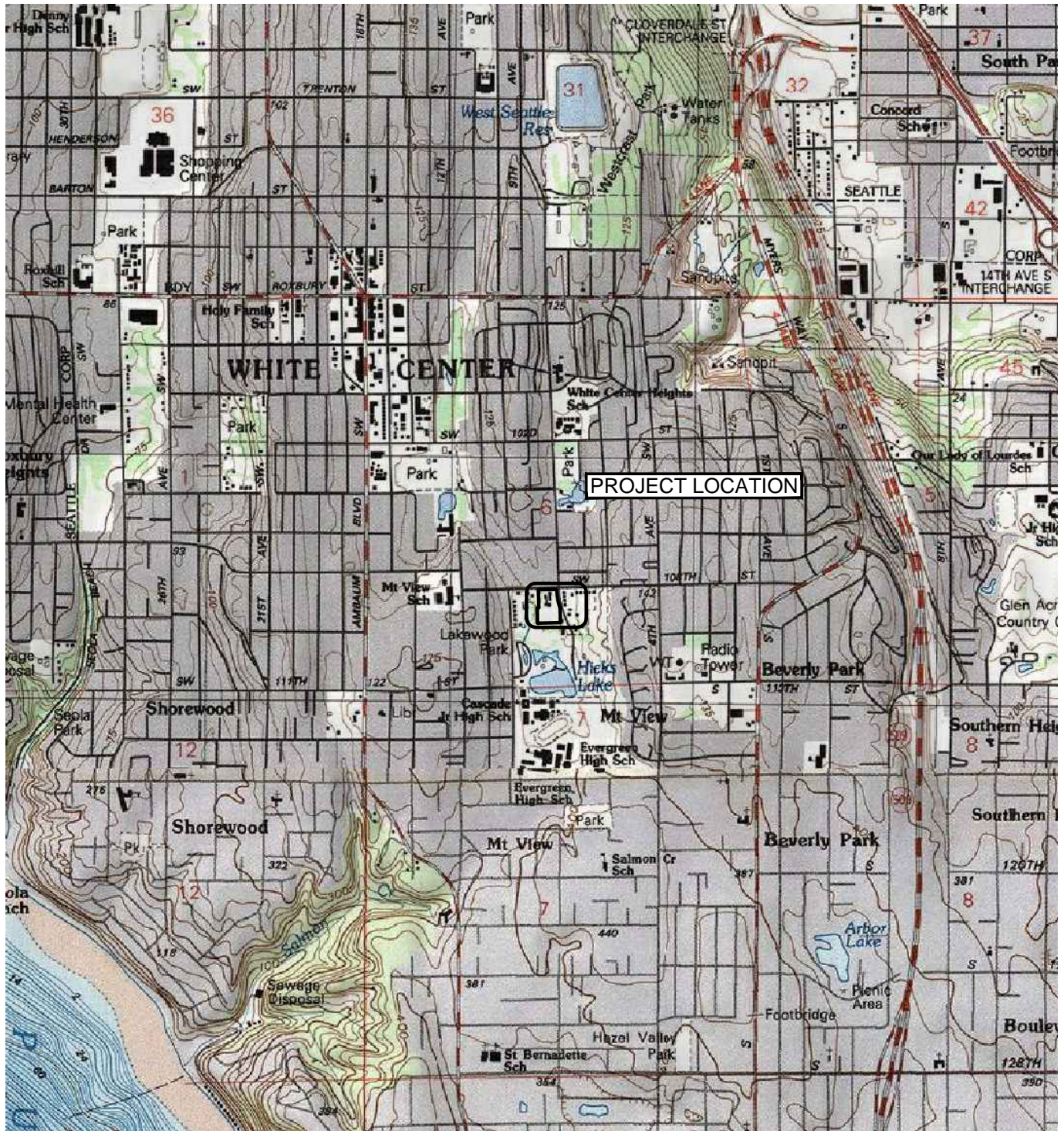


Photo 14. Existing wetland buffer on property.



Photo 15. Wetland A off-site.

FIGURES



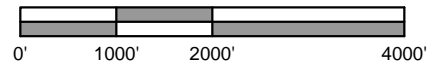
SOURCE: USGS SEATTLE SOUTH E, WA OR QUADRANGLE 1978, PHOTO REVISED 1983.



WASHINGTON



Scale 1" = 2000'



PREPARED FOR: CAPITOL HILL HOUSING



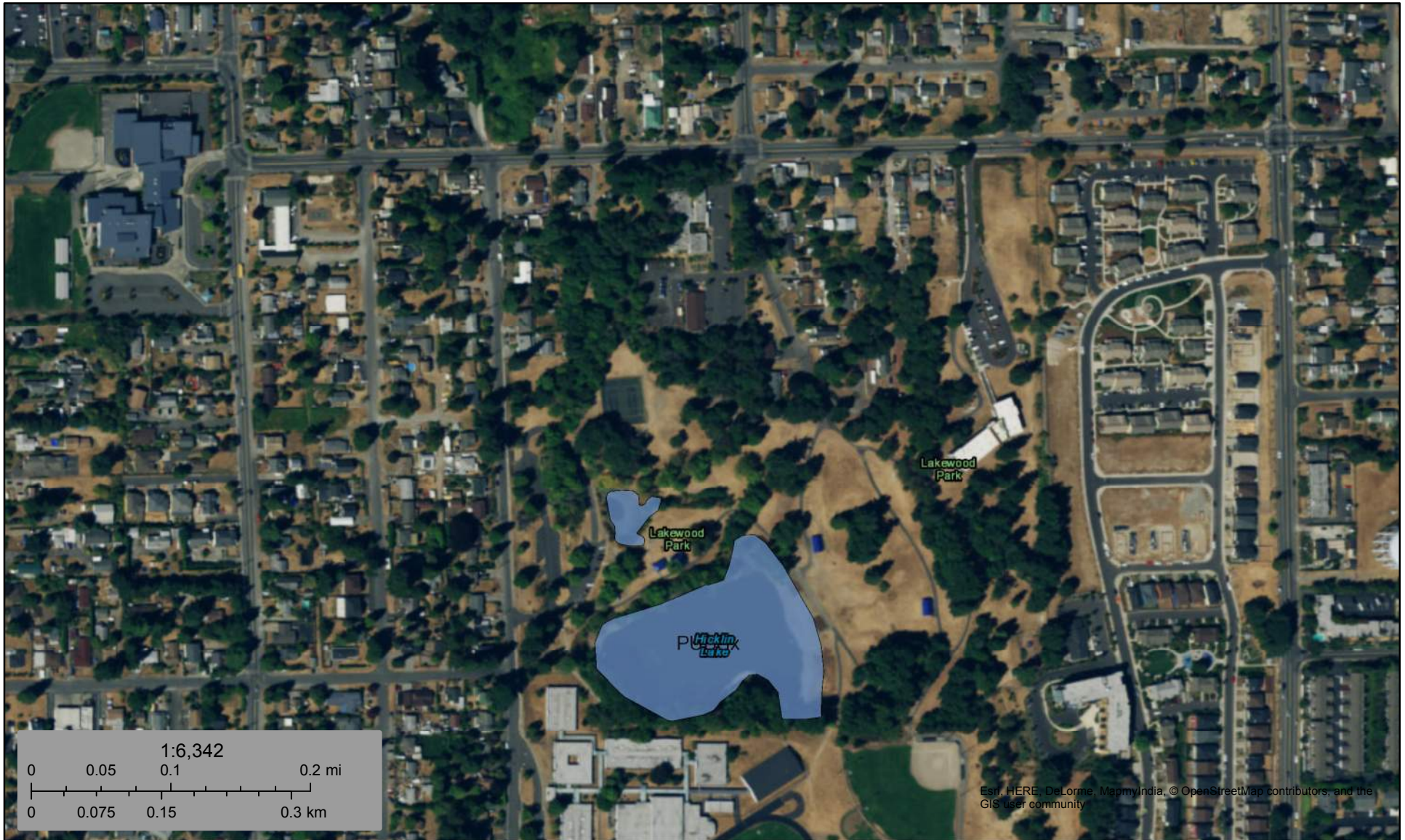
VICINITY MAP

10821 8TH AVENUE SOUTHWEST
SEATTLE, WASHINGTON

JUN 2018
41308.003

FIGURE

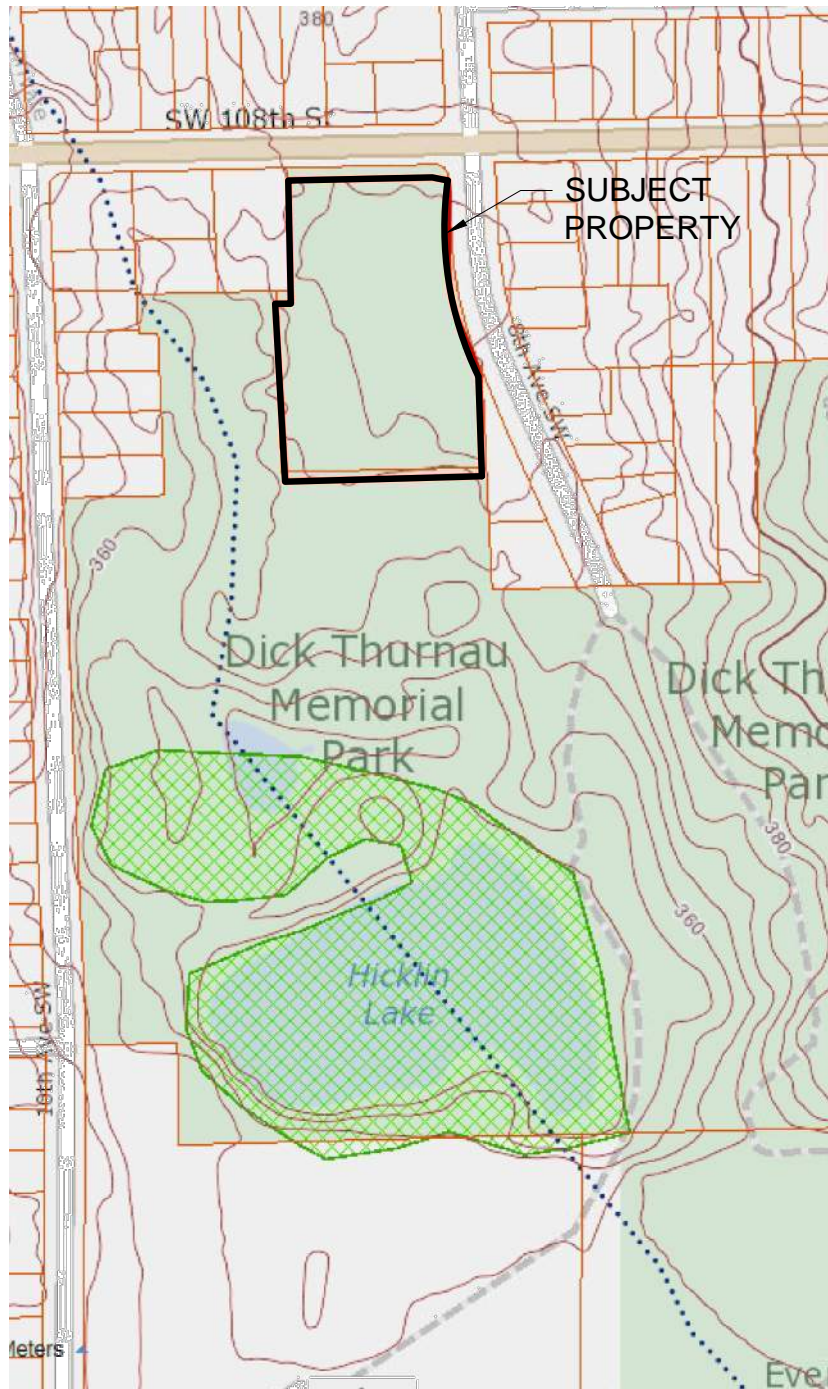
1



January 26, 2017

- | | | |
|--------------------------------|-----------------------------------|----------|
| Estuarine and Marine Deepwater | Freshwater Forested/Shrub Wetland | Other |
| Estuarine and Marine Wetland | Freshwater Pond | Riverine |
| Freshwater Emergent Wetland | Lake | |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



Legend

Property Layers

- Parcels:

Elevation Contours

- index contours - 100 foot:
- contours - 5 foot (below 1000 feet) and 10 foot:

Environmentally Sensitive Areas

- Landslide hazard (1990 SAO):
- Erosion hazard (1990 SAO):
- Seismic hazard (1990 SAO):
- Stream (1990 SAO):
 - class 1:
 - class 2 perennial:
 - class 2 salmonid:
 - class 3:
 - unclassified:
- Wetland (1990 SAO):
- Wildlife network:

SOURCE: KING COUNTY IMAP



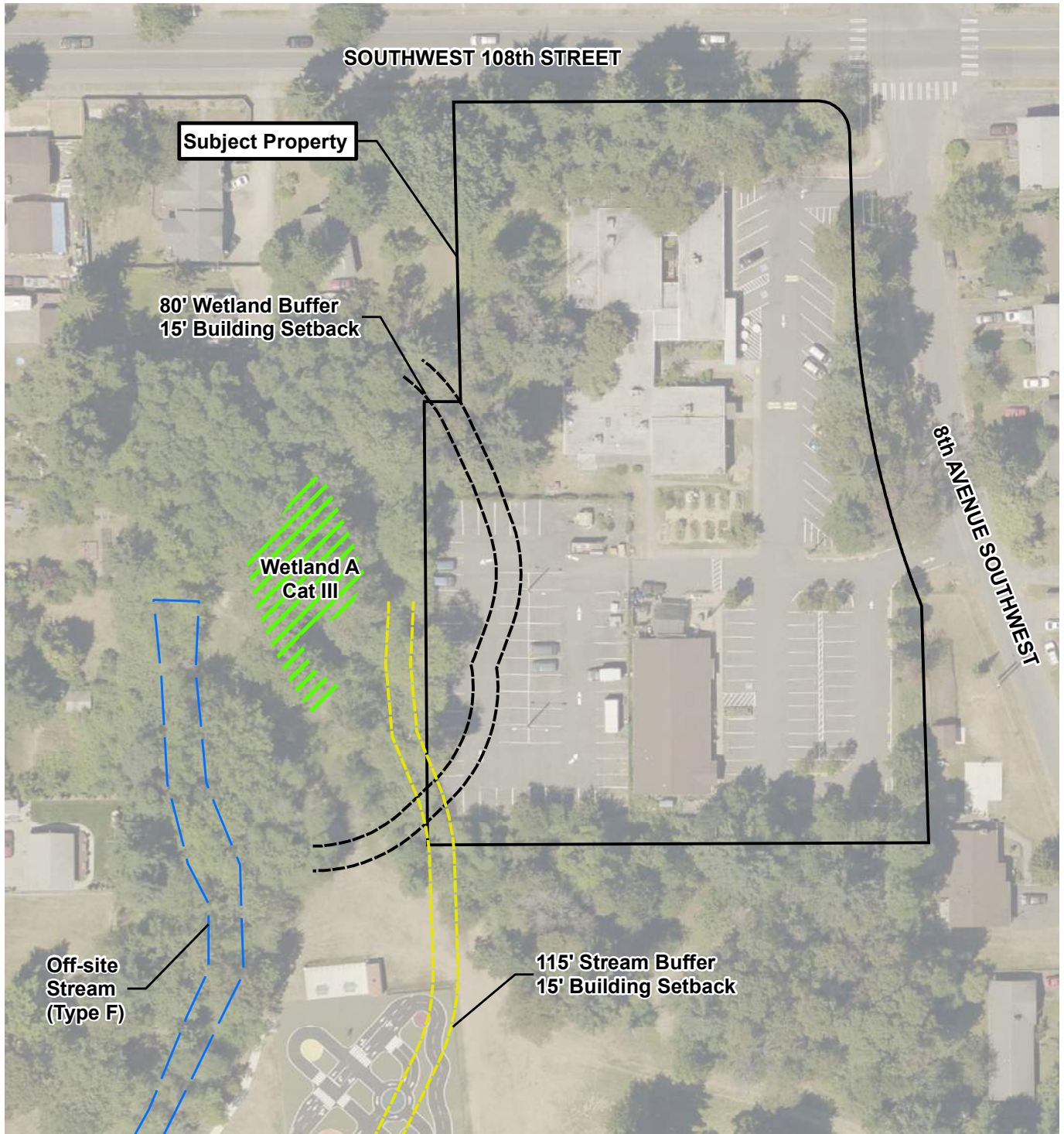
NOT TO SCALE

PREPARED FOR: CAPITOL HILL HOUSING







KING COUNTY CRITICAL AREAS MAP
 10821 8TH AVENUE SOUTHWEST
 SEATTLE, WASHINGTON

JUN 2018
 41308.003
 FIGURE
3



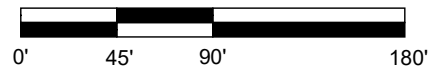
SOURCE: KING COUNTY AERIAL 2017.

LEGEND

-  Stream
-  Stream Buffer and Setback
-  Wetland A
-  Wetland Buffer and Setback



SCALE: 1" = 90'



PREPARED FOR: COMMUNITY ROOTS HOUSING.

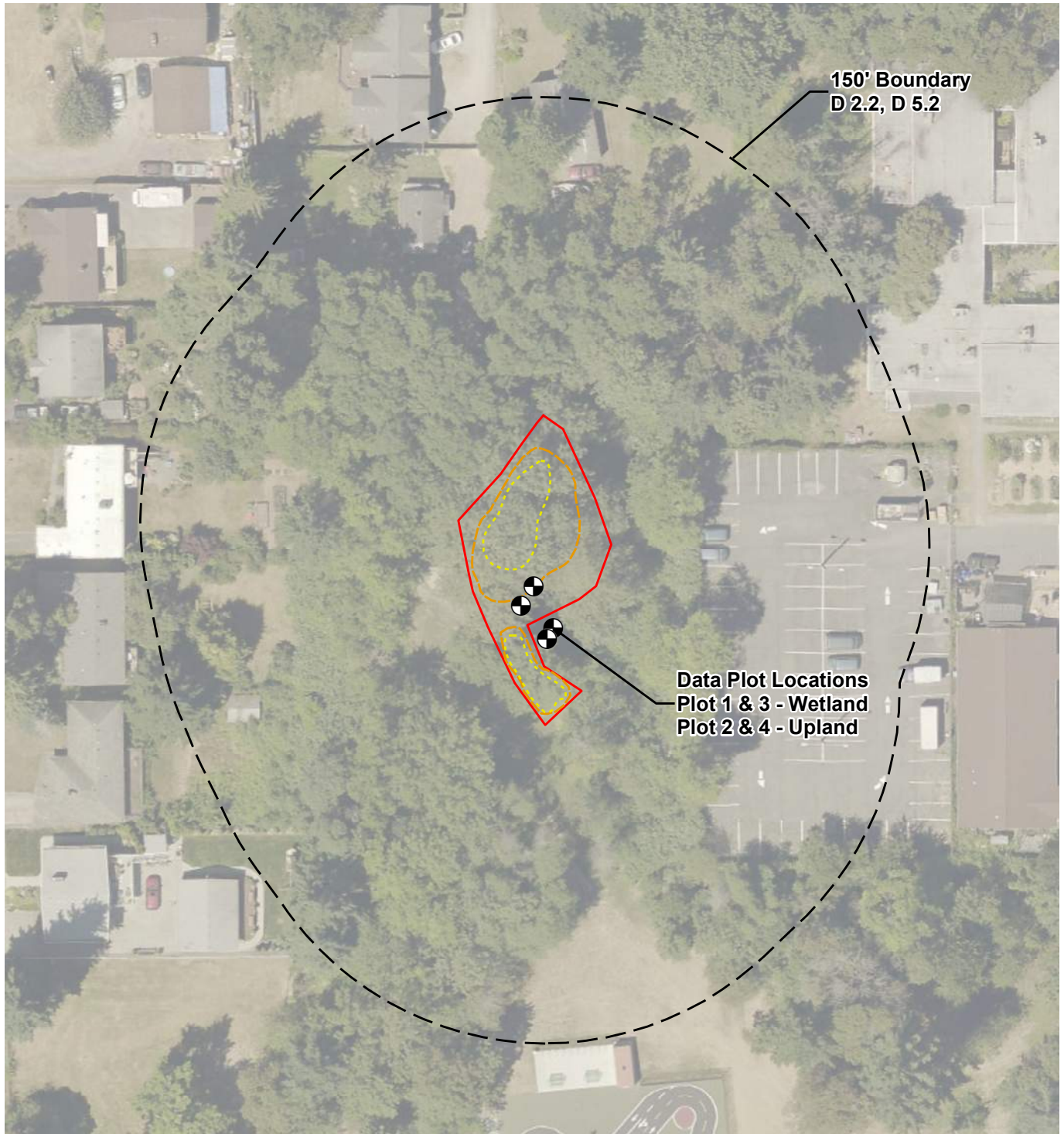


APPROXIMATE CRITICAL AREAS MAP
 CRITICAL AREAS REPORT
 KING COUNTY, WASHINGTON

DEC 2020
41308.027

FIGURE

4



SOURCE: KING COUNTY AERIAL 2017.

LEGEND

Plot

Hydroperiods

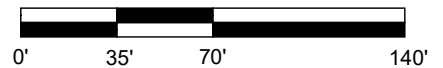
Occasionally Pounded

Saturated

Seasonally Pounded



SCALE: 1" = 70'



PREPARED FOR: COMMUNITY ROOTS HOUSING.



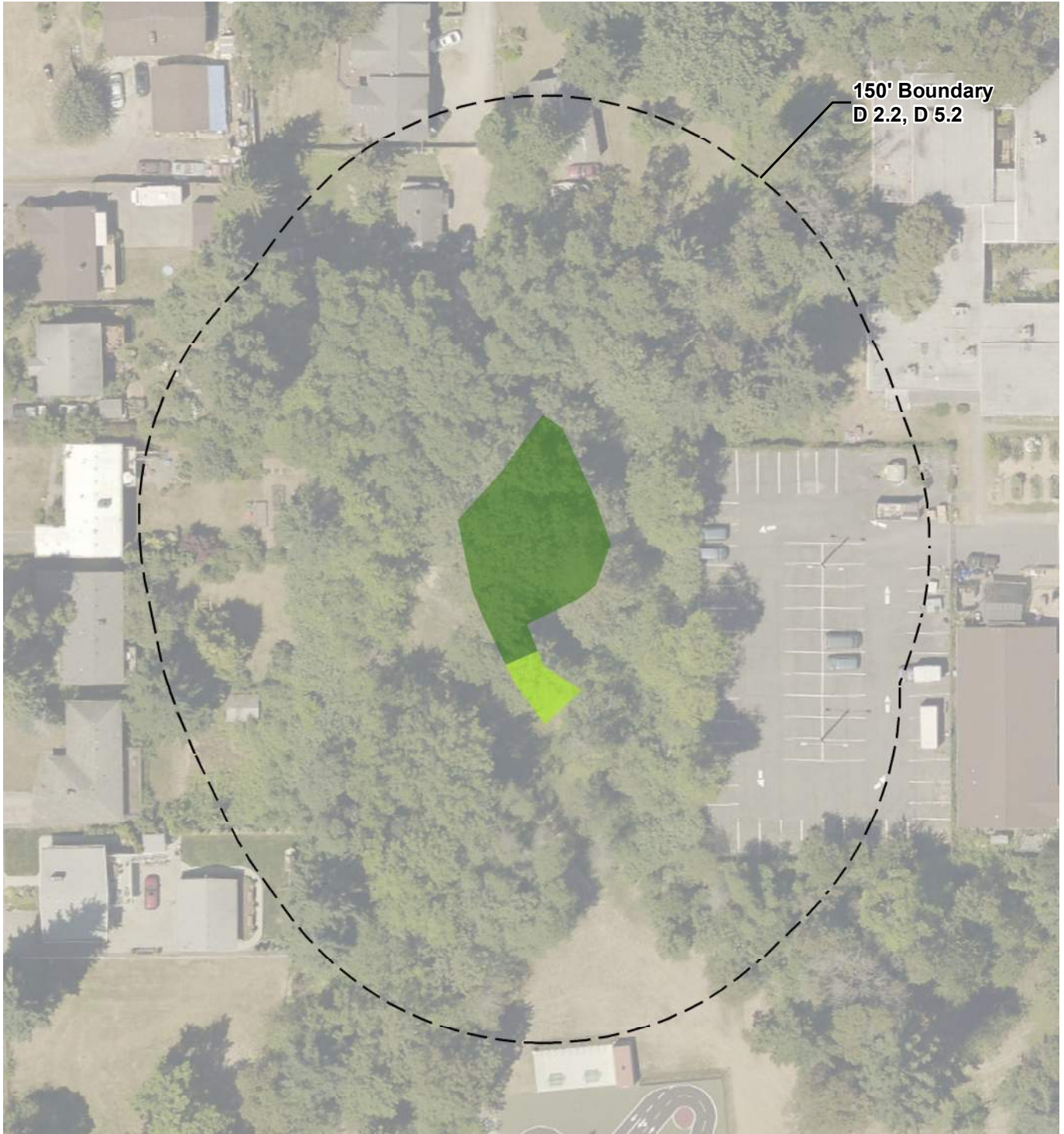
WETLAND A RATING

CRITICAL AREAS REPORT
KING COUNTY, WASHINGTON

DEC 2020
41308.027

FIGURE

5A





150' Boundary
D 2.2, D 5.2

SOURCE: KING COUNTY AERIAL 2017.

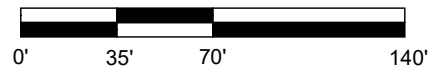
LEGEND

Cowardin

-  Emergent
-  Forested



SCALE: 1" = 70'



PREPARED FOR: COMMUNITY ROOTS HOUSING.

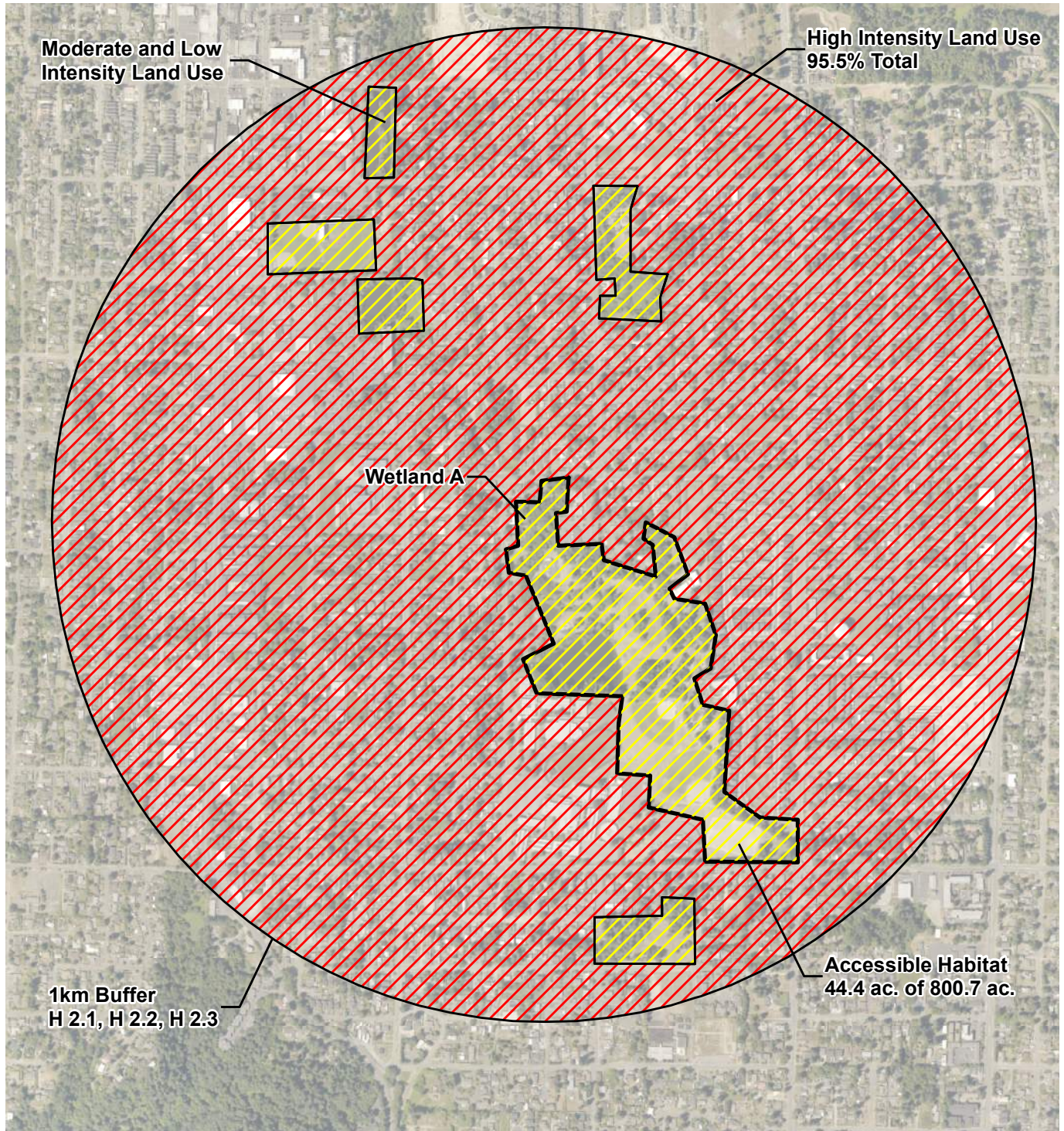


WETLAND A RATING
CRITICAL AREAS REPORT
KING COUNTY, WASHINGTON

DEC 2020
41308.027

FIGURE





5B



SOURCE: KING COUNTY AERIAL 2017.

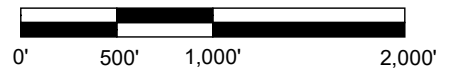
LEGEND

Landscape Potential

-  High Intensity
-  Moderate and Low Intensity
-  Relatively Undisturbed
-  Landscape Access



SCALE: 1" = 1,000'



PREPARED FOR: COMMUNITY ROOTS HOUSING.



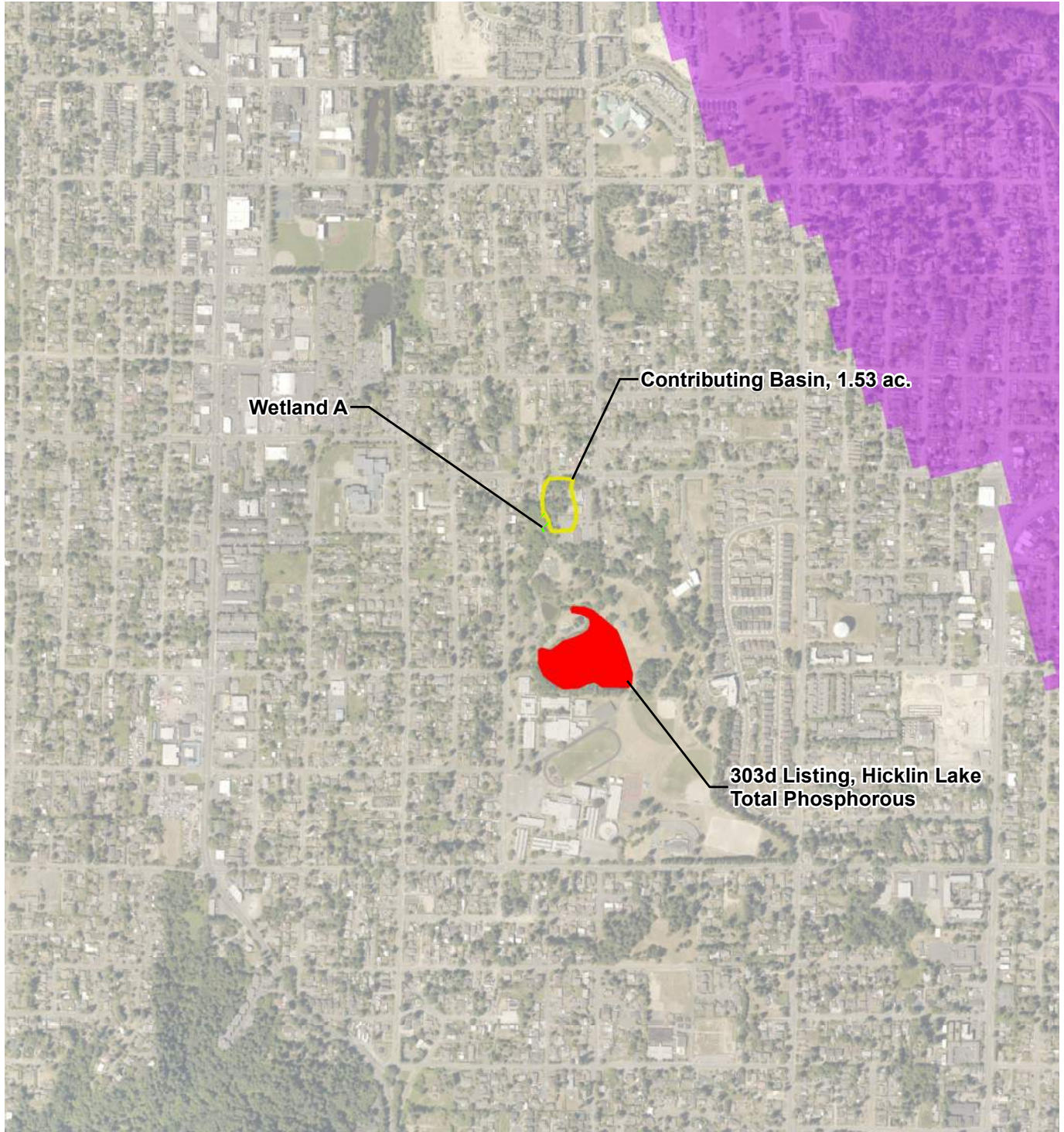
WETLAND A RATING

CRITICAL AREAS REPORT
KING COUNTY, WASHINGTON

DEC 2020
41308.027

FIGURE

5C



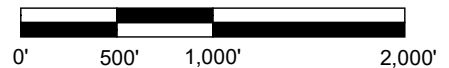
SOURCE: KING COUNTY AERIAL 2017.

LEGEND

-  Wetland A
-  TMDL
-  303d Listing



SCALE: 1" = 1,000'



PREPARED FOR: COMMUNITY ROOTS HOUSING.



WETLAND A RATING
CRITICAL AREAS REPORT
KING COUNTY, WASHINGTON

DEC 2020
41308.027

FIGURE

5D

APPENDIX A

Wetland Delineation Datasheets

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

Project/Site: 10821 8th Avenue SW City/County: Seattle/King Sampling Date: 12/14/2020
 Applicant/Owner: Community Roots Housing State: Washington Sampling Point: Plot 3
 Investigator(s): K. Numata Section, Township, Range: SW S6 T23N R4E
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-5
 Subregion (LRR): LRR A - Northwest Forests and Coast Lat: 47.505641 Long: -122.346103 Datum: WGS84
 Soil Map Unit Name: Urban land-Alderwood complex, 0-5% slopes NWI Classification: PFO

Are climatic/hydrologic conditions of the site typical for this time of the year? Yes X No (If no, explain in remarks)
 Are vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? (If needed, explain any answers in remarks) Yes X No
 Are vegetation , Soil , or Hydrology naturally problematic? Yes X No

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

Hydrophytic vegetation present?	Yes <u>X</u>	No <u> </u>	Is the sampled area within a wetland? Yes <u>X</u> No <u> </u>
Hydric soil present?	Yes <u>X</u>	No <u> </u>	
Indicators of wetland hydrology present?	Yes <u>X</u>	No <u> </u>	
Remarks: <u>Plot located in the southeast corner of the wetland. Paired with Plot 4.</u>			

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: <u>30' r</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet			
1. <u>Fraxinus latifolia</u>	40	Y	FACW	Number of Dominant Species that are OBL, FACW, or FAC: <u>2</u> (A)			
2. <u> </u>				Total Number of Dominant Species Across all Strata: <u>2</u> (B)			
3. <u> </u>				Percent of Dominant Species that are OBL, FACW, or FAC: <u>100%</u> (A/B)			
4. <u> </u>							
40 = Total Cover							
Sapling/Shrub Stratum (Plot size: <u>30' r</u>)	Absolute % Cover	Dominant Species	Indicator Status	Prevalence Index Worksheet			
1. <u>Spiraea douglasii</u>	10	Y	FACW			Total % Cover of: Multiply by:	
2. <u> </u>						OBL species <u>0</u> x 1 = <u>0</u>	
3. <u> </u>						FACW species <u>50</u> x 2 = <u>100</u>	
4. <u> </u>						FAC species <u>0</u> x 3 = <u>0</u>	
5. <u> </u>						FACU species <u>0</u> x 4 = <u>0</u>	
10 = Total Cover				UPL species <u>0</u> x 5 = <u>0</u>			
				Column totals <u>50</u> (A) <u>100</u> (B)			
				Prevalence Index = B/A = <u>2.00</u>			
Herb Stratum (Plot size: <u>5' r</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Indicators:			
1. <u> </u>						1 - Rapid Test for Hydrophytic Vegetation	
2. <u> </u>						<u>X</u> 2 - Dominance Test is >50%	
3. <u> </u>						3 - Prevalence Index is ≤3.0	
4. <u> </u>						4 - Morphological Adaptations* (Provide supporting data in Remarks or on a separate sheet)	
5. <u> </u>						5 - Wetland Non-Vascular Plants ¹	
6. <u> </u>						Problematic Hydrophytic Vegetation ¹	
7. <u> </u>						(Explain)	
8. <u> </u>						¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic	
9. <u> </u>							
10. <u> </u>							
11. <u> </u>							
0 = Total Cover							
Woody Vine Stratum (Plot size: <u>30' r</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic vegetation present? Yes <u>X</u> No <u> </u>			
1. <u> </u>							
2. <u> </u>							
0 = Total Cover							
% Bare Ground in Herb Stratum <u>100</u>							

Remarks:

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

Project/Site: 10821 8th Ave SW, White Center City/County: King Sampling Date: 3/30/2018
 Applicant/Owner: Capitol Hill Housing State: WA Sampling Point: D-P1
 Investigator(s): Katharine M Lee Section/Township/Range: SE1/4 S6 T23N R4E
 Landform (hillslope, terrace etc.): toeslope Local relief: none Slope (%): 7
 Subregion (LRR): A - Northwest Forests and Coast Lat: 47.506000 Long: -122.346060 Datum: WGS84
 Soil Map Unit Name: KpB NWI Classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? (If needed, explain any answers in remarks) Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? Yes x No

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

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>	
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>	
Remarks:			

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: 30' r)					
1. <u>Fraxinus latifolia</u>	<u>75</u>	<u>Yes</u>	<u>FACW</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</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>75%</u> (A/B)	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
Total Cover:	<u>75</u>				
Sapling/Shrub Stratum (Plot size: 30' r)					
1. <u>Rubus armeniacus</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>	Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: OBL species <u>15</u> x 1 = <u>15</u> FACW species <u>75</u> x 2 = <u>150</u> FAC species <u>40</u> x 3 = <u>120</u> FACU species <u>20</u> x 4 = <u>80</u> UPL species <u>0</u> x 5 = <u> </u> Column Totals: <u>150</u> (A) <u>365</u> (B) Prevalence Index = B/A = <u>2.43</u>	
2. <u>Corylus cornuta</u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>		
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
Total Cover:	<u>60</u>				
Herb Stratum (Plot size: 5' r)					
1. <u>Carex obnupta</u>	<u>15</u>	<u>Yes</u>	<u>OBL</u>		
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
Total Cover:	<u>15</u>				
Woody Vine Stratum (Plot Size: 30' r)					
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Hydrophytic Vegetation Indicators: 1- Rapid Test for Hydrophytic Vegetation <u>X</u> 2- Dominance Test is >50% 3- Prevalence Index is ≤3.0 ¹ 4- Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5- Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain)	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
Total Cover:	<u>0</u>				
% Bare Ground in Herb Stratum <u>85</u> %					

Remarks: Corylus is rooted on higher ground

SOIL

Sampling Point: D-P1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (in.)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-8	5YR 2.5/1	100					loam	mucky
8-13	10YR 3/1	100					sandy loam	gravelly
13-18	10YR4/2	100					sandy loam	gravelly,slurry

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.)			Indicators for Problematic Hydric Soils ³ :		
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	2 cm Muck (A10)
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	Red Parent Material (TF2)
<input type="checkbox"/>	Black Histic (A3)	<input checked="" type="checkbox"/>	Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/>	Very Shallow Dark Surface (TF12)
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Other (Explain in Remarks)
<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)		

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 _____ X _____ No _____
--	--

Remarks: Soil below 13 inches may have had redox but too wet to tell

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (any one indicator is sufficient)		Secondary Indicators (2 or more required)	
<input type="checkbox"/>	Surface Water (A1)	<input type="checkbox"/>	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/>	High Water Table (A2)	<input type="checkbox"/>	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/>	Saturation (A3)	<input type="checkbox"/>	Salt Crust (B11)
<input checked="" type="checkbox"/>	Water Marks (B1)	<input type="checkbox"/>	Aquatic Invertebrates (B13)
<input checked="" 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 Stressed Plants (D1) (LRR A)
<input type="checkbox"/>	Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/>	Other (Explain in Remarks)
<input checked="" type="checkbox"/>	Sparsely Vegetated Concave Surface (B8)	<input checked="" 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 (D4)

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> _____ Depth (in): _____ Water Table Present? Yes <input checked="" type="checkbox"/> _____ No _____ Depth (in): 6" Saturation Present? Yes <input checked="" type="checkbox"/> _____ No _____ Depth (in): 0" (includes capillary fringe)	Wetland Hydrology Present? Yes _____ X _____ No _____
---	--

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

Remarks:

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

Project/Site: 10821 8th Ave SW, White Center City/County: King Sampling Date: 3/30/2018
 Applicant/Owner: Capitol Hill Housing State: WA Sampling Point: D-P2
 Investigator(s): Katharine M Lee Section/Township/Range: SE1/4 S6 T23N R4E
 Landform (hillslope, terrace etc.): river terrace Local relief: none Slope (%): 2
 Subregion (LRR): A - Northwest Forests and Coast Lat: 47.506000 Long: -122.346060 Datum: WGS84
 Soil Map Unit Name: KpB NWI Classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? (If needed, explain any answers in remarks) Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? Yes No

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

Hydrophytic Vegetation Present?	Yes <u> </u>	No <u>X</u>	Is the Sampled Area within a wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u>	No <u>X</u>	
Wetland Hydrology Present?	Yes <u> </u>	No <u>X</u>	
Remarks:			

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: 30' r)				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>4</u> (B)
1. <u>Fraxinus latifolia</u>	<u>30</u>	<u>Yes</u>	<u>FACW</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
Total Cover:	<u>30</u>			Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B) Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u>0</u> x 1 = <u> </u> FACW species <u>30</u> x 2 = <u>60</u> FAC species <u>80</u> x 3 = <u>240</u> FACU species <u>50</u> x 4 = <u>200</u> UPL species <u>0</u> x 5 = <u> </u> Column Totals: <u>160</u> (A) <u>500</u> (B) Prevalence Index = B/A = <u>3.13</u>
Sapling/Shrub Stratum (Plot size: 30' r)				
1. <u>Rubus armeniacus</u>	<u>80</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Corylus cornuta</u>	<u>20</u>	<u>No</u>	<u>FACU</u>	
3. <u>Prunus laurocerasus</u>	<u>15</u>	<u>No</u>	<u>NL</u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
Total Cover:	<u>115</u>			
Herb Stratum (Plot size: 5' r)				Hydrophytic Vegetation Indicators: 1- Rapid Test for Hydrophytic Vegetation 2- Dominance Test is >50% 3- Prevalence Index is ≤3.0 ¹ 4- Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5- Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Polystichum munitum</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>	
2. <u>Hedera helix</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
Total Cover:	<u>30</u>			
Woody Vine Stratum (Plot Size: 30' r)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
Total Cover:	<u>0</u>			
% Bare Ground in Herb Stratum	<u>70</u>	<u>%</u>		Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
Remarks:				

SOIL

Sampling Point: D-P2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (in.)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-10	7.5YR2.5/1	100					sandy loam	
10-13	10YR2/2	100					sandy loam	gravelly
13-18	10YR3/3	100					sandy loam	gravelly

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.)			Indicators for Problematic Hydric Soils ³ :		
<input type="checkbox"/>	Histosol (A1)	<input type="checkbox"/>	Sandy Redox (S5)	<input type="checkbox"/>	2 cm Muck (A10)
<input type="checkbox"/>	Histic Epipedon (A2)	<input type="checkbox"/>	Stripped Matrix (S6)	<input type="checkbox"/>	Red Parent Material (TF2)
<input type="checkbox"/>	Black Histic (A3)	<input type="checkbox"/>	Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/>	Very Shallow Dark Surface (TF12)
<input type="checkbox"/>	Hydrogen Sulfide (A4)	<input type="checkbox"/>	Loamy Gleyed Matrix (F2)	<input type="checkbox"/>	Other (Explain in Remarks)
<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)		

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 <u> X </u>
--	--

Remarks: *Redox was not observed in this profile which may be due to the fact that it stays saturated continuously. There is an abrupt wetland boundary associated with a slope, creating a minimal transition zone.

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (any one indicator is sufficient)	Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D4)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations: Surface Water Present? Yes _____ No <u> X </u> Depth (in): _____ Water Table Present? Yes _____ No <u> X </u> Depth (in): _____ Saturation Present? Yes <u> X </u> No _____ Depth (in): 10" (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u> X </u>
---	--

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

Remarks: Saturation at 10 inches in March does not constitute wetland hydrology

SOIL

Sampling Point: Plot 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	7.5Y 2.5/1	100					L	
9-14	10YR 3/2	100					SL	
14+	10YR 4/6	60	2.5Y 5/2	40	C	M	SL	Prominent

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (Except MRLA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input checked="" type="checkbox"/> Other (Explain in Remarks)
<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)	

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

Restrictive Layer (if present): Type: <u>Compacted soil</u> Depth (inches): <u>14</u>	Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks:
Compacted soil at 14", depression fills with water and cannot infiltrate.

HYDROLOGY

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

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u> </u> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u> </u> Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u> </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
--	--

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

Remarks:

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

Project/Site: 10821 8th Avenue SW City/County: Seattle/King Sampling Date: 12/14/2020
 Applicant/Owner: Community Roots Housing State: Washington Sampling Point: Plot 4
 Investigator(s): K. Numata Section, Township, Range: SW S6 T23N R4E
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-5
 Subregion (LRR): LRR A - Northwest Forests and Coast Lat: 47.505574 Long: -122.346073 Datum: WGS84
 Soil Map Unit Name: Urban land-Alderwood complex, 0-5% slopes NWI Classification: Upland

Are climatic/hydrologic conditions of the site typical for this time of the year? Yes X No (If no, explain in remarks)
 Are vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? (If needed, explain any answers in remarks) Yes X No
 Are vegetation , Soil , or Hydrology naturally problematic? Yes X No

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

Hydrophytic vegetation present?	Yes <u>X</u>	No <u> </u>	Is the sampled area within a wetland? Yes <u> </u> No <u>X</u>
Hydric soil present?	Yes <u> </u>	No <u>X</u>	
Indicators of wetland hydrology present?	Yes <u> </u>	No <u>X</u>	
Remarks: <u>Plot located southeast of the wetland. Paired with Plot 3.</u>			

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: <u>30' r</u>)	Absolute % Cover	Dominant Species	Indicator Status	Dominance Test Worksheet	
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Number of Dominant Species that are OBL, FACW, or FAC: <u>2</u> (A)	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Total Number of Dominant Species Across all Strata: <u>3</u> (B)	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Percent of Dominant Species that are OBL, FACW, or FAC: <u>67%</u> (A/B)	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
<u>0</u> = Total Cover					
Sapling/Shrub Stratum (Plot size: <u>30' r</u>)	Absolute % Cover	Dominant Species	Indicator Status	Prevalence Index Worksheet	
1. <u><i>Picea sitchensis</i></u>	<u>5</u>	<u>Y</u>	<u>FAC</u>	Total % Cover of: <u> </u> Multiply by: <u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	OBL species <u>0</u> x 1 = <u>0</u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	FACW species <u>0</u> x 2 = <u>0</u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	FAC species <u>25</u> x 3 = <u>75</u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	FACU species <u>25</u> x 4 = <u>100</u>	
<u>5</u> = Total Cover			UPL species <u>0</u> x 5 = <u>0</u>		
			Column totals <u>50</u> (A) <u>175</u> (B)		
			Prevalence Index = B/A = <u>3.50</u>		
Herb Stratum (Plot size: <u>5' r</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic Vegetation Indicators:	
1. <u><i>Rubus armeniacus</i></u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	<u>1</u> - Rapid Test for Hydrophytic Vegetation	
2. <u><i>Geranium robertianum</i></u>	<u>20</u>	<u>Y</u>	<u>FACU</u>	<u>X</u> <u>2</u> - Dominance Test is >50%	
3. <u><i>Polystichum munitum</i></u>	<u>5</u>	<u>N</u>	<u>FACU</u>	<u>3</u> - Prevalence Index is ≤3.0	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>4</u> - Morphological Adaptations* (Provide supporting data in Remarks or on a separate sheet)	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>5</u> - Wetland Non-Vascular Plants ¹	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Problematic Hydrophytic Vegetation ¹	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	(Explain)	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
11. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
<u>45</u> = Total Cover					
Woody Vine Stratum (Plot size: <u>30' r</u>)	Absolute % Cover	Dominant Species	Indicator Status	Hydrophytic vegetation present?	
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Yes <u>X</u> No <u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
<u>0</u> = Total Cover					
% Bare Ground in Herb Stratum <u>55</u>					

Remarks:

SOIL

Sampling Point: Plot 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		
0-8	10YR 2/1	100					SL	
8-16+	7.5YR 3/3	100					SL	Rocks, Wood chips abundant

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.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (Except MRLA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<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)	

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 <u> X </u>
--	--

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water-Stained Leaves (B9) (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 on 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 Stressed 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)	<input type="checkbox"/> Frost Heave Hummocks (D7)

Field Observations: Surface Water Present? Yes _____ No <u> X </u> Depth (inches): _____ Water Table Present? Yes _____ No <u> X </u> Depth (inches): _____ Saturation Present? Yes _____ No <u> X </u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u> X </u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

APPENDIX B
Wetland Rating Forms

Wetland name or number A

RATING SUMMARY – Western Washington

Name of wetland (or ID #): Wetland A Date of site visit: 12/14/20

Rated by K. Numata Trained by Ecology? Yes No Date of training 03/30/16

HGM Class used for rating Depressional / Flats Wetland has multiple HGM classes? Yes No

NOTE: Form is not complete with out the figures requested (figures can be combined).

Source of base aerial photo/map ERSI Aerial Imagery

OVERALL WETLAND CATEGORY III (based on functions 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	
Appropriate ratings incl. ("H" - High, "M" - Medium, "L" - Low)				
Site Potential	M	M	M	
Landscape Potential	M	M	L	
Value	H	M	M	Total
Score Based on Ratings	7	6	5	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	
Wetland of High Conservation Value	
Bog	
Mature Forest	
Old Growth Forest	
Coastal Lagoon	
Interdunal	
None of the above	X

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	5B
Hydroperiods	D 1.4, H 1.2	5A
Location of outlet (<i>can be added to map of hydroperiods</i>)	D 1.1, D 4.1	5A
Boundary of area within 150 ft of the wetland (<i>can be added to another figure</i>)	D 2.2, D 5.2	5B
Map of the contributing basin	D 4.3, D 5.3	5B
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	5C
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	5D
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	5D

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 another figure</i>)	S 4.1	
Boundary of area within 150 ft of the wetland (<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	

Wetland name or number A

HGM Classification of Wetland in Western Washington

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

If 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 A

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 A

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>		
<input checked="" type="checkbox"/> Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). points = 3		3
<input type="checkbox"/> Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. points = 2		
<input type="checkbox"/> Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing. points = 1		
<input type="checkbox"/> Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. points = 1		
D 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions). Yes = 4 No = 0		0
D 1.3. <u>Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes):</u>		
<input type="checkbox"/> Wetland has persistent, ungrazed, plants > 95% of area points = 5		1
<input type="checkbox"/> Wetland has persistent, ungrazed, plants > 1/2 of area points = 3		
<input checked="" type="checkbox"/> Wetland has persistent, ungrazed plants > 1/10 of area points = 1		
<input type="checkbox"/> Wetland has persistent, ungrazed plants < 1/10 of area 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>		
<input checked="" type="checkbox"/> Area seasonally ponded is > 1/2 total area of wetland points = 4		4
<input type="checkbox"/> Area seasonally ponded is > 1/4 total area of wetland points = 2		
<input type="checkbox"/> Area seasonally ponded is < 1/4 total area of wetland points = 0		
Total for D 1		8

Rating of Site Potential If score is: 12 - 16 = H 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		0
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		0
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?		1
Source <u> Frisbee golf course </u> Yes = 1 No = 0		
Total for D 2		2

Rating of Landscape Potential If score is: 3 - 4 = H 1 - 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		1
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		1
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		2

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

Wetland name or number A

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. <u>Characteristics of surface water outflows from the wetland:</u>	<input checked="" type="checkbox"/> Wetland is a depression or flat depression with no surface water leaving it (no outlet) points = 4 <input type="checkbox"/> Wetland has an intermittently flowing stream or ditch, OR highly constricted perm. flowing outlet points = 2 <input type="checkbox"/> Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch points = 1 <input type="checkbox"/> Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points = 0	4
D 4.2. <u>Depth of storage during wet periods:</u> 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.	<input type="checkbox"/> Marks of ponding are 3 ft or more above the surface or bottom of outlet points = 7 <input type="checkbox"/> Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet points = 5 <input checked="" type="checkbox"/> Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet points = 3 <input type="checkbox"/> The wetland is a "headwater" wetland points = 3 <input type="checkbox"/> Wetland is flat but has small depressions on the surface that trap water points = 1 <input type="checkbox"/> Marks of ponding less than 0.5 ft (6 in) points = 0	3
D 4.3. <u>Contribution of the wetland to storage in the watershed:</u> Estimate the ratio of the area of upstream basin contributing surface water to the wetland to the area of the wetland unit itself.	<input type="checkbox"/> The area of the basin is less than 10 times the area of the unit points = 5 <input checked="" type="checkbox"/> The area of the basin is 10 to 100 times the area of the unit points = 3 <input type="checkbox"/> The area of the basin is more than 100 times the area of the unit points = 0 <input type="checkbox"/> Entire wetland is in the Flats class points = 5	3
Total for D 4		10

Add the points in the boxes above

Rating of Value 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 function of the site?		
D 5.1. Does the wetland unit receive stormwater discharges?	Yes = 1 No = 0	0
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	1
Total for D 5		2

Rating of Value If score is: 3 = H X 1 - 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. <u>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.</u>	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):	
<input type="checkbox"/> Flooding occurs in a sub-basin that is immediately down-gradient of unit.	points = 2	1
<input checked="" type="checkbox"/> Surface flooding problems are in a sub-basin farther down-gradient.	points = 1	
<input type="checkbox"/> Flooding from groundwater is an issue in the sub-basin.	points = 1	
<input type="checkbox"/> 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. <i>Explain why</i> _____	points = 0	
<input type="checkbox"/> 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		1

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

Record the rating on the first page

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	1
<input checked="" type="checkbox"/> Emergent	3 structures: points = 2	
<input 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 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		

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

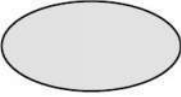
H 1.3. Richness of plant species

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

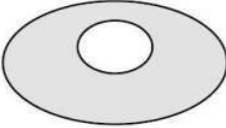
If you counted: > 19 species	points = 2	1
5 - 19 species	points = 1	
< 5 species	points = 0	

H 1.4. Interspersion of habitats

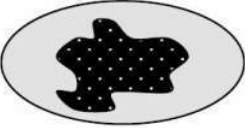
Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. *If you have four or more plant classes or three classes and open water, the rating is always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



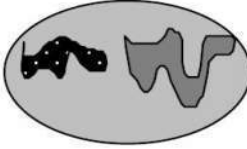
None = 0 points

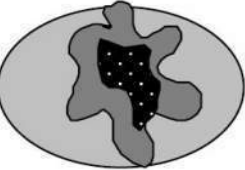


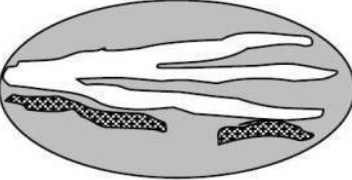
Low = 1 point



Moderate = 2 points







All three diagrams in this row are HIGH = 3 points

Wetland name or number A

<p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. The number of checks is the number of points.</p> <p><input checked="" type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long)</p> <p><input 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 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>	2
<p>Total for H 1</p>	7

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 function of the site?

<p>H 2.1 Accessible habitat (<i>include only habitat that directly abuts wetland unit</i>).</p> <p>Calculate: <u> 0 </u> % undisturbed habitat + (<u> 6 </u> moderate & low intensity land uses / 2) = <u> 2.75 </u></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>	0
<p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: <u> 0 </u> % undisturbed habitat + (<u> 9 </u> moderate & low intensity land uses / 2) = <u> 4.25 </u></p> <p><input type="checkbox"/> Undisturbed habitat > 50% of Polygon points = 3</p> <p><input type="checkbox"/> Undisturbed habitat 10 - 50% and in 1-3 patches points = 2</p> <p><input type="checkbox"/> Undisturbed habitat 10 - 50% and > 3 patches points = 1</p> <p><input type="checkbox"/> Undisturbed habitat < 10% of 1 km Polygon points = 0</p>	0
<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 1km Polygon is high intensity points = 0</p>	-2
<p>Total for H 2</p>	-2

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

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

<p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score that applies to the wetland being rated.</i></p> <p><input type="checkbox"/> Site meets ANY of the following criteria: points = 2</p> <p><input type="checkbox"/> It has 3 or more priority habitats within 100 m (see next page)</p> <p><input type="checkbox"/> It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</p> <p><input type="checkbox"/> It is mapped as a location for an individual WDFW priority species</p> <p><input type="checkbox"/> It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</p> <p><input type="checkbox"/> 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</p> <p><input checked="" type="checkbox"/> Site has 1 or 2 priority habitats (listed on next page) with in 100m points = 1</p> <p><input type="checkbox"/> Site does not meet any of the criteria above points = 0</p>	1
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Rating of Value If Score is: 2 = H X 1 = M 0 = L *Record the rating on the first page*

Wetland name or number A

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.

PDF here: <https://wdfw.wa.gov/sites/default/files/publications/00165/wdfw00165.pdf> or access the file 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.

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

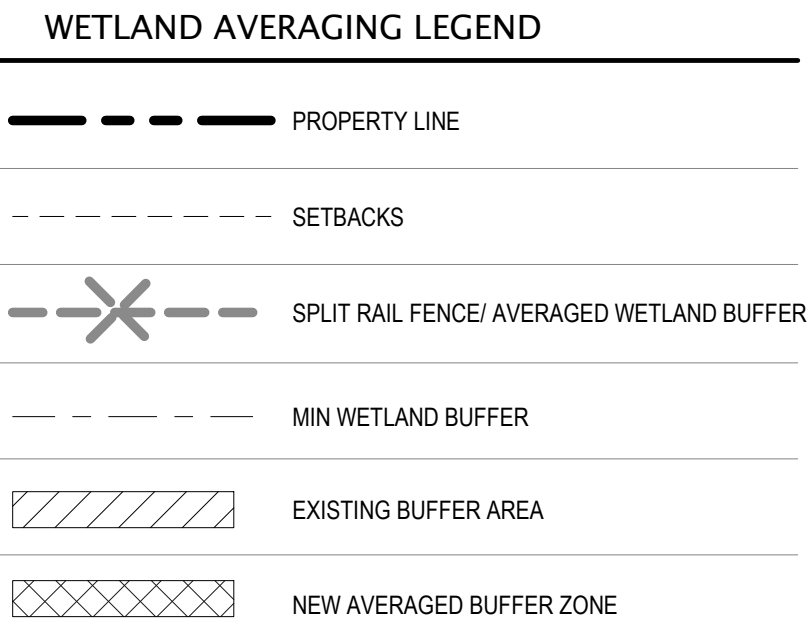
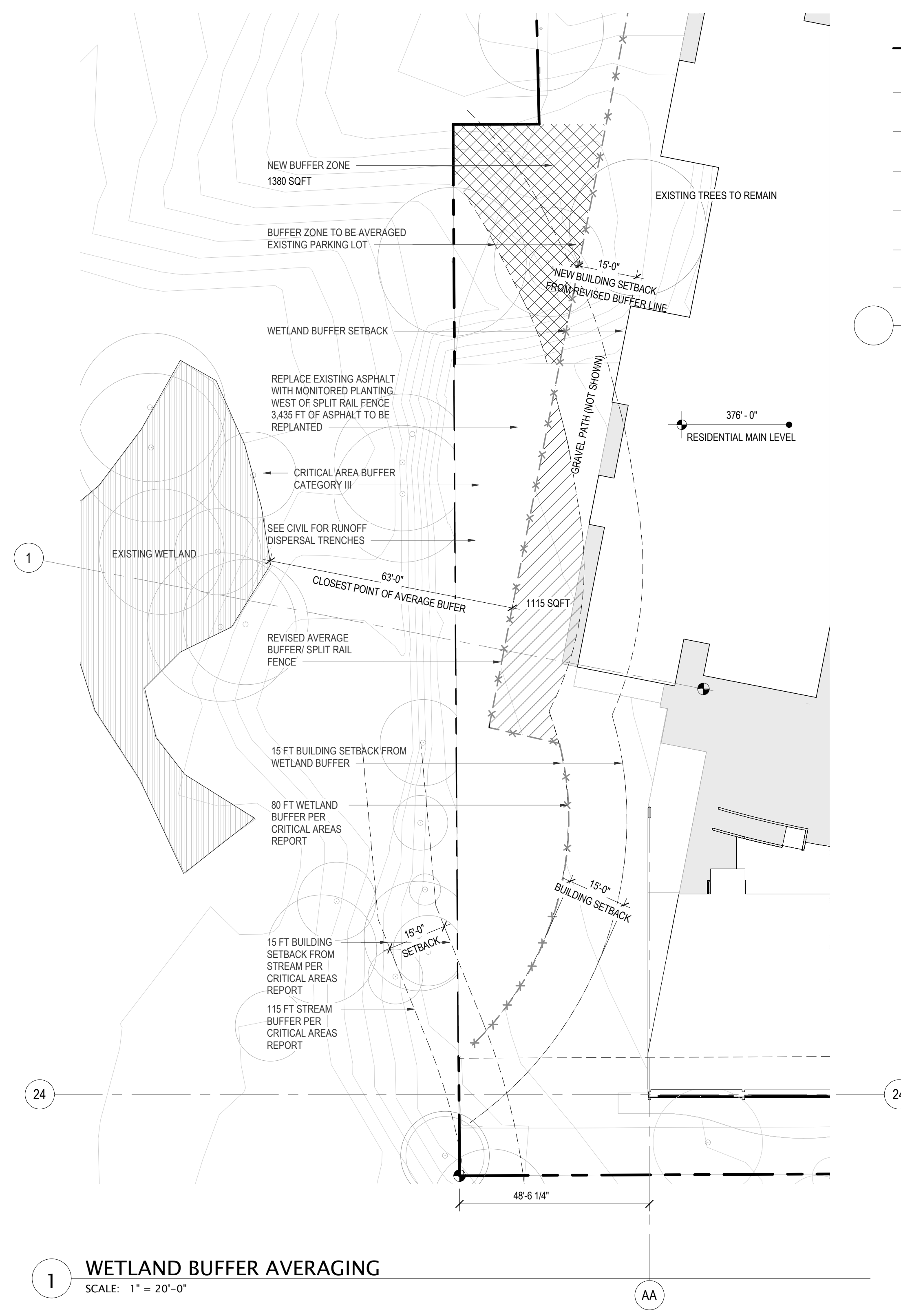
Wetland Type	Category
<i>Check off any criteria that apply to the wetland. List the category when the appropriate criteria are met.</i>	
<p>SC 1.0. Estuarine Wetlands</p> <p>Does the wetland meet the following criteria for Estuarine wetlands?</p> <p> <input type="checkbox"/> The dominant water regime is tidal, <input type="checkbox"/> Vegetated, and <input type="checkbox"/> With a salinity greater than 0.5 ppt </p> <p style="text-align: right;"> Yes - Go to SC 1.1 <input checked="" type="checkbox"/> No = Not an estuarine wetland </p>	
<p>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?</p> <p style="text-align: right;"> Yes = Category I No - Go to SC 1.2 </p>	
<p>SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?</p> <p> <input type="checkbox"/> 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) <input type="checkbox"/> 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. <input type="checkbox"/> The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands. </p> <p style="text-align: right;"> Yes = Category I No = Category II </p>	
<p>SC 2.0. Wetlands of High Conservation Value (WHCV)</p> <p>SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value?</p> <p style="text-align: right;"> Yes - Go to SC 2.2 <input checked="" type="checkbox"/> No - Go to SC 2.3 </p> <p>SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?</p> <p style="text-align: right;"> Yes = Category I No = Not WHCV </p> <p>SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? Updated WA Wetlands of High Conservation Value Web Map (WA DNR) [ORIGINAL DOC] </p> <p style="text-align: right;"> Yes - Contact WNHP/WDNR and to SC 2.4 <input checked="" type="checkbox"/> No = Not WHCV </p> <p>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?</p> <p style="text-align: right;"> Yes = Category I No = Not WHCV </p>	
<p>SC 3.0. Bogs</p> <p>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></p> <p>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?</p> <p style="text-align: right;"> Yes - Go to SC 3.3 <input checked="" type="checkbox"/> No - Go to SC 3.2 </p> <p>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?</p> <p style="text-align: right;"> Yes - Go to SC 3.3 <input checked="" type="checkbox"/> No = Is not a bog </p> <p>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?</p> <p style="text-align: right;"> Yes = Is a Category I bog No - Go to SC 3.4 </p> <p>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.</p> <p>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?</p> <p style="text-align: right;"> Yes = Is a Category I bog No = Is not a bog </p>	

Wetland name or number A

<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> <p><input type="checkbox"/> 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.</p> <p><input type="checkbox"/> 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> <p style="text-align: right;">Yes = Category I <input checked="" type="checkbox"/> No = Not a forested wetland for this section</p>	
<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> <p><input type="checkbox"/> 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</p> <p><input type="checkbox"/> 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> <p style="text-align: right;">Yes - Go to SC 5.1 <input checked="" type="checkbox"/> No = Not a wetland in a coastal lagoon</p> <p>SC 5.1. Does the wetland meet all of the following three conditions?</p> <p><input type="checkbox"/> 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).</p> <p><input type="checkbox"/> 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.</p> <p><input type="checkbox"/> The wetland is larger than 1/10 ac (4350 ft²)</p> <p style="text-align: right;">Yes = Category I No = Category II</p>	
<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> <p><input type="checkbox"/> Long Beach Peninsula: Lands west of SR 103</p> <p><input type="checkbox"/> Grayland-Westport: Lands west of SR 105</p> <p><input type="checkbox"/> Ocean Shores-Copalis: Lands west of SR 115 and SR 109</p> <p style="text-align: right;">Yes - Go to SC 6.1 <input checked="" type="checkbox"/> No = 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)? <input type="checkbox"/> Yes = Category I <input type="checkbox"/> 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? <input type="checkbox"/> Yes = Category II <input type="checkbox"/> 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? <input type="checkbox"/> Yes = Category III <input type="checkbox"/> No = Category IV</p>	
<p>Category of wetland based on Special Characteristics</p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>	<p>NOT APPLICABLE</p>

APPENDIX C

Site Plan



1 WETLAND BUFFER AVERAGING
SCALE: 1" = 20'-0"

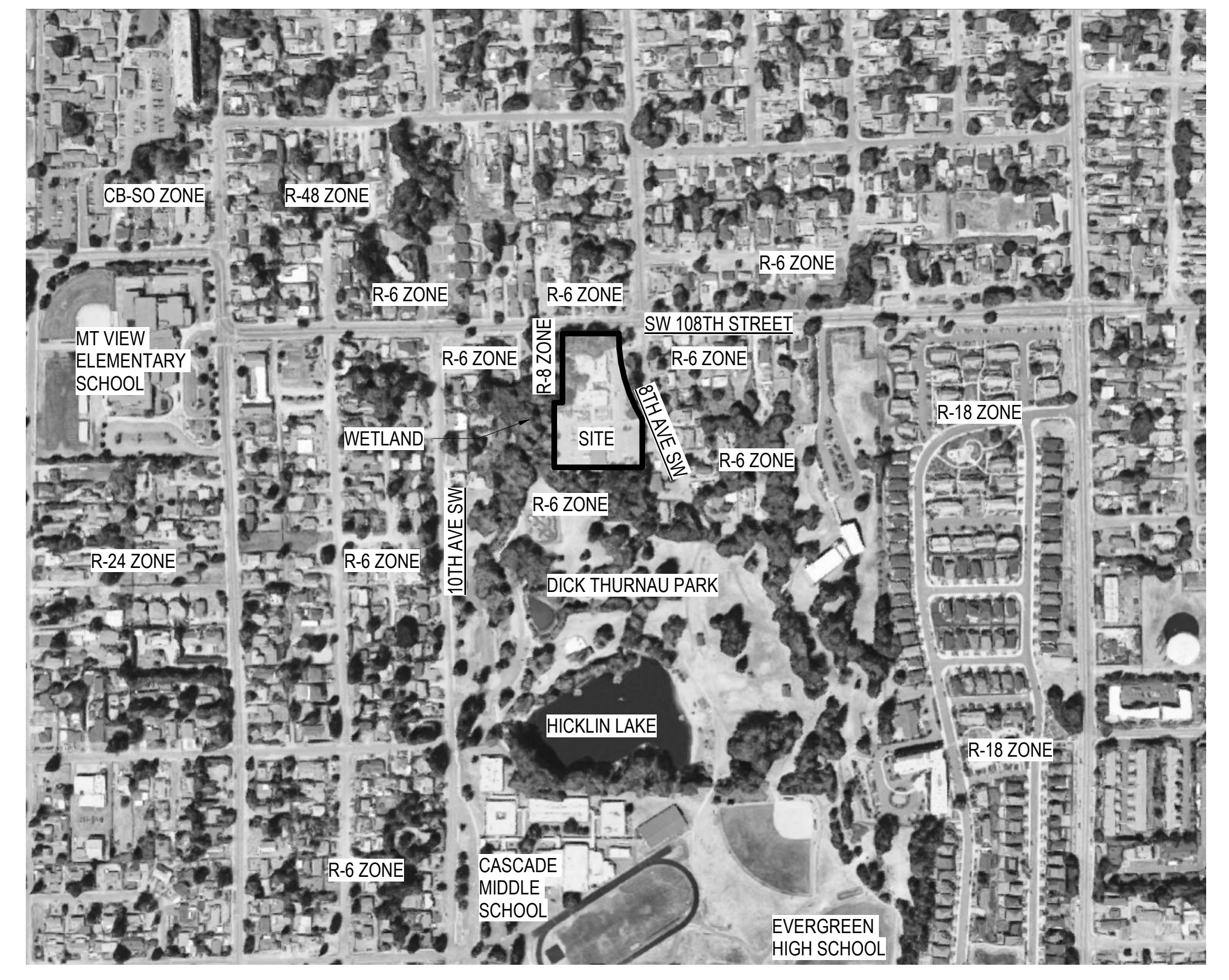
PROJECT SCOPE: THE PROPOSAL IS A 70,000 SQFT, 4- STORY MULTI- FAMILY HOUSING STRUCTURE WITH 76 LOW INCOME UNITS. UNITS INCLUDE MOSTLY 2 AND 3 BEDROOMS CATERING TO FAMILIES. PROPOSED HEIGHT IS 40FT.

IN ADDITION TO THE RESIDENTIAL BUILDING, A 28,000 SQFT. COMMERCIAL BUILDING IS PROPOSED HOUSING COMMUNITY NON- PROFIT ORGANIZATIONS AND SOCIAL SERVICES INCLUDING HEALTH CLINICS, YOUNG ADULT EDUCATION, TEEN ENGAGEMENT PROGRAMS AND THE WHITE CENTER COMMUNITY DEVELOPMENT ASSOCIATION AMONG OTHER COMMUNITY AMENITIES. THE PROPOSED HEIGHT OF THE COMMUNITY BUILDING IS 45FT.

BETWEEN THE 2 BUILDINGS IS A PAVED COMMUNITY OPEN SPACE. SURFACE PARKING WILL BE PROVIDED FOR THE RESIDENTIAL UNITS AND COMMERCIAL BUILDING ON SITE. THE PROJECT WILL ALSO INCLUDE NEW UTILITIES, PAVEMENT AND LANDSCAPING.

CONDITIONAL USE PERMIT SUBMITTAL DOCUMENTS

- WATER AVAILABILITY CERTIFICATE
- SEWER AVAILABILITY CERTIFICATE
- FIRE DISTRICT RECEIPT
- DRAINAGE ANALYSIS
- HYDRANT FLOW
- PARKING ASSESSMENT
- TRAFFIC IMPACT ANALYSIS
- CRITICAL AREAS REPORT
- GEO TECHNICAL REPORT
- COPY OF VARIANCE SUBMISSION



AREA MAP WITH ZONING INFORMATION
NOT TO SCALE

**SUNDBERG
KENNEDY
LY-AU YOUNG
ARCHITECTS**

1501 E MADISON, SUITE 205
SEATTLE WA 98122-4465
206.322.1130

STUDIO WGL
S-MGL
**DERIANA
CONSULTING**

**COMMUNITY ROOTS
HOUSING**

CDA
White Center
Community
Development
Association

Official
Stamps:

White Center Community HUB
10821 8th AVE SW SEATTLE, WA 98146

REVISIONS NO.	DATE	DESCRIPTION	CUP
			KING COUNTY CUP APPLICATION SET
			2021-0412

GENERAL INFO		Scale	
Project number	2001	As indicated	
Date	2021-04-12		
Project Manager	JK		
Drawn by	MS		
Checked by			

A0.1

SITE PLAN LEGEND

- PROPERTY LINE
- SETBACKS
- SPLIT RAIL FENCE/ AVERAGED WETLAND BUFFER
- FIRE LANE/ ACCESS
- OVERHEAD
- PAVING/ ASPHALT
- LANDSCAPING GRASS
- PROPOSED BUILDINGS
- ROCKERY
- WETLANDS
- LANDSCAPE BUFFER
- EXISTING PARKING LOT TO REMAIN
- GRAVEL PATH

FLOOR PLAN LEGEND

SCALE: 1/2" = 1'-0"



1 SITE PLAN
SCALE: 1" = 20'-0"

Official
Stamps:

White Center Community HUB
10821 8th AVE SW SEATTLE, WA 98146

REVISIONS	NO.	DATE	DESCRIPTION
	2001	2021/04/12	CUP APPLICATION SET
	2021/04/12		KING COUNTY CUP APPLICATION SET

SITE PLAN
Scale: As Indicated
A1.00
Checked by: [Signature]
Drawn by: [Signature]
Project Manager: [Signature]
Date: [Signature]