WETLAND AND FISH AND WILDLIFE HABITAT ASSESSMENT REPORT

CAMAS BUSINESS CENTER

OCTOBER 2021



WETLAND AND FISH AND WILDLIFE HABITAT ASSESSMENT REPORT

CAMAS BUSINESS CENTER

OCTOBER 8, 2021

PROJECT LOCATION

4707 & 4723 NORTHWEST LAKE ROAD CAMAS, WASHINGTON 98607

PREPARED FOR

PANATTONI DEVELOPMENT COMPANY, INC. 1821 DOCK STREET, SUITE 100 TACOMA, WASHINGTON 98402

PREPARED BY

SOUNDVIEW CONSULTANTS LLC 2907 HARBORVIEW DRIVE GIG HARBOR, WASHINGTON 98335 (253) 514-8952



Executive Summary

Soundview Consultants LLC (SVC) has been assisting Panattoni Development Company Inc. (Applicant) with a wetland and fish and wildlife habitat assessment and environmental planning to support the proposed Camas Business Center industrial development on a 74.06-acre site located at 4707 & 4723 Northwest Lake Road in the City of Camas, Washington. The subject property consists of two tax parcels situated in the Southeast ½ of Section 29, Township 02 North, Range 03 East, W.M (Clark County Tax Parcel Numbers 176155000, and 176170000).

SVC performed an investigation and assessment of potentially regulated wetlands, streams, and other fish and wildlife habitat conservation areas on the subject property and publicly accessible areas within 300 feet of the site in December 2020, with follow-up investigations in April 2021. Using current methodology, SVC identified four potentially regulated wetlands (Wetlands A - D) on the subject property, and one potentially regulated stream (Offsite Stream Z) offsite to the west of the subject property. Wetland A is classified as Category III wetland with 4 total habitat points, and subject to a standard 80-foot buffer based on proposed high intensity land use per Camas Municipal Code (CMC) 16.53.040.B.2 Table 16.53.040-1. Wetland B is classified as a Category III wetland with 5 total habitat points and subject to a standard 120-foot buffer per CMC 16.53.040.B.2 Table 16.53.040-3. Wetland C is classified as a Category IV wetland and is likely exempt from buffer regulations per Camas Municipal Code (CMC) 16.53.010.C.2.a due to its isolated location in the landscape and small size (less than 4,350 square feet). Wetland D is classified as a Category III wetland with 6 total habitat points and subject to a standard 135-foot buffer per CMC 16.53.040.B.2 Table 16.53.040-3. Offsite Stream Z is likely a Type F stream with no known salmonid presence in accordance with Washington Department of Fish and Wildlife (WDFW) SalmonScape data and subject to a standard 75-foot buffer per CMC 16.61.040.D. The stream buffer is not anticiapted to project onto the subject property. No other potentially regulated wetlands or fish and wildlife habitat conservation areas were identified within 300 feet of the subject property.

The Applicant proposes industrial development of the subject property to create a business center that includes three buildings, internal access roads, parking and loading areas, utilities, and stormwater facilities. Necessary critical area impacts and mitigation requirements are outlined in a wetland mitigation plan prepared under separate cover. The table below summarizes the identified wetlands and streams and summarizes the potential regulatory status by local, state, and federal agencies.

Feature Name	Size/Length Onsite		Regulated Under CMC 16.53 & 16.61	Regulated Under RCW 90.48	Regulated Under Clean Water Act
Wetland A	56,558 sf	III	Yes	Yes	Likely
Wetland B	32,343 sf	III	Yes	Yes	Likely
Wetland C	3,167 sf	IV	No - Exempt	Yes	Not Likely
Wetland D	9,074 sf	III	Yes	Yes	Assumed
Offsite Stream Z	N/A (Offsite)	F	Yes	Yes	Likely

Wetlands classified according to Washington State Department of Ecology (WSDOE) wetland rating system for western Washington (Hruby, 2014); streams classified according Washington Department of Natural Resources (DNR) Water Typing System and CMC 16.61.040.

Table of Contents

Chapter 1. Introduction	
Chapter 2. Property Location	2
2.1 Proposed Location	2
2.2 Proposed Project	3
Chapter 3. Methods	
Chapter 4. Existing Conditions	
4.1 Landscape Setting	
4.2 Soils	
4.3 Vegetation	
4.4 Wetland and Stream Inventories and Priority Habitats and Species	
4.6 Precipitation	
Chapter 5. Results	
5.1 Wetlands	
5.2 Offsite Stream Z	
5.3 Non-Regulated Farm Pond	
Chapter 6. Regulatory Considerations	
6.1 Local Critical Areas Buffer Requirements	
6.2 State and Federal Considerations	
Chapter 7. Closure	
Chapter 8. References	18
Figure 1. Vicinity Map Figure 2. Aerial View of the Subject Property	
Tables	
Table 1. Precipitation Summary ¹	7
Table 2. Wetland Summary	8
Table 3. Wetland A Summary	10
Table 4. Wetland B Summary	11
Table 5. Wetland C Summary	12
Table 5. Wetland D Summary	13
, and the second se	
Appendices	
Appendix A — Methods and Tools	
Appendix B — Background Information	
Appendix C — Existing Conditions Map	
Appendix D — Data Forms	
Appendix E — Wetland Rating Forms	
Appendix F — Wetland Rating Maps	
Appendix G – Qualifications	

Chapter 1. Introduction

Soundview Consultants LLC (SVC) has been assisting Panattoni Development Company Inc. (Applicant) with a wetland and fish and wildlife habitat assessment and environmental planning to support the proposed Camas Business Center industrial development on a 74.06-acre site located at 4707 & 4723 Northwest Lake Road in the City of Camas, Washington. The subject property consists of two tax parcels situated in the Southeast ½ of Section 29, Township 02 North, Range 03 East, W.M (Clark County Tax Parcel Numbers 176155000, and 176170000).

The purpose of the wetland and fish and wildlife habitat assessment report is to identify the presence of potentially regulated wetlands and fish and wildlife habitat conservation areas that may be found on or near the subject property.

This report provides conclusions and recommendations regarding:

- Site description and area of assessment;
- Background research and identification of potential critical areas within the vicinity of the site;
- Identification and assessment of potentially regulated wetlands and streams;
- Existing site map detailing identified wetlands and offsite stream; and
- Supplemental information necessary for local, state, and federal regulatory review.

1

Chapter 2. Property Location

2.1 Proposed Location

The subject property is located at located at 4707 & 4723 Northwest Lake Road in the City of Camas, Washington. The subject property consists of two tax parcels situated in the Southeast ½ of Section 29, Township 02 North, Range 03 East, W.M (Clark County Tax Parcel Numbers 176155000, and 176170000).

To access the subject property, heading southbound on Interstate-5 from the Ridgefield area, keep right at the fork to take the exit for Interstate 205 S toward Salem. After 10.1 miles, use the right two lanes to take exit 27 for Washington-14 East towards Camas. Continue for 4.3 miles, then take exit 10 for Southeast 192nd Avenue. Turn left on Southeast 192nd Avenue then right on Southeast Brady Road. At the traffic circle in 0.1 mile, take the first exit and stay on Southeast Brady Road. Follow Southeast Brady Road for 1.6 miles where it becomes Northwest Parker Street. Continue for 1.6 miles, and then turn left on Northwest Lake Road, where the property will be located on the right-hand side after 0.5 miles.



2.2 Proposed Project

The Applicant proposes industrial development of the subject property to create a business center that includes three buildings, internal access roads, parking and loading areas, utilities, and stormwater facilities. Necessary critical area impacts and mitigation requirements are outlined in a wetland mitigation plan prepared under separate cover.

Chapter 3. Methods

SVC investigated, assessed, and/or delineated potentially regulated wetlands, streams and other fish and wildlife habitat on the subject property in December 2020 and April 2021. All determinations were made using observable vegetation, hydrology, and soils in conjunction with data from the U.S. Geological Survey (USGS) topographic maps, National Resource Conservation Service (NRCS) soil survey, U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI), Washington State Department of Natural Resources (DNR) water typing system, Washington Department of Fish and Wildlife (WDFW) Priority Habitats and Species (PHS) and SalmonScape mapping tools, Clark County GIS, and various orthophotographic resources. Appendix A contains further details for the methods and tools used to prepare this report.

Wetland boundaries were determined using the routine approach described in the U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual (Environmental Laboratory, 1987) and modified according to the guidelines established in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0) (USACE, 2010) and Field Indicators of Hydric Soils in the United States (NRCS, 2018). Qualified wetland scientists marked boundaries of wetlands with orange surveyor's flagging labeled alpha-numerically and tied to 3-foot lath or vegetation at formal sampling locations (DP-1 through DP-21) to mark the points where detailed data was collected. Additional tests pits were excavated at regular intervals inside and outside of the wetland boundaries to further confirm the delineation.

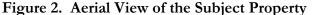
SVC classified all wetlands using both the hydrogeomorphic (Brinson, 1993) and Cowardin (Cowardin, 1979) classification systems. Following classification and assessment, WSDOE-trained scientists rated and categorized all wetlands using the *Washington State Wetlands Rating System for Western Washington* (Hruby, 2014) and the definitions established in Camas Municipal Code (CMC) 16.53.020.

The fish and wildlife habitat assessment was conducted during the same site visit by qualified fish and wildlife biologists. The experienced biologists made visual observations using stationary and walking survey methods for both aquatic and upland habitats noting any special habitat features or signs of fish and wildlife activity.

Chapter 4. Existing Conditions

4.1 Landscape Setting

The subject property is located in a mixed light-commercial and industrial setting in the City of Camas. The parcels are undeveloped and sparsely forested, and currently used as grazing land for cattle (Figure 2). A single-family residence and associated infrastructure including a driveway, detached garage, and equipment storage shed/barn is located on the southern portion of the subject property. The site is bounded by commercial buildings to the north, undeveloped land and commercial buildings to the east, Northwest Lake Road to the south, and a golf course and commercial properties to the west. Topography onsite is generally flat with a slight downwards slope from to south to north. Elevation ranges from approximately 295 feet above mean sea level (amsl) on the southern portion of the site to approximately 244 feet amsl on the northern portion of the site. A topographic map is provided in Appendix B1. The subject property is located within Water Resource Inventory Area (WRIA) 28 – Salmon-Washougal.





4.2 Soils

The NRCS Soil Survey of Clark County, Washington identifies four soil series on the subject property: Cove silty clay loam, thin solum, 0 to 3 percent (CwA), Hesson clay loam, 0 to 8 percent slopes (HcB), Hesson clay loam, 8 to 20 percent slopes (HcD), and Powell silt loam, 0 to 8 percent slopes (PoB). A soil map is provided in Appendix B2. Below is a detailed description of each soil series.

Cove silty clay loam, thin solum, 0 to 3 percent (CwA)

According to the survey, Cove silty clay loam, thin solum, 0 to 3 percent (CwA) is part of the Cove series of soils mapped by the NRCS in Clark County. The Cove series consists of deep, very poorly drained soils that were formed in water-laid deposits in old lakes and ponds. The CwA soils occur in low, wet basins and depressions on terraces in the central part of the county. A typical soil profile is a silty clay loam for the first 10 inches of depth and is a very dark grayish brown. From 10 to 14 inches, the soil is a dark-gray silty loam. Immediately below, is an extremely firm, black clay layer about 7 inches thick. The underlying material to a depth of about 60 inches is and olive-colored silt laom. Cove silty clay loam, thin solum, 0 to 3 percent slopes, is listed as hydric on the Clark County Hydric Soils List (NRCS, N.d.).

Hesson clay loam, 0 to 8 percent slopes (HcB)

According to the survey, Hesson clay loam, 0 to 8 percent slopes (HcB) is part of the Hesson series of soils mapped by the NRCS in Clark County. The Hesson series consists well-drained soils in mostly level to gently rolling terrain. Parent material is deeply weathered, old alluvium that consists of varying amounts of gravel. Annual precipitation typically varies between 50 and 60 inches. In a typical profile, the surface layer is a dark reddish-brown clay loam about 4 inches thick. Below this layer is a friable, dark reddish-brown clay loam about 10 inches thick. A reddish-brown clay to a depth of about 91 inches. The Hesson clay loam, 0 to 8 percent slopes (HcB) is listed as non-hydric on the Clark County Hydric Soils List (NRCS, N.d.).

Hesson clay loam, 8 to 20 percent slopes (HcD)

According to the survey, this soil is similar to the Hesson clay loam 0 to 8 percent except the surface layer is generally, 1 to 2 inches thinner, and up to 4 inches thinner where erosion has been active. The Hesson clay loam, 8 to 20 percent slopes (HcD) is listed as non-hydric on the Clark County Hydric Soils List (NRCS, N.d.).

Powell silt loam, 0 to 8 percent slopes (PoB)

According to the survey, the Powell series is a moderately, well-drained, medium textured soil found in rolling terrains. The annual precipitation is typically around 50 inches. Powell soils are used for row crops, hay production, pasture and timber. The Powell silt loam, 0 to 8 percent slopes (PoB) surface layer is dark brown silt loam to a depth of about 17 inches. Below the surface layer is a friable, mottled, grayish-brown silt loam about 6 inches thick. The following layer, to a depth of approximately 22 inches is a dark yellowish-brown silt loam that is firm, and mottled brown heavy silt loam in the lower part. Below this layer to a depth of approximately 63 inches is a firm, mottled, dark-brown heavy silt loam. The Powell silt loam, 0 to 8 percent slopes (PoW) is listed as non-hydric on the Clark County Hydric Soils List (NRCS, N.d.)

4.3 Vegetation

Vegetation on the subject property consists of an actively grazed pasture with partially forested areas on the west and northern portions of the property. The grazed areas on the property exhibited evidence of disturbance and heavily compacted soils from cattle activity. Vegetation in these areas consisted of common pasture grasses including tall fescue (*Schedonorus arundinaceus*), common velvetgrass (*Holcus lanatus*), orchard grass (*Dactylis glomerata*), Kentucky bluegrass (*Poa pratensis*), and soft rush (*Juncus effusus*). The forested portion of the site is generally dominated by a canopy of Oregon ash (*Fraxinus latifolia*), with smaller amounts of Douglas fir (*Psuedotsuga menziesii*), oneseed hawthorn (*Crataegus monogyna*), and hardhack (*Spiraea douglasii*). Non-native, invasive species were prevalent

throughout the site, including Himalayan blackberry (*Rubus armeniacus*) (particularly in the north and northwest portions of the property), reed canarygrass (*Phalaris arundinacea*), and bird's-foot trefoil (*Lotus corniculatus*).

4.4 Wetland and Stream Inventories and Priority Habitats and Species

The USFWS NWI map (Appendix B3), WDFW PHS Map (Appendix B4), and Clark County Stream and Wetland Inventory (Appendix B5) do not identify any potentially regulated wetlands, streams, or priority habitats or species on the subject property. The Clark County Stream and Wetland Inventory map and the USFWS NWI map identify potential wetlands offsite within 300 feet to the west of the subject property, associated with a potential offsite stream identified by Clark County and DNR (Appendix B6). DNR classifies the offsite stream as a Type F (fish-bearing) stream. The WDFW SalmonScape map (Appendix B7) does not identify potential salmonid presence within the offsite stream, or within 300 feet of the site. The WDFW PHS map identifies potential caves or cave-rich areas within the township, but not necessarily on the subject property. No other potential wetlands, streams, or other priority habitats or species are documented on or within 300 feet of the subject property.

4.6 Precipitation

Precipitation data was obtained from the National Oceanic and Atmospheric Administration (NOAA) weather station at Portland International Airport in order to obtain percent of normal precipitation during and preceding the investigation. A summary of data collected is provided in Table 1.

Table 1. Precipitation Summary¹.

Date	Day of	Day Before	1 Week Prior	2 Weeks Prior	30 Days Prior (Observed/Normal)	Year to Date (Observed/Normal) ²	Percent of Normal (Year to Date ²)
12/21/2020	0.33	1.43	2.80	3.96	4.99/5.98	10.80/12.89	84
04/06/2021	0.00	0.00	0.00	0.33	1.37/3.82	24.19/27.99	86
04/07/2021	0.00	0.00	0.00	0.33	1.12/3.79	24.19/28.09	86

Precipitation levels provided in inches. Data obtained from NOAA (http://w2.weather.gov/climate/xmacis.php?wfo=pqr) for Sea-Tac airport.

Precipitation data during the December 21, 2020 site investigation were within the statistical normal range for the prior 30 days and for the year-to-date (approximately 84 percent of normal). This investigation followed a heavy storm event where 1.43 inches of precipitation accumulation was reported the previous day, and 1.76 inches reported in the prior 24-48 hours. Precipitation data for the April 6 and 7, 2021 site visits were drier than normal for the prior 30 days though within the statistical normal range for the year-to-date (approximately 86 percent of normal). Precipitation data suggests that conditions were at the lower end of the normal range during the April 2021 delineation work, which was completed during the early growing season. Such conditions were considered in making professional wetland boundary determinations.

^{2.} Year-to-Date precipitation is for the water year from the preceding October 1st to the onsite date.

Chapter 5. Results

The site investigations on December 21, 2020, and April 6 and 7, 2021 identified and delineated four wetlands (Wetlands A - D) on the subject property and identified one stream (Offsite Stream Z) offsite to the west of the subject property. No other wetlands, streams, or other fish and wildlife habitat conservation areas were identified within 300 feet of the subject property during the site investigations.

5.1 Wetlands

SVC identified and delineated four wetlands (Wetlands A - D) on the subject property. The identified wetlands contained indicators of wetland hydrology, hydric soils, and a predominance of hydrophytic vegetation according to current wetland delineation methodology. The data forms (DP-1 through DP-21), wetland rating forms, and wetland rating maps are provided in Appendices D, E, and F, respectively. Table 2 summarizes the wetlands identified during the site investigations.

Table 2. Wetland Summary

	Predominant	Wetland Class	Wetland Size	Standard Buffer		
Wetland	Cowardin ¹	HGM ²	WSDOE ³	City of Camas ⁴	Onsite (sq ft)	Width (feet)
A	PFOC	Depressional	III	III	56,558	80
В	PFO/EMBC	Slope	III	III	32,343	120
С	PEMB	Slope	IV	IV	3,167	N/A ⁵
D	PFO/SS/EMBC	Depressional	III	III	9,074	135

Notes:

5.1.1 Wetland A

Wetland A is 56,558 square feet (1.30 acres) in size and is located on the northern portion of the subject property. Hydrology for Wetland A is provided by direct precipitation, a seasonally high water table, and surface runoff from adjacent uplands. A culvert is located on the west end of the wetland and reduces the storage capacity of the wetland. Wetland vegetation is dominated by an overstory of Oregon ash, with an understory of oneseed hawthorn, hardhack, and shortawn foxtail (*Alopecurus aequalis*). Non-native, invasive species observed in Wetland A include Himalayan blackberry, reed canarygrass, meadow foxtail, and bird's-foot trefoil. Wetland A is a Palustrine Forested, Seasonally Flooded (PFOC) wetland. Wetland A is a Category III depressional wetland with a habitat score of 4 points under current WSDOE wetland rating methodology (Hruby, 2014). Table 3 provides a detailed summary of Wetland A.

^{1.} Cowardin et al. (1979); Federal Geographic Data Committee (2013); class based on vegetation: PFO = Palustrine Forested, PSS = Scrub-Shrub, PEM = Palustrine Emergent. Modifiers for Water Regime: B = Seasonally Saturated, C = Seasonally Flooded.

^{2.} Brinson, M. M. (1993).

^{3.} Current WSDOE rating (Hruby, 2014).

^{4.} Current WSDOE rating system (Hruby, 2014) per CMC 16.53.020.B.

^{5.} Exempt per CMC 16.53.010.C.2.a

5.1.2 Wetland B

Wetland B is 32,343 square feet (0.74 acre) in size and is located on the western portion of the subject property, extending offsite to the west. Hydrology for Wetland B is provided by direct precipitation, a seasonally high-water table, and surface runoff from adjacent uplands. A culvert provides hydraulic connectivity between Wetland A and Wetland B. Wetland vegetation is dominated by an overstory of Oregon ash, with an understory dominated by tall fescue and Kentucky bluegrass, and non-native, invasives Himalayan blackberry, reed canarygrass, and bird's-foot trefoil. Wetland B is a Palustrine Forested/Emergent, Seasonally Flooded/Seasonally Saturated (PFO/EMBC) wetland. Wetland B is a Category III slope wetland with a habitat score of 5 points under current WSDOE wetland rating methodology (Hruby, 2014). Table 4 provides a detailed summary of Wetland B.

5.1.2 Wetland C

Wetland C is 3,167 square feet (0.07 acre) in size and located on the eastern portion of the subject property. Hydrology for Wetland C is provided by direct precipitation, a seasonally high water table, and surface runoff from adjacent uplands. Wetland vegetation is dominated by soft rush, with smaller amounts of common velvetgrass, Kentucky bluegrass, and tall fescue. Wetland C is a Palustrine, Emergent, Seasonally Saturated (PEMB) wetland. Wetland C is a Category IV slope wetland under current WSDOE wetland rating methodology (Hruby, 2014). Table 4 provides a detailed summary of Wetland C.

5.1.2 Wetland D

Wetland D is 9,074 square feet (0.21 acre) in size and located in the northwestern corner of the subject property. Hydrology for Wetland B is provided by direct precipitation, a seasonally high water table, and surface runoff from adjacent uplands. Wetland vegetation is dominated by an overstory of Oregon ash with an understory consisting of hardhack, oneseed hawthorn, soft rush, and fringed willow herb (*Epilobium ciliatum*), as well non-native invasive species including Himalayan blackberry, rambler rose (*Rosa multiflora*), bull thistle (*Cirsium vulgare*), reed canarygrass, tall fescue, and bird's foot trefoil. Wetland D is a Palustrine Forested/Scrub-shrub/Emergent, Seasonally Flooded/Seasonally Saturated (PFO/SS/EMBC) wetland. Wetland D is a Category III depressional wetland with a habitat score of 6 points under current WSDOE wetland rating methodology (Hruby, 2014). Table 4 provides a detailed summary of Wetland D.

Table 3. Wetland A Summary					
	WETLAND A – INFORM				
Location:	Located on the northern portion of the				
		Local Jurisdiction	City of Camas		
VEHICLE SHOW A SHOW		WRIA	28 – Salmon-		
THE STATE OF THE S	人等为为上华大区的推荐		Washougal		
1. 经经济		WSDOE Rating	III		
NOTAL LA	A THE STATE OF STATE	(Hruby, 2014)			
/ 语词词	(1) 1 2 1 2 1 2 1 2 2 2 2 2 2 2 2 2 2 2 2	City of Camas Rating	III		
		City of Camas Buffer	80		
		Width Wetland Size	EZ EEO CE		
		Cowardin	56,558 SF		
		Classification	PFOC		
A PART OF THE PART		HGM Classification	Depressional		
对 国家的		Wetland Data Sheet(s)	DP-3W		
\$16000000000000000000000000000000000000		Upland Data Sheet(s)	DP-4U		
		Boundary Flag color	Orange		
	Wetland vegetation is dominated by	· ·	C		
Dominant	comprised of native and non-native shr				
Vegetation	<u> </u>	-	icidding reed carrary grass,		
Soils	Himalayan blackberry, shortawn foxtail, hardhack and tall fescue. Hydric soil indicator F3 (Depleted Matrix) was observed.				
	Hydrology for Wetland A is provided by direct precipitation, a seasonally high water table,				
Hydrology	and surface runoff from adjacent wetlands.				
Rationale for	Wetland boundaries were determined by topographic drop and a transition to a hydrophytic				
Delineation	plant community.				
Rationale for	Wetland rating based on the current WSDOE wetland rating system for Western Washington				
Local Rating	(Hruby, 2014) per CMC 16.53.020.B.				
_	Wetland Function	ns Summary			
	Wetland A has moderate potential to is	mprove water quality due to	the presence of an outlet,		
	seasonal ponding in more than half the				
	that generates pollutants. However,				
Water Quality	persistent, ungrazed plants throughout				
water Quanty	wetland. The value of any water quality improvement functions within the wetland is				
	increased as the wetland is located in a sub-basin with 303(d) listed waters and an area				
	identified as important for maintaining	g water quality. This wetland	d scores 7 out of 9 points		
	for water quality functions.	1 0 1: 1 :			
	This wetland has moderate potential to	_			
II-d-1-:	potential during wet periods, the moderate contribution of storage within the watershed, and the presence of a constricted outlet (culvert) leading to a downgradient wetland. These				
Hydrologic					
	functions are limited by less the 25% of the contributing basin being covered in intensive human land uses. This wetland scores 6 out of 9 points for hydrologic functions.				
	Wildlife habitat functions provided by				
	mammal and bird forage and cover. Wetland A has only one Cowardin class and hydroperiod,				
Habitat	and is relatively low in species diversity. However, Wetland A contains limited priority and special habitat features (snags and logs). The surrounding landscape has a limited potential to				
	support habitat connectivity between t				
	habitat fragmentation and surrounding				
	habitat function.		r		
D	The buffer for Wetland A is considered	ed degraded as it contains ex	xtensive amounts of non-		
Buffer Condition	native invasive, Himalayan blackberry.	O			
	,				

Table 4. Wetland B Summary

Table 4. Wetland	<u> </u>				
	WETLAND B – INFORM				
Location:	Located on the western portion of the subject property, extending offsite to the west.				
		Local Jurisdiction	City of Camas		
		WRIA	28 – Salmon-		
	THE THE PARTY OF T		Washougal		
		WSDOE Rating	III		
发展中国主义		(Hruby, 2014)	TIT		
一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个	著 然是"我一个打扮"字题《古	City of Camas Rating	III		
	WAY WAY TO THE WAY TO	City of Camas Buffer Width	120		
		Wetland Size	32,343 SF		
		Cowardin	32,343 31		
经外 个生事。	STATE OF THE PARTY	Classification	PFO/EMBC		
		HGM Classification	Slope		
		Wetland Data Sheet(s)	DP-5W		
CALIBORN STORY		Upland Data Sheet(s)	DP-4U and DP-15U		
		Boundary Flag color	Orange		
.	Wetland vegetation is dominated by				
Dominant	dominated by tall fescue and Kentuc				
Vegetation	blackberry, reed canarygrass, and bird's-foot trefoil.				
Soils	Hydric soil indicator F3 (Depleted Matrix) was observed.				
Hydrology	Hydrology for Wetland B is provided	by direct precipitation, a se	asonally high water table,		
	and surface runoff from adjacent wetlands.				
Rationale for	Wetland boundaries were determined by a transition to a hydrophytic plant community and				
Delineation	hydric soils.				
Rationale for	Wetland rating based on the current WSDOE wetland rating system for Western Washington				
Local Rating	(Hruby, 2014) per CMC 16.53.020.B.				
	Wetland Function				
	Wetland B has some potential to impre-				
W/ . O 1'.	the wetland unit, surrounding land uses that generate pollutants and being located in a sub-				
Water Quality	basin with 303(d) listed waters and an area identified as important for maintaining water				
	quality. However, the wetland lacks the appropriate types and coverage of plants needed to trap sediments and pollutants. This wetland scores 6 out of 9 points for water quality function.				
	This wetland has some potential to reduce flooding and erosion due to being located in an area that generates excess surface runoff and surface flooding problems down-gradient.				
Hydrologic	However, these functions are limited by the lack of dense, uncut, rigid plants in the wetland				
11, 01010810	unit required to reduce surface water velocities. This wetland scores 5 out of 9 points for				
	hydrologic function.		1		
	Wildlife habitat functions provided by	the wetland are considered l	ow and may include small		
Habitat	mammal and bird forage and cover. Wetland B contains some plant diversity with two				
	Cowardin classes, two hydroperiods, and low interspersion of habitat. The surrounding				
	landscape has a low potential to suppo-				
	potential habitat due to existing habita		anding high intensity land		
	uses. Wetland B scores 5 out of 9 poin		<u> </u>		
Buffer Condition	The offsite buffer for Wetland A is con		ains extensive amounts of		
	non-native invasive, Himalayan blackbe	erry.			

Table 5. Wetland C Summary

	Table 3. Wettand C Summary				
T 4'	WETLAND C – INFORM				
Location:	Located on the eastern boundary of the	Local Jurisdiction	City of Compa		
and the second		Local jurisdiction	City of Camas 28 – Salmon-		
		WRIA			
West A		WSDOE Pating	Washougal		
		WSDOE Rating (Hruby, 2014)	IV		
		Clark County Rating	IV		
NONE WAY		Clark County Rating Clark County Buffer			
		Width	N/A		
	加度是大量工具,从	Wetland Size	3,167 SF		
		Cowardin	-		
		Classification	PEMB		
		HGM Classification	Slope		
THE WAY WAS		Wetland Data Sheet(s)	DP-10W		
一州东北下的		Upland Data Sheet(s)	DP-11U		
		Boundary Flag color	Orange		
Dominant	Wetland vegetation is dominated by so		s of common velvetgrass,		
Vegetation	Kentucky bluegrass, and tall fescue.				
Soils	Hydric soil indicator F6 (Redox Dark Surface) was observed.				
Undrology	Hydrology for Wetland C is provided by direct precipitation, a seasonally high water tal				
Hydrology	and surface runoff from adjacent wetlands.				
Rationale for	Wetland boundaries were determined by a transition to hydric soils and a hydrophytic plant				
Delineation	community.				
Rationale for	Wetland rating based on the current WSDOE wetland rating system for Western Washington				
Local Rating	(Hruby, 2014) per CMC 16.53.020.B.				
	Wetland Function	•			
	Wetland C has some potential to improve water quality due to the relatively low slope grade				
	of the wetland and being located in				
	pollutants. However, the wetland lacks the appropriate types and coverage of plants needed				
Water Quality	to trap sediments and pollutants. The value of any water quality improvement functions				
	within the wetland is increased as the wetland is located in a sub-basin with 303(d) listed waters and in area identified as important for maintaining water quality. This wetland scores 6 out				
		maintaining water quality.	Inis wetland scores 6 out		
	of 9 points for water quality functions.	ice flooding and erosion due	to potential excess surface		
	This wetland has some potential to reduce flooding and erosion due to potential excess surface runoff entering the wetland, however, these functions are limited due to the lack of dense,				
Hydrologic	uncut, rigid vegetation required to redu				
	of 9 points for hydrologic functions	ce surface water velocities.	Tins wettand scores 5 out		
		the wetland are low and m	av include small mammal		
	Wildlife habitat functions provided by the wetland are low and may include small mammal and bird forage and cover. Wetland C contains very little plant diversity with one Cowardin				
TT 1 % 4	class, one hydroperiod, and no interspersion of habitat. The surrounding landscape has a low				
Habitat	potential to support habitat connectivit				
	to existing habitat fragmentation and so				
	4 out of 9 points for habitat function				
Buffer Condition	The area surrounding Wetland C is con				
Dunci Condition	pasture. Wetland C buffer is likely waive	ed from buffer requirements	per CMC 16.53.010.C.2.a.		

Table 5. Wetland D Summary

	WE'TI AND D _ INFORM	ATION CHMMADV				
WETLAND D – INFORMATION SUMMARY Location: Located on the northwest corner of the subject property.						
Location,	1 Docated on the northwest corner of the	Local Jurisdiction	City of Camas			
			·			
		WRIA	28 – Salmon-Washougal			
		WSDOE Rating	III			
		(Hruby, 2014)				
Vicinity (1995)		City of Camas Rating	III			
	THE REST OF THE PARTY OF THE PARTY.	City of Camas Buffer	135			
	10000000000000000000000000000000000000	Width				
		Wetland Size	9,074 SF			
		Cowardin	PFO/SS/EMBC			
		Classification				
		HGM Classification	Depressional DP 12W/			
		Wetland Data Sheet(s)	DP-12W			
		Upland Data Sheet(s)	DP-13U			
	W/ 1 1	Boundary Flag color	Orange			
Dominant	Wetland vegetation is dominated by a chardhack, oneseed hawthorn, soft rus					
Vegetation	species including Himalayan blackberry.					
Vegetation	and bird's foot trefoil.	, rambler 10se, buil thistie, re	ect canarygrass, tan rescue,			
	Hydric soil indicators A11 (Depleted Below Dark Surface) and F3 (Depleted Matrix) were					
Soils	observed.					
TT 1 1	Hydrology for Wetland D is provided b	y direct precipitation, a seaso	onally high water table, and			
Hydrology	surface runoff from adjacent wetlands.					
Rationale for	Wetland boundaries were determined by topographic drop and a transition to a hydrophytic					
Delineation	plant community.					
Rationale for	Wetland rating based on the current WSDOE wetland rating system for Western Washington					
Local Rating	(Hruby, 2014) per CMC 16.53.020.B.					
	Wetland Function					
	Wetland D has moderate potential to					
	persistent, ungrazed vegetation of more than 50 percent of the areas, and seasonal ponding in					
	greater than half the unit. However, the land use in the area immediately surrounding the					
Water Quality	wetland does not generate pollutants and stormwater discharge, limiting potential for water					
		quality improvement. The value of any water quality improvement functions within the				
	wetland is increased as the wetland is located in a sub-basin with 303(d) listed waters and an area identified as important for maintain water quality. This wetland scores 7 out of 9 points					
	for water quality functions.					
	This wetland has some potential to red	luce flooding and erosion di	ie to the lack of an outlet			
	and moderate storage potential during wet periods. The small size of the wetland relative to					
TT 1 1 1	the size of the watershed results in lower hydrologic benefit to the surrounding area. The					
Hydrologic	immediate surrounding area generates excessive runoff, stormwater discharge, and intensive					
human land uses. The hydrologic functions provided onsite are valuable to society						
	wetland scores 6 out of 9 points for hydrologic function					
	Wildlife habitat functions provided by the					
	and bird forage and cover. Wetland D co					
Habitat	two hydroperiods, moderate interspersion					
	The surrounding landscape has a low					
	wetland and other potential habitat due					
	intensity land uses. Wetland D scores 6					
Buffer Condition	Wetland D buffer is in fair condition wi	_	iding Oregon ash, quaking			
	aspen (Populus tremuloides), and Himalaya	in biackberry.				

5.2 Offsite Stream Z

One stream (Offsite Stream Z) was identified offsite to the west of the subject property. Offsite Stream Z is identified by the DNR water typing map as a Type F (fish habitat) stream. The WDFW SalmonScape inventory does not identify any potential salmonid presence within Offsite Stream Z. SVC was unable to access the offsite stream; however high-resolution LiDAR imagery, topographic maps, and aerial imagery suggest that Offsite Stream Z may be a tributary to Lacamas Creek. Based on the WDFW SalmonScape Inventory and DNR water typing map, Offsite Stream Z is a Type F stream that lacks documented or potential salmonid presence. As such, Offsite Stream Z is classified as a Type F stream (without anadromous salmonids).

5.3 Non-Regulated Farm Pond

An excavated farm pond was identified on the south-central portion of the subject property during the site investigations. The farm pond was located in the middle of an actively grazed cattle pasture and utilized by livestock. The farm pond exhibited sharp edges typical of artificially excavated features rather than natural wetland conditions. The farm pond is slightly elevated relative to the surrounding land suggesting the banks are occasionally built up and reinforced. Topography in this area of the site slopes downgradient from east to west. An elevated dirt road/trail bisects the property in a north south direction and acts as an impoundment of overland storm flows, creating surface water in the farm pond during the rainy season. Therefore, the farm pond was determined to be an artificially and intentionally created feature for use by cattle based on land use, the presence of a road, and geomorphic positioning. Per CMC 16.53.010.C.2.b, wetlands created from nonwetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, stormwater facilities, farm ponds, and landscape amenities, shall be exempt from wetland regulations. As such, the farm pond is likely considered a non-regulated feature by the City of Camas.

Chapter 6. Regulatory Considerations

The site investigations in December of 2020 and April of 2021 identified and delineated four wetlands (Wetlands A - D) on the subject property and one stream (Offsite Stream Z) offsite to the west of the subject property. No other wetlands, streams, or other fish and wildlife habitat conservation areas were identified within 300 feet of the subject property during the site investigations.

6.1 Local Critical Areas Buffer Requirements

CMC 16.53.020.B describes wetland categorizations with reference to the Washington State Wetlands Rating System for Western Washington-Revised – Washington State Department of Ecology Publication No. 04-06-029, published August 2014 (Hruby, 2014). Category IV wetlands are typically more disturbed, smaller, and/or more isolated in the landscape than Category I, II, or III wetlands. Category IV wetlands provide low levels of functions and score less than 16 out of 27 points on the Revised Washington State Wetland Rating System for Western Washington (Hruby, 2014). Category III wetlands have generally been disturbed in some ways and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands. Category III provide moderate levels of functions and score between 16 to 19 points on the Revised Washington State Wetland Rating System for Western Washington (Hruby, 2014).

Wetland A is classified as Category III wetland with 4 total habitat points, and subject to a standard 80-foot buffer based on proposed high intensity land use per CMC 16.53.040 Table-3. Wetland B is classified as a Category III wetland with 5 total habitat points and subject to a standard 120-foot buffer based on the proposed high intensity land use. Wetland C is classified as a Category IV wetland and is likely exempt from buffer regulations per CMC 16.53.010.C.2.a. Wetland D is classified as a Category III wetland with 6 total habitat points and subject to a standard 135-foot buffer.

Offsite Stream Z is likely a Type F stream with no known salmonid presence in accordance with Washington Department of Fish and Wildlife (WDFW) SalmonScape data and subject to a standard 75-foot buffer per CMC 16.61.040.D. The stream buffer is not anticipated to project onto the subject property.

6.2 State and Federal Considerations

In a December 2, 2008 memorandum from the Environmental Protection Agency (EPA) and USACE, joint guidance is provided that describes waters that are to be regulated under section 404 of the CWA (USACE, 2008). This memorandum was amended on February 2, 2012 where the EPA and USACE issued a final guidance letter on waters protected by the CWA.

The 2012 guidance describes the following waters where jurisdiction would be asserted: 1) traditional navigable waters, 2) interstate waters, 3) wetlands adjacent to traditional navigable waters, 4) non-navigable tributaries of traditional navigable waters that are relatively permanent meaning they contain water at least seasonally (e.g. typically three months and does not include ephemeral waters), and 5) wetlands that directly abut permanent waters. The regulated waters are those associated with naturally occurring waters and water courses and not artificial waters (i.e. stormwater pond outfalls).

The 2012 memorandum further goes on to describe waters where jurisdiction would likely require further analysis: 1) Tributaries to traditional navigable waters or interstate waters, 2) Wetlands adjacent to jurisdictional tributaries to traditional navigable waters or interstate waters, and 3) Waters that fall under the "other waters" category of the regulations.

In addition, the 2012 guidance identifies thirteen waters or areas where jurisdiction will not be asserted: 1) Wet areas that are not tributaries or open waters and do not meet the agencies regulatory definition of "wetlands", 2) Waters excluded from coverage under the CWA by existing regulations, 3) Waters that lack a "significant nexus: where one is required for a water to be jurisdictional, 4) Artificially irrigated areas that would revert to upland if the irrigation ceased, 5) Artificial lakes or ponds created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing, 6) Artificial reflecting pools or swimming pools excavated in uplands, 7) Small ornamental waters created by excavating and/or diking dry land to retain water for primarily aesthetic reasons, and puddles, 8) Water-filled depressions created incidental to construction activity, 9) Groundwater, including groundwater drained through subsurface drainage systems, 10) Erosional features (gullies and rills), 11) Non-wetland swales, 12) Ditches that are excavated wholly in uplands, drain only uplands or non-jurisdictional waters, and have no more than ephemeral flow, and 13) Ditches that do not contribute flow, either directly or through other waterbodies, to a traditional navigable water, interstate water, or territorial sea.

As a tributary to a traditionally navigable water, Offsite Stream Z Creek is likely regulated by USACE as WOTUS. Wetlands A and B likely contribute surface waters to Offsite Stream Z and are likely regulated as an adjacent wetlands. Wetlands C and D are likely non-jurisdictional waters as they do not have surface water connections to Offsite Stream Z, they do not contain direct surface water connection to any traditional navigable water or a tributary to a traditional navigable water, and are also not considered "adjacent" wetlands. However, the project will assume jurisdiction of Wetland D to expedite the review process.

Future industrial development is anticipated to require complete fill of Wetland C. Once an approved jurisdictional determination is obtained from the USACE confirming the non-jurisdictional status of the identified wetland, an Administrative Order will be sought from WSDOE for the required wetland fill.

All identified wetlands (Wetlands A-D) and stream (Offsite Stream Z) are likely to be regulated as waters of the state by WSDOE under RCW 90.48.

Chapter 7. Closure

The findings and conclusions documented in this report have been prepared for specific application to this project. They have been developed in a manner consistent with that level of care and skill normally exercised by members of the environmental science profession currently practicing under similar conditions in the area. Our work was also performed in accordance with the terms and conditions set forth in our proposal. The conclusions and recommendations presented in this report are professional opinions based on an interpretation of information currently available to us and are made within the operation scope, budget, and schedule of this project. No warranty, expressed or implied, is made. In addition, changes in government codes, regulations, or laws may occur. Due to such changes, our observations and conclusions applicable to this project may need to be revised wholly or in part.

All wetland boundaries delineated by SVC are based on conditions present at the time of the site inspection and considered preliminary until the flagged wetland boundaries are validated by the jurisdictional agencies. Validation of the wetland boundaries by the regulating agency provides a certification, usually written, that the wetland boundaries verified are the boundaries that will be regulated by the agencies until a specific date or until the regulations are modified. Only the regulating agencies can provide this certification.

As wetlands are dynamic communities affected by both natural and human activities, changes in wetland and waterbody boundaries may be expected; therefore, wetland delineations cannot remain valid for an indefinite period of time. Local agencies typically recognize the validity of wetland delineations for a period of five years after completion of a wetland delineation report. Development activities on a site five years after the completion of this wetland delineation report may require revision of the wetland delineation. In addition, changes in government codes, regulations, or laws may occur. Due to such changes, our observations and conclusions applicable to this site may need to be revised wholly or in part.

Chapter 8. References

- Brinson, M. M. 1993. A hydrogeomorphic classification for wetlands, Technical Report WRP-DE-4. U.S. Army Engineer Waterways Experiment Station. Vicksburg, Mississippi.
- Camas Municipal Code (CMC). 2021. *Title 16 Environment Critical Areas*. https://library.municode.com/wa/camas/codes/code_of_ordinances?nodeId=TIT16EN_CRA R. Current through May 28, 2021.
- Cowardin, L.M. V. Carter, F. Golet, and E.T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States.* U.S. Fish and Wildlife Service. Washington D.C.
- Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual*. Technical Report Y-87-1, US Army Engineer Waterways Experiment Station, Vicksburg, Mississippi.
- Federal Geographic Data Committee. 2013. Classification of wetlands and deepwater habitats of the United States. FGDC-STD-004-2013. Second Edition. Wetlands Subcommittee, Federal Geographic Data Committee and U.S. Fish and Wildlife Service, Washington, DC.
- Hruby, T. 2014. Washington State Wetland Rating System for Western Washington Revised. Washington State Department of Ecology Publication #04-06-029.
- McGee, Dale A. 1972. Soil Survey of Clark County Area, Washington. Soil Conservation Service United States Department of Agriculture, Soil Conservation Service, in cooperation with the Washington Agricultural Experiment Station. Natural Resource Conservation Service.
- Munsell® Color, 2000. Munsell® Soil Color Charts. New Windsor, New York.
- Natural Resources Conservation Service (NRCS). 2001. *Hydric Soils List: Clark County Area, Washington*. U.S. Department of Agriculture. Washington D.C.
- NRCS. N.d. Soil Data Access Hydric Soils List (Soil Data Access Live). Website: https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcseprd1316620.html.
- NRCS. 2018. Field Indicators of Hydric Soils in the United States, Version 8.2. L.M. Vasilas, G.W. Hurt, and J.F. Berkowitz (eds.). USDA, NRCS, in cooperation with the National Technical Committee for Hydric Soils.
- U.S. Army Corps of Engineers (USACE). 2008. Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in Rapanos v. United States & Carabell v. United States. EPA/USACE. December 2, 2008.
- USACE and Environmental Protection Agency (EPA). 2012. Guidance on Identifying Waters Protected by the Clean Water Act. EPA/USACE. February 17, 2012.
- USACE. 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL

TR-10-3. Vicksburg, MS: U.S. Army Engineer Research and Development Center. Vicksburg, Mississippi.

USACE. 2018. National Wetland Plant List, version 3.4. http://wetland-plants.usace.army.mil/.

Appendix A — Methods and Tools

Table A1. Methods and tools used to prepare the report.

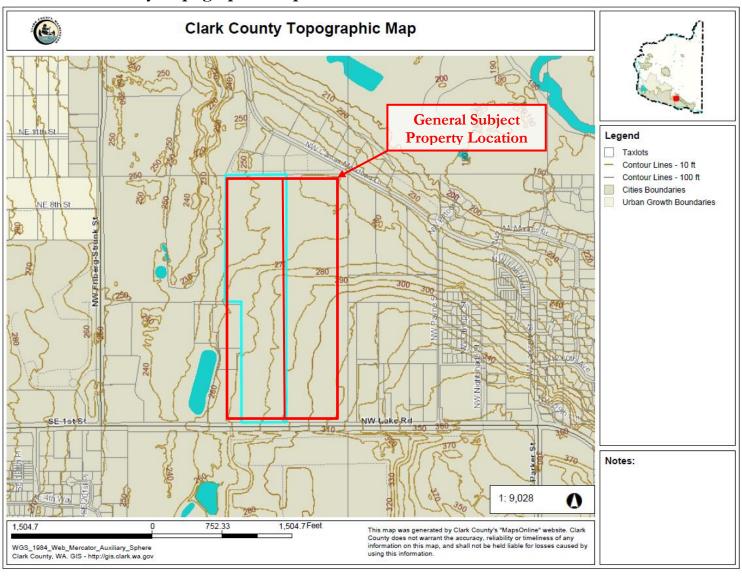
Parameter	Method or Tool	Website	Reference
Wetland Delineation	USACE 1987 Wetland Delineation Manual	http://el.erdc.usace.army.mi l/elpubs/pdf/wlman87.pdf	Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1, US Army Engineer Waterways Experiment Station, Vicksburg, Mississippi.
	Western Mountains, Valleys, and Coast Region Regional Supplement	http://www.usace.army.mil /Portals/2/docs/civilworks /regulatory/reg_supp/west _mt_finalsupp.pdf	U.S. Army Corps of Engineers. 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-10-3. Vicksburg, MS: U.S. Army Engineer Research and Development Center.
Wetland Classification	USFWS / Cowardin Classification System	http://www.fws.gov/wetlands/Documents/Classification-of-Wetlands-and-Deepwater-Habitats-of-the-United-States.pdf https://www.fgdc.gov/standards/projects/wetlands/nvcs-2013	Cowardin, L. M., V. Carter, F. C. Golet, E. T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. Government Printing Office, Washington, D.C. Federal Geographic Data Committee. 2013. Classification of Wetlands and Deepwater Habitats of the United States. FGDC-STD-004-2013. Second Edition. Wetlands Subcommittee, Federal Geographic Data Committee and U.S. Fish and Wildlife Service, Washington, DC.
	Hydrogeomorphic Classification (HGM) System	http://el.erdc.usace.army.mi l/wetlands/pdfs/wrpde4.pd f	Brinson, M. M. (1993). "A hydrogeomorphic classification for wetlands," Technical Report WRP-DE-4, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.
Wetland Rating	2014 Washington State Wetland Rating System	http://www.ecy.wa.gov/bib lio/0406025.html	Hruby, T . 2014. Washington State wetland rating system for western Washington –Revised. Publication # 04-06-025.
Wetland Indicator Status	2018 National Wetland Plant List	http://wetland- plants.usace.army.mil/	U.S. Army Corps of Engineers. 2018. National Wetland Plant List, version 3.4.
Plant Names	USDA Plant Database	http://plants.usda.gov/	Website.
Soils Data	NRCS Soil Survey	http://websoilsurvey.nrcs.u sda.gov/app/	Website GIS data based upon: McGee, Dale A. 1972. Soil Survey of Clark County Area, Washington. Soil Conservation Service United States Department of Agriculture, Soil Conservation Service, in cooperation with the Washington Agricultural Experiment Station. Natural Resource Conservation Service.
	Clark County Hydric Soils List	http://www.wa.nrcs.usda.g ov/technical/soils/hydric_li sts/hydsoil-wa-653.pdf	Natural Resources Conservation Service. 2001. Hydric Soils List: Clark County Area, Washington. U.S. Department of Agriculture. Washington D.C.

Parameter	Method or Tool	Website	Reference
Threatened and Endangered Species	Washington Natural Heritage Program	http://data- wadnr.opendata.arcgis.com/ datasets/wnhp-current- element-occurrences	Washington Natural Heritage Program (Data published 07/19/17). Endangered, threatened, and sensitive plants of Washington. Washington State Department of Natural Resources, Washington Natural Heritage Program, Olympia, WA
	Washington Priority Habitats and Species	http://wdfw.wa.gov/hab/p hspage.htm	Priority Habitats and Species (PHS) Program Map of priority habitats and species in project vicinity. Washington Department of Fish and Wildlife.
Species of Local Importance	WDFW GIS Data	http://wdfw.wa.gov/mappi ng/salmonscape/	Website
Report Preparation	Camas Municipal Code (CMC)	https://library.municode.co m/wa/camas/codes/code_ of_ordinances?nodeId=TTT 16EN_CRAR	CMC Title 16 – Environment – Critical Areas

Appendix B — Background Information

This appendix includes a Clark County Topographic map (B1); NRCS Soil Survey map (B2); USFWS NWI map (B3); WDFW PHS map (B4); Clark County Stream and Wetland Inventory map (B5); DNR Stream Typing map (B6); and WDFW SalmonScape map (B7).

Appendix B1. Clark County Topographic Map



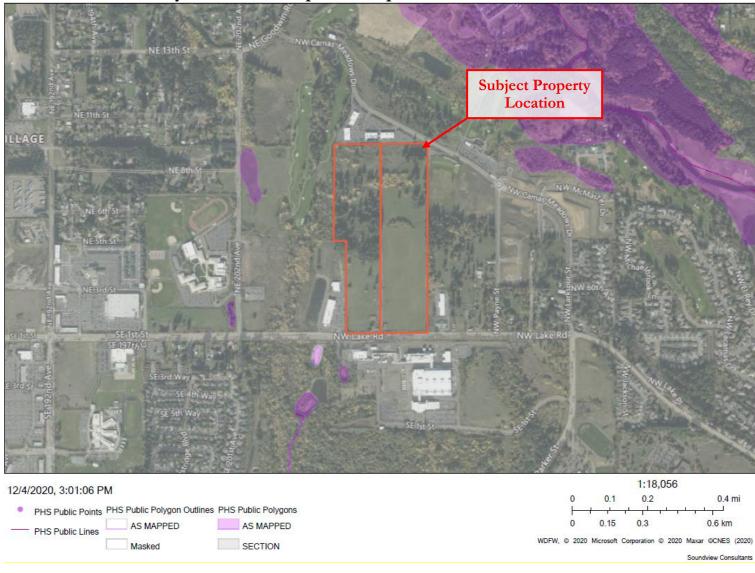
Appendix B2. NRCS Soil Survey Map



Appendix B3. USFWS National Wetland Inventory Map



Appendix B4. WDFW Priority Habitats and Species Map



PHS Species/Habitats Overview:

Occurence Name	Federal Status	State Status	Generalized Location
Freshwater Forested/Shrub Wetland	N/A	N/A	No
Caves Or Cave-rich Areas	N/A	N/A	Yes

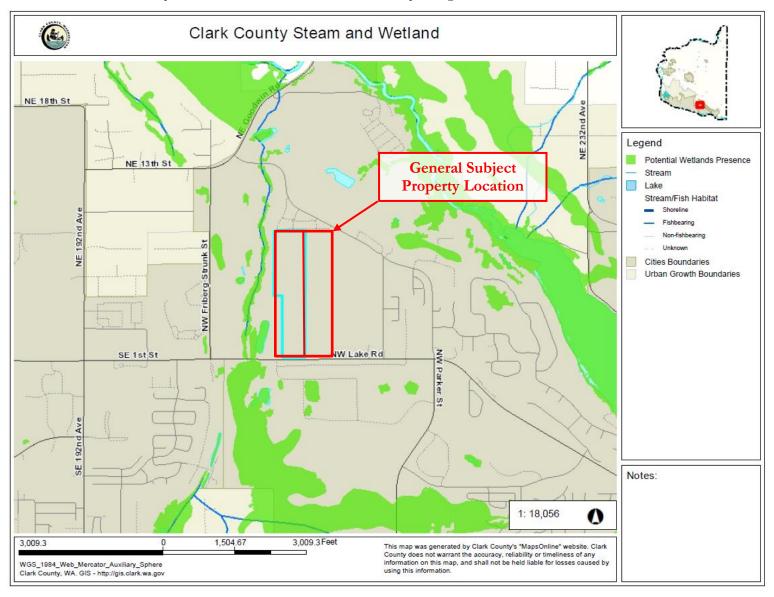
PHS Species/Habitats Details:

Freshwater Forested/Shrub Wetland			
Priority Area	Aquatic Habitat		
Site Name	N/A		
Accuracy	NA		
Notes	Wetland System: Freshwater Forested/Shrub Wetland - NWI Code: PFOA		
Source Dataset	NWIWetlands		
Source Name	Not Given		
Source Entity	US Fish and Wildlife Service		
Federal Status	N/A		
State Status	N/A		
PHS Listing Status	PHS Listed Occurrence		
Sensitive	N		
SGCN	N		
Display Resolution	AS MAPPED		
ManagementRecommendations	http://www.ecy.wa.gov/programs/sea/wetlands/bas/index.html		
Geometry Type	Polygons		

Caves Or Cave-rich Areas	
Notes	This polygon mask represents one or more records of the above species or habitat occurrence. Contact PHS Data Release (360-902-2543) for obtaining information about masked sensitive species and habitats.
Federal Status	N/A
State Status	N/A
PHS Listing Status	PHS Listed Occurrence
Sensitive	Υ
SGCN	N
Display Resolution	TOWNSHIP

DISCLAIMER. This report includes information that the Washington Department of Fish and Wildlife (WDFW) maintains in a central computer database. It is not an attempt to provide you with an official agency response as to the impacts of your project on fish and wildlife. This information only documents the location of fish and wildlife resources to the best of our knowledge. It is not a complete inventory and it is important to note that fish and wildlife resources may occur in areas not currently known to WDFW biologists, or in areas for which comprehensive surveys have not been conducted. Site specific surveys are frequently necessary to rule out the presence of priority resources. Locations of fish and wildlife resources are subject to variation caused by disturbance, changes in season and weather, and other factors. WDFW does not recommend using reports more than six months oid.

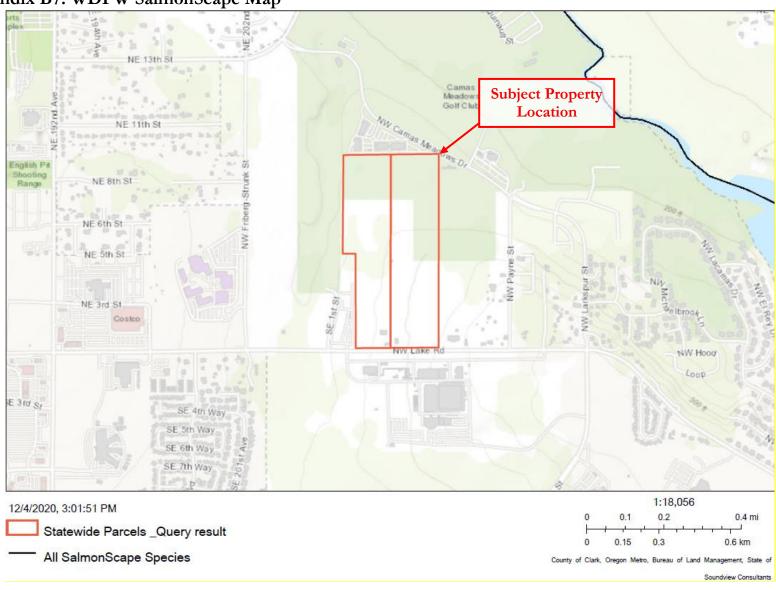
Appendix B5. Clark County Stream and Wetland Inventory Map



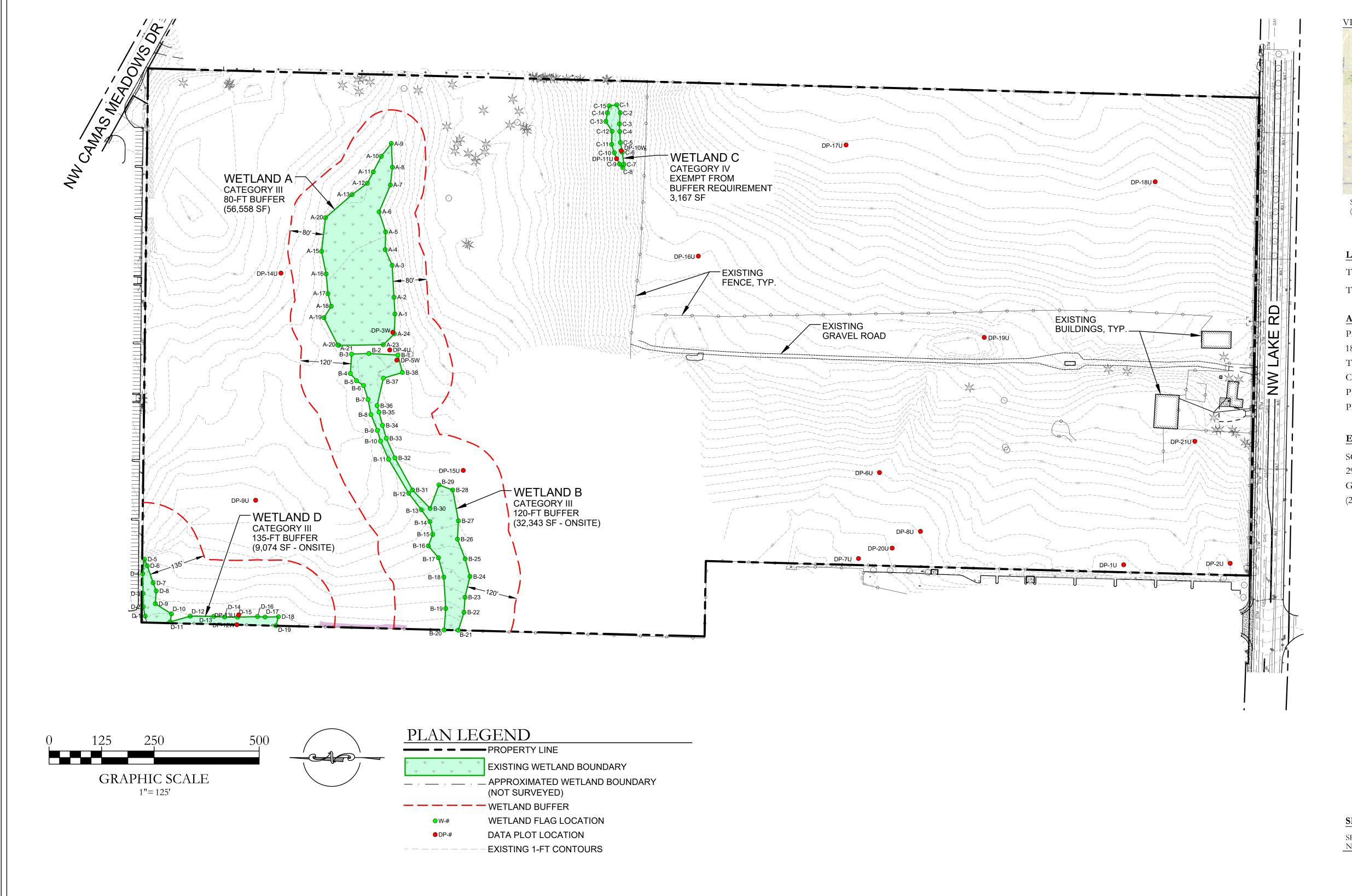
Appendix B6. DNR Stream Typing Map



Appendix B7. WDFW SalmonScape Map



Appendix C — Existing Conditions Map



VICINITY MAP



SOURCE: CLARK COUNTY GIS (ACCESSED 8/17/2021)

LOCATION

THE SE ¼ OF SECTION 29, TOWNSHIP 02N, RANGE 03E, WM

APPLICANT/OWNER

PANATTONI DEVELOPMENT COMPANY, INC 1821 DOCK STREET, SUITE 100 TACOMA, WASHINGTON 98402 CONTACT: BJORN BRYNESTAD, DEVELOPMENT MGR. PHONE: (206) 838-1730 PHONE: BJORN@PANATTONI.COM

ENVIRONMENTAL CONSULTANT

SOUNDVIEW CONSULTANTS LLC 2907 HARBORVIEW DRIVE, SUITE D GIG HARBOR, WA 98355 (253) 514-8952

Consultants Soundview

SHEET INDEX

SHEET NUMBER SHEET TITLE EXISTING CONDITIONS CAMAS BUSINESS CENTER 4707 & 4723 NW LAKE ROAD CAMAS, WASHINGTON 98607

DATE: 10/6/2021

JOB: 1144.0027

BY: MW

SCALE: AS SHOWN

SHEET: 1

2907 HARBORVIEW GIG HARBOR, WASF

Appendix D — Data Forms

Project/Site: 1144.0027 E Vancouver E-Commerc	e Center	City/County	_{/:} Camas	s, Clark	Sampling Date: 04/06/2021
Applicant/Owner: Panattoni Development Company	y, Inc.			State: WA	Sampling Point: DP-1u
Investigator(s): Rachael Hyland			Section, To	ownship, Range: 29, 02N	I, 03E, SE
Landform (hillslope, terrace, etc.): Top of Slope					
Subregion (LRR): A2	_ Lat: 45	.622295		Long: -122.4596864	0 Datum: WGS 84
Soil Map Unit Name: Hesson clay loam, 0 to 8 percentage					
Are climatic / hydrologic conditions on the site typical for this	s time of yea	ır? Yes 🗷	No ☐ (I	f no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology sign	nificantly dis	turbed?	Are "No	ormal Circumstances" pres	ent? Yes ☒ No ☐
Are Vegetation, Soil, or Hydrology natu	rally probler	natic?	(If need	ed, explain any answers in	Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing	samplin	g point l	ocations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes ☒ No ☐					
Hydric Soil Present? Yes ⊠ No □			e Sampled		_
Wetland Hydrology Present? Yes ☐ No ☒		with	in a Wetlar	nd? Yes ☐ No) X
Remarks:	- laveti a vya a a	tation and	herdala aail	a massamt. Data callacted	on the couthwrest some of the
Not all three wetland criteria met; only hydrog property near the property line, approximately			-	-	on the southwest corner of the
VEGETATION – Use scientific names of plan	ts.				
		Dominant		Dominance Test works	heet:
Tree Stratum (Plot size: 30 ft) 1	% Cover			Number of Dominant Sports That Are OBL, FACW, o	
2				Total Number of Domina	ınt
3				Species Across All Strata	a: <u>3</u> (B)
4	_	= Total C		Percent of Dominant Spe	
Sapling/Shrub Stratum (Plot size: 15 ft)		= Total C	ovei	That Are OBL, FACW, o	r FAC: 100% (A/B)
1. Rubus spectabilis	5	Yes	FAC	Prevalence Index work	sheet:
2					Multiply by:
3					x 1 =
4				•	x 2 =
5					x 3 =
Herb Stratum (Plot size: 5 ft)	<u> </u>	= Total C	over		x 4 = x 5 =
1. Schedonorus arundinaceus	50	Yes	FAC		
2. Poa pratensis	50	Yes	FAC	Column Totals.	(A) (D)
3				Prevalence Index	= B/A =
4				Hydrophytic Vegetation	n Indicators:
5				☐ Rapid Test for Hydro	· ·
6				Dominance Test is >	
7				➤ Prevalence Index is:	
8					ations ¹ (Provide supporting or on a separate sheet)
9				☐ Wetland Non-Vascul	•
10				☐ Problematic Hydroph	nytic Vegetation ¹ (Explain)
11	100				and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft)		= Total C	over	be present, unless distur	bed or problematic.
1				Hydrophytic	
2	0	= Total C	over	Vegetation Present? Yes	⊠ No □
% Bare Ground in Herb Stratum 0		= rotal C	OVEI	11030111: 165	. HV []
Remarks: Hydrophytic vegetation criteria met thro	ough dom	inance t	2 c t	•	
Tryanspriyate vegetation entena met univ	cagii aoii				
1					

Depth (inches)	Matrix Color (moist)	%		Red r (moist)	dox Featur	<u>res</u> Type¹_	_Loc ²	Textur	•	D.	emarks
(inches) 0-9	10YR 2/2	95		R 3/4	5	C Type	M	SiLo	<u>e</u>	Silt Loam	emarks
9-16	10 YR 4/3	83		YR 4/4	_ c	_ 		SiCIL		Silty Clay Lo	nam.
		_	7.5	11\ 4/4				-			
9-16	10YR 3/1	10		-				SiCIL	0	Silty Clay Lo	oam
							<u> </u>				
					<u> </u>						
					<u> </u>						
											
Type: C=C	oncentration, D=D	epletion,	RM=Red	uced Matrix, (CS=Cover	ed or Coa	ted Sand G	rains.	² Loc	ation: PL=Pore	e Lining, M=Matrix.
ydric Soil	Indicators: (Appl	icable to	all LRR	s, unless oth	nerwise no	oted.)		In	dicato	rs for Problem	atic Hydric Soils ³ :
Histosol	, ,			Sandy Redox						Muck (A10)	
	oipedon (A2)			Stripped Matri						Parent Material	, ,
Black Hi	. ,			oamy Mucky	,	,	ot MLRA 1)				Surface (TF12)
	en Sulfide (A4)	(0.4.4)		oamy Gleyed		·2)			Othe	r (Explain in Re	emarks)
•	d Below Dark Surfa	ice (A11)		Depleted Matr		2)		31.	adiaata	ea of budroobset	ia vagatation and
	ark Surface (A12) Nucky Mineral (S1)			Redox Dark S Depleted Dark	•	•		-11			ic vegetation and ust be present,
-	Gleyed Matrix (S4)			Redox Depres						s disturbed or p	' '
	Layer (if present)	:		todox Bopioc	0 1) 0110100	,			unioo	o diotarboa or p	nobiomatic.
Type: No											
	ches):							Hydri	- 0-11	Present? Ye	es⊠ No □
Dopui (iii											
Remarks:	criteria met thr	ough ir	dicator	F6.				Hyun	IC 5011	resent: re	
Remarks: lydric soil	criteria met thr		dicator	F6.				riyun	IC 5011	resent: re	
Remarks: ydric soil YDROLO Vetland Hy	criteria met thr	s:			noly)			riyun			
Remarks: lydric soil YDROLC Vetland Hy Primary Indi	criteria met thr OGY drology Indicator cators (minimum o	s:	uired; che	eck all that ap		oves (BQ) (ovent MIL		Secon	dary Indicators	(2 or more required)
Pemarks: ydric soil YDROLO Vetland Hy Primary Indi Surface	oGY drology Indicator cators (minimum o	s:	uired; che	eck all that ap ☐ Water-St	tained Lea	, , ,	except MLI		Secon	dary Indicators ater-Stained Le	
emarks: ydric soil /DROLO /etland Hy rimary Indi Surface High Wa	oriteria met thr OGY drology Indicator cators (minimum o Water (A1) ater Table (A2)	s:	uired; che	eck all that ap ☐ Water-St 1, 2,	tained Lea	, , ,	except MLI		Secon	dary Indicators ater-Stained Le 4A, and 4B)	(2 or more required) eaves (B9) (MLRA 1, 2,
YDROLO Vetland Hy rimary Indi Surface High Wa	oriteria met throogy drology Indicator cators (minimum o Water (A1) ater Table (A2) on (A3)	s:	uired; che	eck all that ap Water-St 1, 2,	tained Lea 4A, and 4 st (B11)	В)	except MLI		Secon W:	dary Indicators ater-Stained Le 4A, and 4B) ainage Pattern	(2 or more required) eaves (B9) (MLRA 1, 2
PROLO	criteria met thr GGY drology Indicator cators (minimum o Water (A1) ater Table (A2) on (A3) larks (B1)	s:	uired; che	eck all that ap Water-St 1, 2, Salt Crus Aquatic I	tained Lea 4A, and 4 st (B11) nvertebrat	B) tes (B13)	except MLI		Secon Wa	dary Indicators ater-Stained Le 4A, and 4B) ainage Patterna y-Season Wate	(2 or more required) eaves (B9) (MLRA 1, 2) s (B10) er Table (C2)
POROLO Vetland Hy Irimary Indi Surface High Wa Saturatia Water M Sedimer	oriteria met throogy Indicator cators (minimum o Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2)	s:	uired; che	eck all that ap Water-St 1, 2, Salt Crus Aquatic I Hydroger	tained Lea 4A, and 4 st (B11) nvertebrat n Sulfide (tes (B13) Odor (C1)	·	RA	Secon Wa Dr Dr	dary Indicators ater-Stained Le 4A, and 4B) ainage Pattern y-Season Wate turation Visible	eaves (B9) (MLRA 1, 2) s (B10) er Table (C2) e on Aerial Imagery (C9
YDROLO Yetland Hy Irimary Indi Surface High Water M Saturatia Water M Sedimer Drift Dep	oriteria met thronger of the cators (minimum	s:	uired; che	eck all that ap Water-St 1, 2, Salt Crus Aquatic I Hydroger	tained Lea 4A, and 4 st (B11) nvertebrate n Sulfide (Rhizosph	tes (B13) Odor (C1) eres along	g Living Roc	RA	Secon Was Dr Dr Sa Gee	dary Indicators ater-Stained Le 4A, and 4B) ainage Pattern y-Season Wate turation Visible comorphic Posi	s (2 or more required) eaves (B9) (MLRA 1, 2) s (B10) er Table (C2) e on Aerial Imagery (C9) tion (D2)
PROLO Petland Hy rimary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep	oriteria met throogy Indicator cators (minimum o Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) cosits (B3) at or Crust (B4)	s:	uired; che	eck all that ap Water-St 1, 2, Salt Crus Aquatic I Hydrogei Oxidized Presence	tained Lea 4A, and 4 st (B11) nvertebrat n Sulfide (Rhizosph e of Reduc	tes (B13) Odor (C1) teres along ced Iron (C	g Living Roc (4)	RA ots (C3)	Secon W: Dr Dr Sa Ge Sh	dary Indicators ater-Stained Le 4A, and 4B) ainage Patterne y-Season Wate turation Visible comorphic Posi allow Aquitard	s (B10) er Table (C2) e on Aerial Imagery (C9) tion (D2) (D3)
YDROLO Vetland Hy Inimary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma	oriteria met throogy Indicator Cators (minimum o Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5)	s:	uired; che	eck all that ap Water-St 1, 2, Salt Crus Aquatic I Hydrogel Oxidized Presence	tained Lea 4A, and 4 st (B11) nvertebrat n Sulfide (Rhizosph e of Reduction ron Reduction	tes (B13) Odor (C1) eres along ced Iron (C	g Living Roc (4) ed Soils (C6	RA ots (C3)	Secon Water Dr Dr Ge Sth	dary Indicators ater-Stained Le 4A, and 4B) ainage Pattern: y-Season Wate turation Visible comorphic Posi allow Aquitard C-Neutral Test	e (2 or more required) eaves (B9) (MLRA 1, 2, s (B10) er Table (C2) e on Aerial Imagery (C9 tion (D2) (D3) e (D5)
YDROLO Vetland Hy rimary Indi Surface High Wa Saturati Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	criteria met thronger cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6)	s: f one req	uired; che	eck all that ap Water-St 1, 2, Salt Crus Aquatic I Hydrogei Oxidized Presence Recent II	tained Lea 4A, and 4 st (B11) nvertebrat n Sulfide (Rhizosph e of Reduct ron Reduct or Stresse	tes (B13) Odor (C1) eres along ded Iron (C tion in Tille d Plants (I	g Living Roc (4)	RA ots (C3)	Secon Wai Dr Dr Sa Ge Sh FA	dary Indicators ater-Stained Le 4A, and 4B) ainage Pattern y-Season Wate turation Visible comorphic Posi allow Aquitard C-Neutral Test ised Ant Moun	e (2 or more required) eaves (B9) (MLRA 1, 2) es (B10) er Table (C2) e on Aerial Imagery (C9) tion (D2) (D3) e (D5) ds (D6) (LRR A)
YDROLO Vetland Hy rimary Indi Surface High Wa Saturati Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	criteria met throods a control of the control of th	s: f one requ	uired; che	eck all that ap Water-St 1, 2, Salt Crus Aquatic I Hydrogei Oxidized Presence Recent II	tained Lea 4A, and 4 st (B11) nvertebrat n Sulfide (Rhizosph e of Reduction ron Reduction	tes (B13) Odor (C1) eres along ded Iron (C tion in Tille d Plants (I	g Living Roc (4) ed Soils (C6	RA ots (C3)	Secon Wai Dr Dr Sa Ge Sh FA	dary Indicators ater-Stained Le 4A, and 4B) ainage Pattern: y-Season Wate turation Visible comorphic Posi allow Aquitard C-Neutral Test	e (2 or more required) eaves (B9) (MLRA 1, 2, s (B10) er Table (C2) e on Aerial Imagery (C9 tion (D2) (D3) e (D5) ds (D6) (LRR A)
YDROLO Yetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely	criteria met thronger of the content	s: f one requ	uired; che	eck all that ap Water-St 1, 2, Salt Crus Aquatic I Hydrogei Oxidized Presence Recent II	tained Lea 4A, and 4 st (B11) nvertebrat n Sulfide (Rhizosph e of Reduct ron Reduct or Stresse	tes (B13) Odor (C1) eres along ded Iron (C tion in Tille d Plants (I	g Living Roc (4) ed Soils (C6	RA ots (C3)	Secon Wai Dr Dr Sa Ge Sh FA	dary Indicators ater-Stained Le 4A, and 4B) ainage Pattern y-Season Wate turation Visible comorphic Posi allow Aquitard C-Neutral Test ised Ant Moun	e (2 or more required) eaves (B9) (MLRA 1, 2, s (B10) er Table (C2) e on Aerial Imagery (C9 tion (D2) (D3) e (D5) ds (D6) (LRR A)
YDROLO Vetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely	criteria met thronger cators (minimum of Water (A1) ater Table (A2) on (A3) aters (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria (Vegetated Concarvations:	s: f one requ I Imagery ve Surfac	uired; che	eck all that ap Water-St 1, 2, Salt Crus Aquatic I Hydroger Oxidized Presence Recent II Stunted o	tained Lea 4A, and 4 st (B11) nvertebrat n Sulfide (Rhizosph e of Reduct ron Reduct or Stresse xplain in R	tes (B13) Ddor (C1) Deres along Deed Iron (C Detion in Tille Deed Iron (Bernarks)	g Living Roc (4) ed Soils (C6	RA ots (C3)	Secon Wai Dr Dr Sa Ge Sh FA	dary Indicators ater-Stained Le 4A, and 4B) ainage Pattern y-Season Wate turation Visible comorphic Posi allow Aquitard C-Neutral Test ised Ant Moun	e (2 or more required) eaves (B9) (MLRA 1, 2, s (B10) er Table (C2) e on Aerial Imagery (C9 tion (D2) (D3) e (D5) ds (D6) (LRR A)
YDROLO Vetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely	criteria met thronger of the cators (minimum	s: f one required in the second in the secon	uired; che	eck all that ap Water-St 1, 2, Salt Crus Aquatic I Hydrogel Oxidized Presence Recent II Stunted o Other (E:	tained Lea 4A, and 4 st (B11) nvertebrat n Sulfide (Rhizosph e of Reduct ron Reduct or Stresse xplain in R es): Non	tes (B13) Odor (C1) Deres along Ced Iron (C) Ottion in Tille d Plants (I) Remarks)	g Living Roc (4) ed Soils (C6	RA ots (C3)	Secon Wai Dr Dr Sa Ge Sh FA	dary Indicators ater-Stained Le 4A, and 4B) ainage Pattern y-Season Wate turation Visible comorphic Posi allow Aquitard C-Neutral Test ised Ant Moun	e (2 or more required) eaves (B9) (MLRA 1, 2, s (B10) er Table (C2) e on Aerial Imagery (C9 tion (D2) (D3) e (D5) ds (D6) (LRR A)
YDROLO YDROLO Wetland Hy Primary Indi Surface High Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely Field Obser Water Table	criteria met thronger cators (minimum of Water (A1) ater Table (A2) on (A3) ater Table (B2) on (B3) at or Crust (B4) on Visible on Aeria (Vegetated Concarvations: ter Present?	s: f one required in the second in the seco	(B7) ce (B8) No 🔀	eck all that ap Water-St 1, 2, Salt Crus Aquatic I Hydrogei Oxidized Presence Recent II Stunted 0 Other (E:	tained Lea 4A, and 4 st (B11) nvertebrat n Sulfide (Rhizosph e of Reduct ron Reduct or Stresse xplain in R es): Non es): Non	tes (B13) Odor (C1) eres along ced Iron (C tition in Tille d Plants (I Remarks)	g Living Roc (4) ed Soils (C6 (1) (LRR A	RA ots (C3)	Secon War Dr Dr Sa Ge	dary Indicators ater-Stained Le 4A, and 4B) ainage Patterns y-Season Wate turation Visible comorphic Posi allow Aquitard C-Neutral Test ised Ant Moun ost-Heave Hum	e (2 or more required) eaves (B9) (MLRA 1, 2, s (B10) er Table (C2) e on Aerial Imagery (C9 tion (D2) (D3) e (D5) ds (D6) (LRR A) emocks (D7)
YDROLO Vetland Hy Primary Indi Surface High Wa Saturati Sedimer Drift Dep Algal Ma Iron Dep Inundati Sparsely Field Obset Surface War Vater Table	criteria met thronger cators (minimum of Water (A1) ater Table (A2) on (A3) ater Table (B2) oosits (B3) at or Crust (B4) oosits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concarvations: ter Present?	s: f one required in the second in the secon	uired; che	eck all that ap Water-St 1, 2, Salt Crus Aquatic I Hydrogel Oxidized Presence Recent II Stunted o Other (E:	tained Lea 4A, and 4 st (B11) nvertebrat n Sulfide (Rhizosph e of Reduct ron Reduct or Stresse xplain in R es): Non es): Non	tes (B13) Odor (C1) eres along ced Iron (C tition in Tille d Plants (I Remarks)	g Living Roc (4) ed Soils (C6 (1) (LRR A	RA ots (C3)	Secon War Dr Dr Sa Ge	dary Indicators ater-Stained Le 4A, and 4B) ainage Pattern y-Season Wate turation Visible comorphic Posi allow Aquitard C-Neutral Test ised Ant Moun	e (2 or more required) eaves (B9) (MLRA 1, 2, s (B10) er Table (C2) e on Aerial Imagery (C9 tion (D2) (D3) e (D5) ds (D6) (LRR A) emocks (D7)
YDROLO Vetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Iron Dep Iron Dep Iron Dep Surface Inundati Sparsely Field Obset Surface Water Table Saturation Fincludes ca	criteria met thronger cators (minimum of Water (A1) ater Table (A2) on (A3) ater Table (B2) on (B3) at or Crust (B4) on Visible on Aeria (Vegetated Concarvations: ter Present?	s: f one required in the second in the seco	uired; che (B7) ee (B8) No 🔀 No 🔀	eck all that ap Water-St 1, 2, Salt Crus Aquatic I Hydrogee Oxidized Presence Recent II Stunted o Other (E: Depth (inch	tained Lea 4A, and 4 st (B11) nvertebrat n Sulfide (Rhizosph e of Reduct ron Reduct or Stresse xplain in R es): Non es): Non es): Non	tes (B13) Odor (C1) eres along ced Iron (C tition in Tille d Plants (I Remarks)	g Living Roc (4) ed Soils (C6 (D1) (LRR A	RA ots (C3) s)	Secon Wi Dr Dr Sa Ge Sh FA	dary Indicators ater-Stained Le 4A, and 4B) ainage Patterns y-Season Wate turation Visible comorphic Posi allow Aquitard C-Neutral Test ised Ant Moun ost-Heave Hum	e (2 or more required) eaves (B9) (MLRA 1, 2 es (B10) er Table (C2) e on Aerial Imagery (C9 tion (D2) (D3) e (D5) ds (D6) (LRR A) emocks (D7)
YDROLO Vetland Hy Primary Indi Surface High Wa Saturatio Hoff Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Water Table Saturation Fincludes ca	criteria met thronger cators (minimum of Water (A1) ater Table (A2) on (A3) ater Table (B2) oosits (B3) at or Crust (B4) oosits (B5) Soil Cracks (B6) on Visible on Aeria (Vegetated Concarvations: ter Present? Present? Present? Present? Present? Present? Present?	s: f one required in the second in the seco	uired; che (B7) ee (B8) No 🔀 No 🔀	eck all that ap Water-St 1, 2, Salt Crus Aquatic I Hydrogee Oxidized Presence Recent II Stunted o Other (E: Depth (inch	tained Lea 4A, and 4 st (B11) nvertebrat n Sulfide (Rhizosph e of Reduct ron Reduct or Stresse xplain in R es): Non es): Non es): Non	tes (B13) Odor (C1) eres along ced Iron (C tition in Tille d Plants (I Remarks)	g Living Roc (4) ed Soils (C6 (D1) (LRR A	RA ots (C3) s)	Secon Wi Dr Dr Sa Ge Sh FA	dary Indicators ater-Stained Le 4A, and 4B) ainage Patterns y-Season Wate turation Visible comorphic Posi allow Aquitard C-Neutral Test ised Ant Moun ost-Heave Hum	e (2 or more required) eaves (B9) (MLRA 1, 2) es (B10) er Table (C2) e on Aerial Imagery (C9) tion (D2) (D3) e (D5) ds (D6) (LRR A) emocks (D7)
YDROLO Vetland Hy Primary Indi Surface High Wa Saturatia Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatia Sparsely Field Obser Surface Water Table Saturation Fincludes ca	criteria met thronger cators (minimum of Water (A1) ater Table (A2) on (A3) ater Table (B2) oosits (B3) at or Crust (B4) oosits (B5) Soil Cracks (B6) on Visible on Aeria (Vegetated Concarvations: ter Present? Present? Present? Present? Present? Present? Present?	s: f one required in the second secon	uired; che (B7) ce (B8) No 🗵 No 🗵 No 🗷	eck all that ap Water-St 1, 2, Salt Crus Aquatic I Hydrogei Oxidized Presence Recent II Stunted o Other (E: Depth (inch Depth (inch	tained Lea 4A, and 4 st (B11) nvertebrat n Sulfide (Rhizosph e of Reduct ron Reduct or Stresse xplain in R es): Non es): Non al photos,	tes (B13) Odor (C1) teres along ced Iron (C tition in Tille d Plants (I Remarks)	y Living Roc (4) ed Soils (C6 (D1) (LRR A	RA ots (C3) S) land Hyc	Secon W: Dr Dr Sa Ge Sh FA Free	dary Indicators ater-Stained Le 4A, and 4B) ainage Pattern y-Season Wate turation Visible comorphic Posi allow Aquitard C-Neutral Test ised Ant Moun ost-Heave Hum	e (2 or more required) eaves (B9) (MLRA 1, 2 es (B10) er Table (C2) e on Aerial Imagery (CS tion (D2) (D3) e (D5) ds (D6) (LRR A) emocks (D7) es □ No ☒

Project/Site: 1144.0027 E Vancouver E-Commerc	e Center	City/Co	_{unty:} Cama	ıs, Clark	Sampling Date: 04/06/2021
Applicant/Owner: Panattoni Development Compan			-		
				Township, Range: 29,	
Landform (hillslope, terrace, etc.): Terrace; swale					
Subregion (LRR): A2	_ Lat: 45	.62160	07	Long:122.4596	55103 Datum: WGS 84
Soil Map Unit Name: Hesson clay loam, 0 to 8 perce					
Are climatic / hydrologic conditions on the site typical for this					
Are Vegetation, Soil, or Hydrology sign	nificantly dis	turbed?	Are "I	Normal Circumstances"	present? Yes ☒ No ☐
Are Vegetation, Soil, or Hydrology natu				eded, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS – Attach site map			ling point	locations, transec	ets, important features, etc.
Hydrophytic Vegetation Present? Yes ☐ No 🗵					
Hydric Soil Present? Yes ☒ No ☐			s the Sample		
Wetland Hydrology Present? Yes ☐ No ☒		W	vithin a Wetla	and? Yes ∐	No 🗵
Remarks: Not all three wetland criteria met; only hydric		nt Dot	a sallastad a	m the courthweet moution	of the management makes the management
line, approximately 70 feet north of NW Lake	•	nt. Data	a conected of	n the southwest portion	of the property near the property
VEGETATION – Use scientific names of plan	ts.				
-	Absolute		ant Indicator	Dominance Test we	orksheet:
Tree Stratum (Plot size: 30 ft)			es? Status	Number of Dominan	
1				That Are OBL, FAC\	V, or FAC: <u>2</u> (A)
2				Total Number of Dor	
3				Species Across All S	Strata: <u>4</u> (B)
4	0	= Tota	al Cover	Percent of Dominant	t Species N, or FAC: <u>50%</u> (A/B)
Sapling/Shrub Stratum (Plot size: 15 ft)				That Ale Obc, FAO.	V, 01 FAC: <u>50 /0</u> (A/D)
1. Rubus spectabilis	20	Yes		Prevalence Index v	orksheet:
2. Symphoricarpos albus	5	Yes	FACU	·	f: Multiply by:
3					x 1 =
4		· ——			x 2 =
5	25	. ——			x 3 =
Herb Stratum (Plot size: 5 ft)	25	= Tota	al Cover		x 4 =
1. Poa pratensis	70	Yes	FAC		x 5 = (A)(B)
2. Dactylis glomerata	20	Yes	FACU	Column rotals.	(A) (B)
3. Schedonorus arundinaceus	5	No	FAC	Prevalence Inc	dex = B/A =
4. Jacobaea vulgaris	5	No	FACU	Hydrophytic Vegeta	ation Indicators:
5				☐ Rapid Test for H	ydrophytic Vegetation
6				☐ Dominance Test	
7				☐ Prevalence Inde	
8					daptations ¹ (Provide supporting arks or on a separate sheet)
9				☐ Wetland Non-Va	
10					rophytic Vegetation ¹ (Explain)
11	100				soil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft)	100	= Tota	al Cover	be present, unless d	isturbed or problematic.
1				Hydrophytic	
2				Vegetation	
% Bare Ground in Herb Stratum 0	0	= Tota	al Cover	Present?	Yes ☐ No ⊠
Remarks:					
No hydrophytic vegetation criteria met					
Prevalence Index not warranted due to	combine	d bacı	k of hydric	soils and wetland r	iyarology.

Depth	Matrix		eptii ne		ox Feature		or comm	ii uie abs	sence of indicators.)	
(inches)	Color (moist)	%		r (moist)	%	Type ¹	Loc ²	Texture		
0-12	10YR 2/2	95		/R 3/2	10	С	M	SiCILo		
0-12				YR 3/4	10	C	<u>M</u>	SiCILo		
12-16	10YR 3/1	60	7.	5 YR 3/4	10	<u>_C</u>	<u>M</u>	SiCILo	Mixed Matrix, Silty Clay Loan	<u>n</u>
12-16	10 YR 3/2	30		-					Mixed Matrix, Silty Clay Loan	<u>n</u>
			_							
		·								
¹Type: C=C	oncentration, D=D	epletion. R	- RM=Redu	uced Matrix. C	S=Covere	ed or Coa	ed Sand G	rains.	² Location: PL=Pore Lining, M=Matrix.	
	Indicators: (App								dicators for Problematic Hydric Soils ³ :	
☐ Histosol	(A1)			Sandy Redox (S5)				2 cm Muck (A10)	
☐ Histic Ep	pipedon (A2)			Stripped Matrix	(S6)				Red Parent Material (TF2)	
☐ Black His	, ,			oamy Mucky I			t MLRA 1)		,	
	n Sulfide (A4)			oamy Gleyed		2)			Other (Explain in Remarks)	
	d Below Dark Surfa	ace (A11)		Depleted Matrix	. ,			0.		
	ark Surface (A12)			Redox Dark Su				³In	dicators of hydrophytic vegetation and	
-	lucky Mineral (S1) Bleyed Matrix (S4)			Depleted Dark Redox Depress					wetland hydrology must be present, unless disturbed or problematic.	
	Layer (if present)	١-		Redux Depress	SIUIIS (FO)				unless disturbed of problematic.	
Type: No		,-								
• •	ches):							Hydri	c Soil Present? Yes ⊠ No □	
Remarks:								,		
	criteria met th	rough inc	dicator	E6						
l lydlic 30ii	Citteria met ui	rough inc	Jicatoi	10.						
HYDROLO										
•	drology Indicator		irad: aba	ook all that ann	ds (A				Secondary Indicators (2 or more required	1/
	cators (minimum c	one requ				(Da) (4 8 8 1 1		Secondary Indicators (2 or more required	
	Water (A1)			☐ Water-Sta			except MLI	KA	Water-Stained Leaves (B9) (MLRA 1	, 2,
_	iter Table (A2)				A, and 4E	3)			4A, and 4B)	
☐ Saturation	` '			☐ Salt Crust		(D40)			☐ Drainage Patterns (B10)	
	arks (B1)			☐ Aquatic In		. ,			Dry-Season Water Table (C2)	(CO)
	nt Deposits (B2)			☐ Hydrogen		, ,	Listan Dan		Saturation Visible on Aerial Imagery	(C9)
	oosits (B3) at or Crust (B4)			☐ Presence		_	Living Roo		☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3)	
_	osits (B5)					•	ed Soils (C6		_ ' ' '	
•	Soil Cracks (B6)						01) (LRR A	•	☐ FAC-Neutral Test (D5) ☐ Raised Ant Mounds (D6) (LRR A)	
	on Visible on Aeria	al Imagery I	(R7)	Other (Ex		•) (L IXIX A	•)	Frost-Heave Hummocks (D7)	
	Vegetated Conca				piaiii iii ik	omano)			1 Tost Fleave Huminocks (DT)	
Field Obser		ave Ganade	(50)							
Surface Wat		Yes 🗌	No 🔀	Depth (inche	s). None	Э				
Water Table		_	No 🗵	Depth (inche	,					
				Depth (inche			18/64	land Had	rology Procent? Voc 🗆 No 🖾	
	pillary fringe)		No 🗵						rology Present? Yes ☐ No 🗵	
Describe Re	corded Data (stream	am gauge,	monitori	ing well, aerial	photos, p	revious ir	spections),	, if availab	ole:	
Remarks:										
NI. 1	and a standard of	. 1		. 14			0			
No hydrolo	ogic indicators	observe	d. Soil	pit was exc	avated t	to a dep	th of 16 i	nches.		
No hydrolo	ogic indicators	observed	d. Soil	pit was exc	avated t	to a dep	th of 16 i	nches.		

Project/Site: 1144.0027 E Vancouver E-Commerce	e Center	City/Co	_{unty:} Camas	s, Clark	Sampling Date: 04/06/2021
Applicant/Owner: Panattoni Development Company			-		
Investigator(s): Jacob Layman			Section, To	ownship, Range: <u>29, 02</u>	N, 03E, SE
Landform (hillslope, terrace, etc.): Valley bottom on ter	race	Local	relief (concave,	, convex, none): Conca	slope (%): 2%
Subregion (LRR): A2	Lat: 45	.6271 <i>′</i>	18	Long: -122.457710	061 Datum: WGS 84
Soil Map Unit Name: Cove silty clay loam, thin solur					
Are climatic / hydrologic conditions on the site typical for this				f no, explain in Remarks.	
Are Vegetation, Soil, or Hydrology sign	-			ormal Circumstances" pre	
Are Vegetation, Soil, or Hydrology natu				ed, explain any answers i	
SUMMARY OF FINDINGS – Attach site map	snowing	Samp	iing point i	ocations, transects	, important leatures, etc.
Hydrophytic Vegetation Present? Yes ☒ No ☐		ls	s the Sampled	I Area	
Hydric Soil Present? Yes ☒ No ☐			vithin a Wetlar		No □
Wetland Hydrology Present? Yes ☒ No ☐					
Remarks: All three wetland criteria met. Data	collected	on th	ne north-cer	ntral portion of the	property in Wetland A.
	00110000	011 01		Portion of the	property in westure in
VEGETATION – Use scientific names of plant	ts.				
	Absolute	Domin	ant Indicator	Dominance Test work	sheet:
<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)			es? Status	Number of Dominant S	
1. Fraxinus latifolia	15	Yes		That Are OBL, FACW,	or FAC: <u>6</u> (A)
2				Total Number of Domir	_
3				Species Across All Stra	ata: <u>7</u> (B)
4	15			Percent of Dominant S	pecies
Sapling/Shrub Stratum (Plot size: 15 ft)	15	= Tota	al Cover	That Are OBL, FACW,	or FAC: <u>86%</u> (A/B)
1. Rubus spectabilis	10	Yes	FAC	Prevalence Index wor	rksheet:
2. Symphoricarpos albus	5	Yes	FACU	Total % Cover of:	Multiply by:
3. Fraxinus latifolia	5	Yes	FACW	OBL species	x 1 =
4				FACW species	x 2 =
5				FAC species	x 3 =
	20	= Tota	al Cover		x 4 =
Herb Stratum (Plot size: 5 ft) 1. Alopecurus aequalis	25	Yes	OBL		x 5 =
2. Schedonorus arundinaceus	25	Yes	FAC	Column Totals:	(A) (B)
3. Juncus effusus	25	Yes	FACW	Prevalence Index	c = B/A =
4. Poa pratensis	10	No	FAC	Hydrophytic Vegetation	
5. Ranunculus repens	5	No	FAC	Rapid Test for Hyd	
6. Geum macrophyllum	1	No	FAC	■ Dominance Test is	
7.			<u> </u>	☐ Prevalence Index is	s ≤3.0¹
8					ptations ¹ (Provide supporting
9.					s or on a separate sheet)
10				☐ Wetland Non-Vasc	
11.				-	phytic Vegetation¹ (Explain)
	91	= Tota	al Cover	'Indicators of hydric so be present, unless disti	il and wetland hydrology must urbed or problematic.
Woody Vine Stratum (Plot size: 30 ft)				, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,
1				Hydrophytic	
2	0		- Cover	Vegetation Present? Ye	es⊠ No⊡
% Bare Ground in Herb Stratum 9		= 108	ai Covei	riesent: 16	
Remarks: Hydrophytic vegetation criteria met thro	augh dam	ninana	o tost		
Trydrophytic vegetation chiena met tillt	Jagii aoii	mano	o 1031.		
1					!

Depth (inches)	Matrix Color (moist)	%	Colo	Rec or (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-6	7.5 YR 4/1	95		R 3/4	5	C Type	M, PL	SiCILo	Silt Clay Loam
6-16	10 YR 4/1	93		YR 4/6	7			SiCILo	Silty Clay Loam
	10 110 4/1			111 4/0	_			OIOILO	Sity Siay Esam
								_	
									
									
	oncentration, D=D						ted Sand G		ocation: PL=Pore Lining, M=Matrix.
-	Indicators: (App	licable to				oted.)			tors for Problematic Hydric Soils ³ :
Histosol	, ,			Sandy Redox					cm Muck (A10)
– –	oipedon (A2)			Stripped Matri: _oamy Mucky	, ,	E1) (ovcor	of MLDA 1\		ed Parent Material (TF2) ery Shallow Dark Surface (TF12)
	en Sulfide (A4)			_oamy Gleyed			JUNERA I)		her (Explain in Remarks)
	d Below Dark Surfa	ace (A11)		Depleted Matri		2)			ner (Explain in Nemarks)
	ark Surface (A12)	200 (7111)		Redox Dark S	, ,	3)		³ Indica	ators of hydrophytic vegetation and
_	lucky Mineral (S1)			Depleted Dark	•	•			tland hydrology must be present,
	Bleyed Matrix (S4)			Redox Depres					ess disturbed or problematic.
	Layer (if present)	:							
Type: No	one			-					
Depth (in	ches):							Hydric So	oil Present? Yes ⊠ No □
	criteria met th	rough in	ndicator	F3.					
ydric soil	GY		ndicator	F3.					
ydric soil YDROLO Vetland Hy	GY drology Indicator	rs:							
ydric soil YDROLO Vetland Hy	GY drology Indicator cators (minimum c	rs:		eck all that ap					condary Indicators (2 or more required)
YDROLO Vetland Hy rimary Indi Surface	OGY drology Indicator cators (minimum c Water (A1)	rs:		eck all that ap	ained Lea		except MLF		Water-Stained Leaves (B9) (MLRA 1, 2,
YDROLO Vetland Hy rimary Indi Surface High Wa	drology Indicator cators (minimum o Water (A1) ater Table (A2)	rs:		eck all that ap	ained Lea 4A, and 4		except MLF	RA 🗆	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
/DROLO /etland Hy rimary Indi Surface High Wa	drology Indicator cators (minimum o Water (A1) ater Table (A2) on (A3)	rs:		eck all that app Water-Sta 1, 2, 4	ained Lea 4A, and 4 t (B11)	В)	except MLF	RA 🗆	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
YDROLO Vetland Hy rimary Indi Surface High Wa Saturatio Water M	drology Indicator cators (minimum o Water (A1) ater Table (A2) on (A3) larks (B1)	rs:		eck all that app Water-Sta 1, 2, 4 Salt Crus Aquatic Ir	ained Lea 4A, and 4 t (B11) nvertebrat	tes (B13)	except MLF	RA -	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
/DROLO /etland Hy rimary Indi Surface High Wa Saturation Water M Sedimer	drology Indicator cators (minimum o Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2)	rs:		eck all that app Water-Sta 1, 2, 4 Salt Crus Aquatic In Hydroger	ained Lea 4A, and 4 t (B11) nvertebrat Sulfide (tes (B13) Odor (C1)		RA -	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
Vetland Hy rimary Indi Surface High Wa Saturatic Water M Sedimer Drift Dep	drology Indicator cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) posits (B3)	rs:		eck all that app Water-Str 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized	ained Lea 4A, and 4 t (B11) nvertebrat n Sulfide (Rhizosph	tes (B13) Odor (C1) heres along	g Living Roo	RA	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)
YDROLO Vetland Hy Trimary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep	drology Indicator cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) posits (B3) at or Crust (B4)	rs:		eck all that app Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence	ained Lea 4A, and 4 t (B11) nvertebrai n Sulfide (Rhizosph e of Reduc	tes (B13) Odor (C1) deres along ced Iron (C	g Living Roo C4)	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3)
YDROLO Vetland Hy Irimary Indi Surface High Wa Saturati Water M Sedimer Drift Dep Algal Ma	drology Indicator cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) posits (B3) at or Crust (B4)	rs:		eck all that ap Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir	ained Lea 4A, and 4 t (B11) nvertebrai n Sulfide (Rhizosph e of Reduction on Reduction	tes (B13) Odor (C1) heres along ced Iron (C	g Living Roo C4) ed Soils (C6	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
YDROLO Vetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	drology Indicator cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6)	's: If one requ	uired; che	eck all that app Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence	ained Lea 4A, and 4 t (B11) nvertebrat n Sulfide (Rhizosph e of Reduct on Reduct or Stresse	tes (B13) Odor (C1) heres along ced Iron (C ction in Tille d Plants (I	g Living Roo C4)	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
YDROLO Vetland Hy Irimary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	drology Indicator cators (minimum of Water (A1) ter Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria	rs: If one required the requirement of the require	uired; che	eck all that ap Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir	ained Lea 4A, and 4 t (B11) nvertebrat n Sulfide (Rhizosph e of Reduct on Reduct or Stresse	tes (B13) Odor (C1) heres along ced Iron (C ction in Tille d Plants (I	g Living Roo C4) ed Soils (C6	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
YDROLO Vetland Hy Primary Indi Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatic	drology Indicator cators (minimum of Water (A1) ater Table (A2) on (A3) arks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Conca	rs: If one required the requirement of the require	uired; che	eck all that app Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence	ained Lea 4A, and 4 t (B11) nvertebrat n Sulfide (Rhizosph e of Reduct on Reduct or Stresse	tes (B13) Odor (C1) heres along ced Iron (C ction in Tille d Plants (I	g Living Roo C4) ed Soils (C6	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
YDROLO Vetland Hy Primary Indi Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatic Sparsely	drology Indicator cators (minimum of Water (A1) ater Table (A2) on (A3) arks (B1) at Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Conca	rs: If one required the requirement of the require	uired; che	eck all that app Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted co	ained Lea 4A, and 4 t (B11) nvertebrai n Sulfide (Rhizosph e of Reduc on Reduc or Stresse kplain in R	tes (B13) Odor (C1) eres along ced Iron (C tion in Tille d Plants (I Remarks)	g Living Roo C4) ed Soils (C6	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
YDROLO Vetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser	drology Indicator cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Conca	rs: If one required in the second in the se	uired; che	eck all that app Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted of Other (Ex	ained Lea 4A, and 4 t (B11) nvertebrat n Sulfide (Rhizosph e of Reduc on Reduc or Stresse xplain in R es): Non	tes (B13) Odor (C1) eres along ced Iron (C tion in Tille d Plants (I Remarks)	g Living Roo C4) ed Soils (C6	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
YDROLO Vetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Gurface Water Table	drology Indicator cators (minimum of Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (B2) Inter Tab	rs: If one required in the second in the s	uired; che r (B7) ce (B8) No ⊠ No □	eck all that app Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted of Other (Ex	ained Lea 4A, and 4 t (B11) nvertebrat n Sulfide (Rhizosph e of Reduct on Reduct or Stresse xplain in R es): Non 10"	tes (B13) Odor (C1) eres along ced Iron (C tion in Tille d Plants (I Remarks)	g Living Roo C4) ed Soils (C6 D1) (LRR A)	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
YDROLO Vetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Water Table Saturation P	drology Indicator cators (minimum of Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (B2) Inter Tab	rs: If one required in the second in the se	uired; che (B7) ce (B8)	eck all that app Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted of Other (Ex	ained Lea 4A, and 4 t (B11) nvertebrat n Sulfide (Rhizosph e of Reduct on Reduct or Stresse xplain in R es): Non 10"	tes (B13) Odor (C1) eres along ced Iron (C tion in Tille d Plants (I Remarks)	g Living Roo C4) ed Soils (C6 D1) (LRR A)	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
YDROLO Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely Field Obser Surface Water Table Saturation Princludes ca	drology Indicator cators (minimum of Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (A2) Inter Table (B1) Int Deposits (B2) Inter Table (B2) Inter Ta	rs: If one required in the second s	uired; che (B7) ce (B8) No 🖾 No 🗆	eck all that app Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted or Other (Ex	ained Lea 4A, and 4 t (B11) nvertebrat a Sulfide (Rhizosph e of Reduct on Reduct or Stresse xplain in R es): Non = 10" es): 7"	tes (B13) Odor (C1) heres along ced Iron (C tition in Tille d Plants (I Remarks)	g Living Roo C4) ed Soils (C6 D1) (LRR A)	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
YDROLO Vetland Hy Primary Indi Surface High Wa Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatic Sparsely Field Obser Surface Wat Vater Table Saturation P includes ca Describe Re	drology Indicator cators (minimum of water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concar controls are Present? Present? Present?	rs: If one required in the second s	uired; che (B7) ce (B8) No 🖾 No 🗆	eck all that app Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted or Other (Ex	ained Lea 4A, and 4 t (B11) nvertebrat a Sulfide (Rhizosph e of Reduct on Reduct or Stresse xplain in R es): Non = 10" es): 7"	tes (B13) Odor (C1) heres along ced Iron (C tition in Tille d Plants (I Remarks)	g Living Roo C4) ed Soils (C6 D1) (LRR A)	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
YDROLO Vetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Inon Dep Inon Dep Inon Dep Surface Inundatio Sparsely Field Obser Surface Water Table Saturation Princludes ca Describe Re	drology Indicator cators (minimum of water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concator vations: are Present? Present? pillary fringe) corded Data (streat	rs: If one required the second of the seco	uired; che (B7) ce (B8) No 🖾 No 🗆 , monitor	eck all that app Water-Sta 1, 2, 4 Salt Crus Aquatic In Hydroger Oxidized Presence Recent In Stunted of Other (Ex	ained Lea 4A, and 4 t (B11) nvertebrat a Sulfide (Rhizosph e of Reduct on Reduct or Stresse xplain in R es): Non es): 10" es): 7"	tes (B13) Odor (C1) heres along ced Iron (C etion in Tille d Plants (I Remarks) he	g Living Roo C4) ed Soils (C6 D1) (LRR A)	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
YDROLO Vetland Hy Irimary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely ield Obser surface Water Table staturation P includes ca Describe Re	drology Indicator cators (minimum of water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concar controls are Present? Present? Present?	rs: If one required the second of the seco	uired; che (B7) ce (B8) No 🖾 No 🗆 , monitor	eck all that app Water-Sta 1, 2, 4 Salt Crus Aquatic In Hydroger Oxidized Presence Recent In Stunted of Other (Ex	ained Lea 4A, and 4 t (B11) nvertebrat a Sulfide (Rhizosph e of Reduct on Reduct or Stresse xplain in R es): Non es): 10" es): 7"	tes (B13) Odor (C1) heres along ced Iron (C etion in Tille d Plants (I Remarks) he	g Living Roo C4) ed Soils (C6 D1) (LRR A)	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

Project/Site: 1144.0027 E Vancouver E-Commerc	e Center	City/Co	ounty	: Camas	s, Clark	Samplir	ng Date: 04/0	06/2021
Applicant/Owner: Panattoni Development Company			-				-	
Investigator(s): Rachael Hyland, Jacob Layman			;	Section, To	ownship, Range: 29,02	N,03E,S	Ē	
Landform (hillslope, terrace, etc.): Berm		Local	relie	f (concave,	, convex, none): none		Slope (%	_{6):} 0
Subregion (LRR): A2								
Soil Map Unit Name: Cove silty clay loam, thin solur								
Are climatic / hydrologic conditions on the site typical for this	s time of yea	ır? Ye	s 🔀	No □ (I	If no, explain in Remarks)		
Are Vegetation, Soil, or Hydrology sign	nificantly dis	turbed'	?	Are "No	ormal Circumstances" pr	esent? Ye	es 🗵 No 🗆	
Are Vegetation, Soil, or Hydrology natu				(If need	ed, explain any answers	in Remark	(s.)	
SUMMARY OF FINDINGS – Attach site map			oling	,	•		•	es, etc.
Hydrophytic Vegetation Present? Yes ☐ No 🗵								
Hydric Soil Present? Yes ☐ No 🗵				e Sampled		N. Ed		
Wetland Hydrology Present? Yes ☐ No 🗵		'	withi	n a Wetlar	nd? Yes 🗌	No 🔀		
Remarks:		tual ma		- of the ma	amouter in an unland and	- h otreson	Watlanda A	and D
No wetland criteria met. Data collected on th	ie nortn-cer	itrai po	ortioi	1 of the pro	operty in an upland are:	a between	Wettands A	ana B.
VEGETATION – Use scientific names of plan	ts.							
- O	Absolute			Indicator	Dominance Test wor	ksheet:		
Tree Stratum (Plot size: 30 ft)	% Cover				Number of Dominant S		2	(4)
1					That Are OBL, FACW,	or FAC:	2	_ (A)
2 3					Total Number of Domi		4	(D)
4			_		Species Across All Str	ala.	4	_ (B)
	0	= Tot	al Co	over	Percent of Dominant S That Are OBL, FACW,	Species , or FAC:	50%	_ (A/B)
Sapling/Shrub Stratum (Plot size: 15 ft) 1. Rubus aremniacus	60	Yas	:	FAC	Prevalence Index wo	rkohooti		
					Total % Cover of:		Multiply by:	
2					OBL species			
4					FACW species			
5					FAC species			
	60	= Tot	al Co	over	FACU species			
Herb Stratum (Plot size: 5 ft)					UPL species	x	5 =	
1. Poa pratensis	30				Column Totals:			(B)
2. Foeniculum vulgare	30	Yes		UPL	Duning law and law day	D/A		
3. Carex hoodii	20	Yes No	<u> </u>	FACU FACU	Prevalence Inde			
4. Leucanthemum vulgare				FACU	Hydrophytic Vegetat Rapid Test for Hyd			
5					Dominance Test is	' '	egetation	
6					☐ Prevalence Index			
7					☐ Morphological Ada		Provide supp	orting
8 9					data in Remark			
10					☐ Wetland Non-Vaso	cular Plants	s ¹	
11					☐ Problematic Hydro	phytic Veg	getation ¹ (Exp	lain)
Woody Vine Stratum (Plot size: 30 ft)	82	= Tot	al Co	over	¹ Indicators of hydric so be present, unless dis			y must
1								
2					Hydrophytic			
	^	= Tot	al Co	over	Vegetation Present? Yes	es ⊟ No	×	
% Bare Ground in Herb Stratum 18								
Remarks: No hydrophytic vegetation criteria met.							<u> </u>	
, y z zp., y z z z z z z z z z z z z z z z z z z								

Depth	cription: (Describ Matrix			Redo	ox Featur		or commi	ii tile ab	361166	of mulcators.
(inches)	Color (moist)	%	Colo	or (moist)	%	Type ¹	Loc ²	Textu	<u>e</u>	Remarks
0-12	7.5YR 2.5/2	100	-			-		SiLo		Silty Loam
12-16	7.5YR 2.5/2	98	7.5	YR 3/3	2	С	M	SiCIL	0	Silty Clay Loam
	•				-					-
										
1 0 0									21	
	Concentration, D=D Indicators: (App						ed Sand G			cation: PL=Pore Lining, M=Matrix. prs for Problematic Hydric Soils ³ :
_		ilcable to a				iteu.)				•
☐ Histosol	oipedon (A2)			Sandy Redox (Stripped Matrix						n Muck (A10) Parent Material (TF2)
	istic (A3)			Loamy Mucky N	. ,	1) (excen	t MI RA 1)			Shallow Dark Surface (TF12)
_	en Sulfide (A4)			Loamy Gleyed			·,			er (Explain in Remarks)
	d Below Dark Surfa	ace (A11)		Depleted Matrix		,				,
	ark Surface (A12)	, ,		Redox Dark Su)		³ 1	ndicato	ors of hydrophytic vegetation and
☐ Sandy N	Mucky Mineral (S1)			Depleted Dark	Surface (F7)			wetla	and hydrology must be present,
_	Bleyed Matrix (S4)			Redox Depress	ions (F8)				unles	ss disturbed or problematic.
	Layer (if present)	:								
Type: No				-						
Depth (ir	iches):							Hydr	ic Soil	Present? Yes ☐ No ☒
Remarks:								L		
HYDROLO	nev									
_	drology Indicator								_	
	cators (minimum o	f one requi	red; che							ndary Indicators (2 or more required)
Surface	, ,			☐ Water-Sta		, , ,	except MLI	RA	⊔ w	/ater-Stained Leaves (B9) (MLRA 1, 2,
_	ater Table (A2)				A, and 4I	3)				4A, and 4B)
☐ Saturati	` ,			☐ Salt Crust	` '	(5.40)				rainage Patterns (B10)
	larks (B1)			☐ Aquatic In		, ,				ry-Season Water Table (C2)
	nt Deposits (B2)			Hydrogen		, ,		. (00)		aturation Visible on Aerial Imagery (C9)
	posits (B3)			Oxidized F		-	•	ots (C3)		eomorphic Position (D2)
_	at or Crust (B4)			☐ Presence		•	•	• •		hallow Aquitard (D3)
· ·	oosits (B5)			☐ Recent Iro			•	,		AC-Neutral Test (D5)
	Soil Cracks (B6)	l Imagas /	D7\	☐ Stunted or		•	(LKK A)		aised Ant Mounds (D6) (LRR A)
	on Visible on Aeria y Vegetated Conca			☐ Other (Exp	Jani In K	emarks)			⊔ FI	rost-Heave Hummocks (D7)
		ive Surface	(D0)							
Field Obse		V00 □	No 🖂	Depth (inche	o). None	Э				
Surface Wa			No 🗵							
Water Table			No 🗵	Depth (inche						
Saturation F	Present? pillary fringe)	Yes 🗌	No 🗵	Depth (inche	s): <u>INOI1</u>		Wetl	and Hyd	drolog	y Present? Yes ☐ No ⊠
	ecorded Data (streate	am gauge,	monitor	ing well, aerial	photos, p	revious in	spections),	if availa	ble:	
		- '			·					
Remarks:										
	ogic indicators	observed	l. Soil	pit was exca	avated	to a den	th of 16 i	nches		
,	J :			,			J			

Landform (hillslope, terrace, etc.): Terrace; swale Local relief (concave, convex, none): Concave Slope (%): 0%	Project/Site: 1144.0027 E Vancouver E-Commerc	e Center	City/Co	ounty	. Camas	, Clark	Samp	ling Date: 0	4/06/2	:021
Local rolled (concave, convex, conve								-		
Local rolled (concave, convex, conve	Investigator(s): Jacob Layman				Section, To	ownship, Range: 29, 0)2N, 03E	E, SE		
Note Covered to Note N									e (%): <u>C</u>)%
Note Covered to Note N	Subregion (LRR): A2	_ Lat: 45	.6270	880		Long: -122.4579	7095	Datum:	WGS	3 84
Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No Wes No W										
Are Vegetation	Are climatic / hydrologic conditions on the site typical for this	s time of yea	ar? Ye	s 🗷	No □ (I	f no, explain in Remark	s.)			
Are Vegetation		-				ormal Circumstances" p	resent? `	Yes ⊠ No	\Box	
SumMary OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.		-				·				
									tures,	etc.
	Hydrophytic Vogetation Procent?									
Wetland Hydrology Present? Yes No					-		_			
All three wetland criteria met. Data collected on the north-central portion of the property, inside Wetland B. VEGETATION - Use scientific names of plants.	· ·			with	in a Wetlar	nd? Yes ☒	No 🗌			
Absolute					_					
Absolute	All three wetland criteria met. Data co	ollected o	n the	nor	th-centra	al portion of the pro	operty, i	nside We	tland I	В.
Absolute Species Status	VEGETATION – Use scientific names of plan	ts.								
1.		Absolute				Dominance Test wo	rksheet:			
2								3	(/	A)
3.								-		-7
Sapling/Shrub Stratum (Plot size: 15 ft)								3	(B	3)
Sapling/Shrub Stratum (Plot size: 15 ft) 1. Rubus spectabilis 30						Porcent of Dominant	Species			
Rubus spectabilis 30 Yes FAC	0 1 (0) 1 0 (0) (0)	0	= To	tal C	over			100%	(A	√B)
2	Dubus epoctabilis	30	Yes	3	FAC	Prevalence Index w	orkshoot:			
3									bv:	
4									-	
Section Stratum Plot size: 30 Strat										
Herb Stratum (Plot size: 5 ft) 1. Poa pratensis 50						FAC species	:	x 3 =		
1. Poa pratensis 50 Yes FAC Column Totals: (A) (B) 2. Alopecurus pratensis 35 Yes FAC Column Totals: (A) (B) 3. Holcus lanatus 10 No FAC Prevalence Index = B/A =			= To	tal C	over	FACU species	:	x 4 =		
2. Alopecurus pratensis 3. Holcus lanatus 10 No FAC 4. Taraxacum officinale 2 No FACU 4. Taraxacum officinale 5.		50	Vos		FΔC					
3. Holcus lanatus 4. Taraxacum officinale 2. No FACU Hydrophytic Vegetation Indicators: □ Rapid Test for Hydrophytic Vegetation □ Dominance Test is >50% □ Prevalence Index is ≤3.0¹ □ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) □ Wetland Non-Vascular Plants¹ □ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. ### Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. #### Hydrophytic Vegetation □ Problematic Hydrophytic Vegetation □ Present? #### Hydrophytic Vegetation □ Present? #### Hydrophytic Vegetation □ Present? #### Prevalence Index is = B/A = □ Hydrophytic Vegetation Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. ##### Hydrophytic Vegetation Prevalence Index is = B/A = □ Hydrophytic Vegetation Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. ###################################				_		Column Totals:	(A)		(B)
4. Taraxacum officinale 2 No FACU Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation Dominance Test is >50% Prevalence Index is ≤3.0¹ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Present? Yes ☑ No ☐				_		Prevalence Ind	ex = B/A :	=		
6										
6	5.					☐ Rapid Test for Hy	drophytic	Vegetation		
7						■ Dominance Test	is >50%			
8						☐ Prevalence Index	(is ≤3.0¹			
10						. –	•	`		g
10	9								neet)	
11	10								-vnlain)	
Woody Vine Stratum (Plot size: 30 ft) 1	11	07						•	. /	
2	Woody Vine Stratum (Plot size: 30 ft)	97	= To	tal C	over					
2	1					Hydrophytic				
% Bare Ground in Herb Stratum 3	2					Vegetation				
Pomarke:	% Para Ground in Harb Stratum 3	0	= To	tal C	over	Present?	∕es ⊠ N	No 🗌		
Hydrophytic vegetation criteria met through dominance test.	Domarke:									
	Hydrophytic vegetation criteria met three	ough dom	ninano	ce te	est.					

Profile Desc	cription: (Describ	e to the d	epth ne	eded to docu	ment the	indicator	or confirm	n the ab	sence	of indicators.)
Depth	Matrix		_		ox Feature					
(inches)	Color (moist)	%		or (moist)	%	Type ¹	Loc ²	Textur		<u>Remarks</u>
0-6	10YR 4/1	95	2.5	YR 3/6	5	С	M, PL	SiCIL	0	Silt Clay Loam
6-16	7.5 YR 4/1	90	7.5	YR 4/6	10	С	M	SiCIL	0	Silty Clay Loam
· 										
	oncentration, D=De						ed Sand Gr			cation: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Appli	icable to	all LRR	s, unless othe	rwise no	ted.)		In	dicato	rs for Problematic Hydric Soils ³ :
☐ Histosol	(A1)			Sandy Redox (S5)] 2 cm	Muck (A10)
	ipedon (A2)			Stripped Matrix	. ,					Parent Material (TF2)
☐ Black His				Loamy Mucky I			MLRA 1)		-	Shallow Dark Surface (TF12)
	n Sulfide (A4)			Loamy Gleyed		2)] Othe	r (Explain in Remarks)
	Below Dark Surfa	ce (A11)		Depleted Matrix				2.		
	rk Surface (A12)			Redox Dark Su	, ,			°II		ers of hydrophytic vegetation and
	lucky Mineral (S1) leyed Matrix (S4)			Depleted Dark Redox Depress		-7)				nd hydrology must be present, s disturbed or problematic.
	Layer (if present):			Nedox Depless	510115 (1-0)				uriles	s disturbed or problematic.
Type: No										
	ches):			-				Uncelui	:- C-!I	Dunnanto Van M. Na 🗆
				-				Hyari	ic Soii	Present? Yes ⊠ No □
Remarks:										
Hydric soil	criteria met thr	ough ind	dicator	⁻ F3.						
HYDROLO	GV									
_	drology Indicators								_	
	cators (minimum of	one requ	rea; ch							ndary Indicators (2 or more required)
	Water (A1)			☐ Water-Sta			xcept MLF	RA	⊔ W	ater-Stained Leaves (B9) (MLRA 1, 2,
_	ter Table (A2)				A, and 4E	3)			_	4A, and 4B)
Saturation	` '			☐ Salt Crust	` '					rainage Patterns (B10)
Water M	, ,			Aquatic In		` ,				y-Season Water Table (C2)
	t Deposits (B2)			☐ Hydrogen						aturation Visible on Aerial Imagery (C9)
-	osits (B3)				•	-	Living Roo	ts (C3)	☐ G	eomorphic Position (D2)
☐ Algal Ma	t or Crust (B4)			☐ Presence	of Reduce	ed Iron (C	4)		☐ Sh	nallow Aquitard (D3)
-	osits (B5)			☐ Recent Iro	n Reduct	ion in Tille	d Soils (C6)	☐ F/	AC-Neutral Test (D5)
	Soil Cracks (B6)						1) (LRR A))		aised Ant Mounds (D6) (LRR A)
	on Visible on Aerial		. ,	☐ Other (Exp	olain in Re	emarks)			☐ Fr	ost-Heave Hummocks (D7)
☐ Sparsely	Vegetated Concav	e Surface	e (B8)							
Field Obser	vations:									
Surface Wat	er Present?	Yes 🗌	No 🔀	Depth (inche		-				
Water Table	Present?	Yes 🗵	No 🗌	Depth (inche						
Saturation P	resent?	Yes 🗵	No 🗌	Depth (inche	s): <u>9"</u>		Wetl	and Hyd	drology	y Present? Yes ⊠ No □
(includes car										
Describe Re	corded Data (strea	m gauge,	monitor	ing well, aerial	photos, p	revious in	spections),	ıt availal	ble:	
Remarks:										
Hydrologic	criteria met the	ough pr	imary	indicator A3	3.					

Project/Site: 1144.0027 E Vancouver E-Commerc	e Center	City/Co	ounty: _	Camas	s, Clark	Sampling	Date: 04/00	6/2021
Applicant/Owner: Panattoni Development Compan	y, Inc.				State: WA	Sampling	Point: DP-	6U
Investigator(s): Rachael Hyland, Jacob Layman			S	ection, To	ownship, Range: 29,02	2N,03E,SE		
Landform (hillslope, terrace, etc.): Drainage		Local	relief ((concave,	, convex, none): Conca	ave	Slope (%): 0
Subregion (LRR): A2								
Soil Map Unit Name: Cove silty clay loam, thin solution								
Are climatic / hydrologic conditions on the site typical for this	s time of yea	ar? Yes	s 🗙	No ☐ (I	f no, explain in Remarks	s.)		
Are Vegetation, Soil, or Hydrology sign	nificantly dis	turbed?	?	Are "No	ormal Circumstances" p	resent? Yes	No □	
Are Vegetation, Soil, or Hydrology natu				(If need	ed, explain any answers	in Remarks.)	
SUMMARY OF FINDINGS – Attach site map								es, etc.
Hydrophytic Vegetation Present? Yes ☒ No ☐								
Hydric Soil Present? Yes ⊠ No □				Sampled		=		
Wetland Hydrology Present? Yes ☐ No ☒		'	within	a Wetlar	nd? Yes □	No 🔀		
Remarks:	mberti a reason	tation :	and br	عراسات ممانا	a massant. Data acilicate	ad in an unla		h.o.
Not all three wetland criteria met; only hydro western portion of the property.	pnytic vege	tation a	and ny	aric son	s present. Data collecte	ea in an upiai	nd area on t	ne
VEGETATION – Use scientific names of plan	te							
VEGETATION — Ose scientific flames of plan	Absolute	Domir	nant Ir	ndicator	Dominance Test wo	rksheet:		
Tree Stratum (Plot size: 30 ft)	% Cover				Number of Dominant			
1					That Are OBL, FACW		2	(A)
2					Total Number of Dom	inant		
3					Species Across All St	rata: <u>3</u>	3	(B)
4					Percent of Dominant	Species		
Sapling/Shrub Stratum (Plot size: 15 ft)	0	= Tot	tal Cov	er	That Are OBL, FACW	, or FAC: <u>6</u>	37%	(A/B)
1					Prevalence Index wo	orksheet:		
2					Total % Cover of		Multiply by:	
3					OBL species			
4					FACW species			
5					FAC species			
		= Tot	tal Cov	/er	FACU species	x 4 :	=	
Herb Stratum (Plot size: 5 ft)	5 0	.,		- 4 0	UPL species	x 5 =	=	
1. Poa pratensis	50				Column Totals:			(B)
2. Schedonorus arundinaceus	20	Yes		FAC	Daniela a calla de	D/A		
3. Dactylis glomerata	20	Yes		FACU FAC	Prevalence Inde		·	
4. Alopecurus pratensis	10	No		AC	Hydrophytic Vegeta			
5					Rapid Test for Hy Dominance Test i		jetation	
6					☐ Prevalence Index			
7					☐ Morphological Ad		ovide sunno	rtina
8					data in Remar			
9					☐ Wetland Non-Vas	cular Plants ¹		
10 11		-			☐ Problematic Hydro	ophytic Veget	ation¹ (Expla	ain)
	100	= Tot	tal Cov	er	¹ Indicators of hydric s			must
Woody Vine Stratum (Plot size: 30 ft)		- 700	JOV	J.	be present, unless dis	nurpea or pro	viematic.	
1					Hydrophytic			
2					Vegetation			
% Bare Ground in Herb Stratum 0	0	= Tot	tal Cov	er er	Present? Y	′es ⊠ No [
Pomorko:					1			
Hydrophytic vegetation criteria met thr	ough dom	ninand	ce tes	st.				

Sampling Point: DP-6U

Depth	Matrix	%	Color (n		ox Featur		1002	Tarde			Remarks	
(inches) 0-4	Color (moist) 10YR 2/2	<u>%</u> 82	-	noist) R 2.5/2	<u>%</u> 10	<u>Type¹</u> C	Loc ²	<u>Textu</u> SiLo	re	Silt Loam		
	1011 2/2	_ 02										
0-4	-		5YR 3		8	<u>C</u>	<u>M</u>	SiLo		Silt loam		
4-16	10YR 2/2	84	5YR 3	3/4	8	CM		SiLo		Silt Loam;	8% charcoal fo	und in matri
							·					
	Concentration, D=D I Indicators: (App						ted Sand G				Pore Lining, M	
] Histoso				idy Redox (,,				Muck (A10	-	
	pipedon (A2)			pped Matrix				Ī		Parent Mate	,	
	listic (A3)			my Mucky I	` '	1) (excep	t MLRA 1)	. [ark Surface (TF	⁻ 12)
	en Sulfide (A4)			my Gleyed		2)] Othe	r (Explain in	n Remarks)	
	ed Below Dark Surfa	ace (A11)		oleted Matri	` '							
	Park Surface (A12)			lox Dark Su	,	•		3			hytic vegetation	
-	Mucky Mineral (S1) Gleyed Matrix (S4)			oleted Dark dox Depress	`	,					y must be pres or problemation	
	Layer (if present)			iox Debies:	510115 (1-0)	1			unies	s disturbed	or problematic	•
Type: N		•										
• •	nches):							Hydr	ic Sail	Present?	Yes ⊠ No	П
								yu.		i resent.	100 [5]	
Remarks: lydric soi	il criteria met th	rough inc	dicator F6	ô.								
ydric soi	OGY		dicator F6	6.								
ydric soi	OGY ydrology Indicator	's:			olv)				Secon	dary Indica	tors (2 or more	e required)
YDROLO Vetland H	OGY ydrology Indicator licators (minimum c	's:	ired; check	all that app		wes (B9) (excent MI	RA			tors (2 or more	
YDROLO Vetland Hyrimary Ind	DGY ydrology Indicator licators (minimum o	's:	ired; check	all that app Water-Sta	ained Leav		except ML	RA		ater-Stained	d Leaves (B9)	
OROLO OTOLO OTOL	DGY ydrology Indicator licators (minimum o w Water (A1) ater Table (A2)	's:	ired; check	all that app Water-Sta 1, 2, 4	ained Leav		except ML	RA	☐ W	ater-Stained	d Leaves (B9)	
/DROLO /etland Hyrimary Ind Surface High W Saturat	DGY ydrology Indicator licators (minimum of Water (A1) ater Table (A2) ion (A3)	's:	ired; check	all that app Water-Sta 1, 2, 4 Salt Crust	ained Leave A, and 4I (B11)	В)	except ML	RA	□ W:□ Dr	ater-Stained 4A, and 4 ainage Patt	d Leaves (B9) B) erns (B10)	(MLRA 1, 2
YDROLO Yetland Hyrimary Ind Surface High W Saturat Water M	pdrology Indicator licators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1)	's:	ired; check	all that app Water-Sta 1, 2, 4 Salt Crust Aquatic In	ained Leaven A. and 4I (B11) ivertebrate	B) es (B13)	except ML	RA		ater-Stained 4A, and 4 ainage Patt y-Season W	d Leaves (B9) B) erns (B10) Vater Table (C	(MLRA 1, 2
YDROLO Yetland Hyrimary Ind Surface High W Saturat Water M Sedime	DGY ydrology Indicator licators (minimum of Water (A1) ater Table (A2) ion (A3)	's:	ired; check	all that app Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen	ained Leaven A, and 4leaven (B11) avertebrate Sulfide C	es (B13) Odor (C1)	except ML			ater-Stained 4A, and 4 ainage Patt y-Season W turation Vis	d Leaves (B9) B) erns (B10)	(MLRA 1, 2
TDROLO Tetland Hyrimary Ind Surface High W Saturat Water M Sedime Drift De	pdrology Indicator dicators (minimum of water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2)	's:	ired; check	all that app Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I	ained Leaver A.A., and 4I (B11) avertebrate Sulfide C	B) es (B13) Odor (C1) eres along	J Living Ro		 □ Wa □ Dr □ Dr □ Sa □ Ge 	ater-Stained 4A, and 4 ainage Patt y-Season W turation Vis	d Leaves (B9) B) erns (B10) Vater Table (C sible on Aerial Position (D2)	(MLRA 1, 2
/DROLO /etland Hyrimary Ind Surface High W Saturat Water N Sedime Drift De Algal M	pogy ydrology Indicator dicators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3)	's:	ired; check	all that app Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence	ined Leaver A, and 4leaver tebrate Sulfide Control Rhizosphe of Reduc	es (B13) Odor (C1) eres along ed Iron (C	J Living Ro	ots (C3)	 □ W: □ Dr □ Dr □ Sa □ Sr 	ater-Stained 4A, and 4 ainage Patt y-Season W aturation Viseomorphic F	d Leaves (B9) B) erns (B10) Vater Table (C sible on Aerial Position (D2) ard (D3)	(MLRA 1, 2
/DROLO /etland Hyrimary Ind Surface High W Saturat Water M Sedime Drift De Algal M Iron De	pogy ydrology Indicator licators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4)	's:	ired; check	all that app Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Iro	ined Leaver A, and 41 (B11) invertebrate Sulfide CRhizosphe of Reduction Reduction	es (B13) Odor (C1) eres along ed Iron (C	g Living Ro	ots (C3)	Ws Dr Dr Sa Ge Sh FA	ater-Stainec 4A, and 4 ainage Patt y-Season W aturation Vis comorphic F allow Aquit C-Neutral 1	d Leaves (B9) B) erns (B10) Vater Table (C sible on Aerial Position (D2) ard (D3)	(MLRA 1, 2 2) Imagery (C
/DROLO /etland Hyrimary Ind Surface High W Saturat Water N Sedime Drift De Algal M Iron De Surface	pogy sydrology Indicator of the Water (A1) atter Table (A2) atter (A3) warks (B1) and Deposits (B2) attor Crust (B4) posits (B5)	s: f one requi	ired; check	all that app Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Iro Stunted o	ined Leaver A.A., and 41 (a) (B11) (b) (a) (b) (b) (c) (b) (c) (c) (c) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d	es (B13) Odor (C1) eres along ed Iron (C tion in Tille d Plants (I	y Living Roo (4) ed Soils (Co	ots (C3)	☐ W: ☐ Dr ☐ Dr ☐ Sa ☐ Ge ☐ St ☐ FA	ater-Stained 4A, and 4 ainage Patt y-Season W ituration Vise comorphic F allow Aquit C-Neutral T aised Ant Mo	d Leaves (B9) B) erns (B10) Vater Table (C sible on Aerial Position (D2) ard (D3) Fest (D5)	(MLRA 1, 2 2) Imagery (C
/DROLO /etland Hyrimary Indi Surface High W Saturat Water M Sedime Drift De Algal M Iron De Surface Inundat	pogy sydrology Indicator (bicators (minimum of water (A1)) ater Table (A2) ion (A3) Marks (B1) and Deposits (B2) aposits (B3) at or Crust (B4) posits (B5) a Soil Cracks (B6)	rs: f one requi	ired; check	all that app Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Iro Stunted o	ined Leaver A.A., and 41 (a) (B11) (b) (a) (b) (b) (c) (b) (c) (c) (c) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d	es (B13) Odor (C1) eres along ed Iron (C tion in Tille d Plants (I	y Living Roo (4) ed Soils (Co	ots (C3)	☐ W: ☐ Dr ☐ Dr ☐ Sa ☐ Ge ☐ St ☐ FA	ater-Stained 4A, and 4 ainage Patt y-Season W ituration Vise comorphic F allow Aquit C-Neutral T aised Ant Mo	d Leaves (B9) B) erns (B10) Vater Table (C sible on Aerial Position (D2) ard (D3) Fest (D5) ounds (D6) (LI	(MLRA 1, 2 2) Imagery (C
YDROLO Vetland Hyrimary Ind Surface Water M Sedime Drift De Algal M Iron De Surface Inundat Sparsel	pogy ydrology Indicator licators (minimum of the Water (A1) ater Table (A2) ion (A3) Marks (B1) the Deposits (B2) the posits (B3) at or Crust (B4) posits (B5) the Soil Cracks (B6) ion Visible on Aeria by Vegetated Conca	rs: If one requi	ired; check	all that app Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Iro Stunted o Other (Ex	ained Leaver, and 41 (B11) avertebrate Sulfide C Rhizosphe of Reduct on Reduct r Stressed plain in R	es (B13) Odor (C1) eres along ed Iron (C tion in Tille d Plants (I emarks)	y Living Roo (4) ed Soils (Co	ots (C3)	☐ W: ☐ Dr ☐ Dr ☐ Sa ☐ Ge ☐ St ☐ FA	ater-Stained 4A, and 4 ainage Patt y-Season W ituration Vise comorphic F allow Aquit C-Neutral T aised Ant Mo	d Leaves (B9) B) erns (B10) Vater Table (C sible on Aerial Position (D2) ard (D3) Fest (D5) ounds (D6) (LI	(MLRA 1, 2 2) Imagery (C
Vetland Hydrimary India Surface High W Saturat Water M Sedime Drift De Algal M Iron De Surface Inundat Sparsel	pogy ydrology Indicator licators (minimum of the Water (A1) ater Table (A2) ion (A3) Marks (B1) the Deposits (B2) the posits (B3) at or Crust (B4) posits (B5) the Soil Cracks (B6) ion Visible on Aeria by Vegetated Conca	f one requi	ired; check	all that app Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent In Stunted o Other (Ex	ained Leaven A, and 41 (B11) avertebrate Sulfide C Rhizosphe of Reducton Reductor Stressed plain in R	es (B13) Dodor (C1) eres along ed Iron (C tion in Tille d Plants (I emarks)	y Living Roo (4) ed Soils (Co	ots (C3)	☐ W: ☐ Dr ☐ Dr ☐ Sa ☐ Ge ☐ St ☐ FA	ater-Stained 4A, and 4 ainage Patt y-Season W ituration Vise comorphic F allow Aquit C-Neutral T aised Ant Mo	d Leaves (B9) B) erns (B10) Vater Table (C sible on Aerial Position (D2) ard (D3) Fest (D5) ounds (D6) (LI	(MLRA 1, 2 2) Imagery (C
YDROLO Vetland Hydrimary Ind Surface High W Saturat Water N Sedime Drift De Algal M Iron De Surface Inundat Sparsel	pogy wydrology Indicator licators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) posits (B5) e Soil Cracks (B6) cion Visible on Aeria ly Vegetated Conca	f one requi	ired; check	all that app Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Iro Stunted o Other (Ex	inned Leaver A, and 41 (B11) avertebrate Sulfide Con Reduction Reductor Stressed plain in Ress: None	es (B13) Dodor (C1) eres along ed Iron (C tion in Tille d Plants (I emarks) e	y Living Roo (4) ed Soils (Co	ots (C3)	☐ W: ☐ Dr ☐ Dr ☐ Sa ☐ Ge ☐ St ☐ FA	ater-Stained 4A, and 4 ainage Patt y-Season W ituration Vise comorphic F allow Aquit C-Neutral T aised Ant Mo	d Leaves (B9) B) erns (B10) Vater Table (C sible on Aerial Position (D2) ard (D3) Fest (D5) ounds (D6) (LI	(MLRA 1, 2 2) Imagery (Cs
YDROLO Vetland Hy Primary Ind Surface High W Saturat Water M Sedime Drift De Algal M Iron De Surface Inundat Sparsel Geld Obse Surface Water Table Saturation I	pogy ydrology Indicator licators (minimum of water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) at or Crust (B4) posits (B5) e Soil Cracks (B6) ion Visible on Aeria ly Vegetated Conca ervations: ater Present? Present?	f one requi	ired; check	all that app Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent In Stunted o Other (Ex	inned Leaver A, and 41 (B11) avertebrate Sulfide Con Reduction Reductor Stressed plain in Ress: None	es (B13) Dodor (C1) eres along ed Iron (C tion in Tille d Plants (I emarks) e	J Living Roo (4) ed Soils (Co (1) (LRR A	ots (C3) 6) N	☐ W: ☐ Dr ☐ Dr ☐ Sa ☐ Ge ☐ Sr ☐ FA	ater-Stained 4A, and 4 ainage Patt y-Season W ituration Vise comorphic F allow Aquit C-Neutral T aised Ant Mo	d Leaves (B9) B) erns (B10) Vater Table (C sible on Aerial Position (D2) ard (D3) Fest (D5) ounds (D6) (Li Hummocks (D7)	(MLRA 1, 2 2) Imagery (C
YDROLO Vetland Hy Primary Ind Surface High W Saturat Water N Sedime Drift De Surface Inundat Sparsel Field Obse Surface Water Table Saturation I	ydrology Indicator licators (minimum of Water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) posits (B5) e Soil Cracks (B6) cion Visible on Aeria ly Vegetated Concae ervations: ater Present? e Present?	I Imagery (ve Surface Yes Yes Yes Yes Yes Yes Yes	ired; check	all that app Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Iro Stunted o Other (Ex	Anned Leaver Anned Leaver Anned Leaver Leave	es (B13) Dodor (C1) eres along ed Iron (C tion in Tille d Plants (I emarks) e e	J Living Root (4) ed Soils (Co (1) (LRR A	ots (C3) 6) N	☐ Wi	ater-Stained 4A, and 4 ainage Patt y-Season W aturation Vise comorphic F allow Aquit C-Neutral T aised Ant Mo ost-Heave F	d Leaves (B9) B) erns (B10) Vater Table (C sible on Aerial Position (D2) ard (D3) Fest (D5) ounds (D6) (Li Hummocks (D7)	(MLRA 1, 2 2) Imagery (C:
YDROLO Vetland Hy Primary Ind Surface High W Saturat Water M Sedime Drift De Surface Inundat Sparsel Field Obse Surface Water Table Saturation I includes ca	pogy ydrology Indicator licators (minimum of wwater (A1) ater Table (A2) ion (A3) Marks (B1) ant Deposits (B2) aposits (B3) lat or Crust (B4) posits (B5) a Soil Cracks (B6) ion Visible on Aeria ly Vegetated Conca	I Imagery (ve Surface Yes Yes Yes Yes Yes Yes Yes	ired; check	all that app Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Iro Stunted o Other (Ex	Anned Leaver Anned Leaver Anned Leaver Leave	es (B13) Dodor (C1) eres along ed Iron (C tion in Tille d Plants (I emarks) e e	J Living Root (4) ed Soils (Co (1) (LRR A	ots (C3) 6) N	☐ Wi	ater-Stained 4A, and 4 ainage Patt y-Season W aturation Vise comorphic F allow Aquit C-Neutral T aised Ant Mo ost-Heave F	d Leaves (B9) B) erns (B10) Vater Table (C sible on Aerial Position (D2) ard (D3) Fest (D5) ounds (D6) (Li Hummocks (D7)	(MLRA 1, 2 2) Imagery (C
YDROLO Vetland High W Saturat Water N Sedime Drift De Algal M Iron De Surface Inundat Sparsel Get Goden	pogy ydrology Indicator licators (minimum of wwater (A1) ater Table (A2) ion (A3) Marks (B1) ant Deposits (B2) aposits (B3) lat or Crust (B4) posits (B5) a Soil Cracks (B6) ion Visible on Aeria ly Vegetated Conca	I Imagery (ve Surface Yes Yes Yes Yes am gauge,	ired; check	all that app Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Iro Stunted o Other (Ex	ained Leaver A, and 41 (B11) avertebrate Sulfide Con Reduction Reductor Stressed plain in Ress: None Spirit None	es (B13) Dodor (C1) eres along ed Iron (C tion in Tille d Plants (I emarks) e e e	ULIVING Root (4) ed Soils (Ci O1) (LRR A Wet	ots (C3) 6) N cland Hyo	☐ W: ☐ Dr ☐ Dr ☐ Sa ☐ Ge ☐ St ☐ FA ☐ Ra ☐ Fr ☐ drology ble:	ater-Stained 4A, and 4 ainage Patt y-Season W aturation Vis eomorphic F allow Aquit C-Neutral T aised Ant Mo ost-Heave F	d Leaves (B9) B) erns (B10) Vater Table (C sible on Aerial Position (D2) ard (D3) Fest (D5) ounds (D6) (LI Hummocks (D7) Yes \[\] No	(MLRA 1, 2 2) Imagery (C

Project/Site: 1144.0027 E Vancouver E-Commerc	e Center	City/Co	ounty	. Camas	, Clark	Sam	npling Date: 04	1/06/2021
Applicant/Owner: Panattoni Development Compan	y, Inc.				State: WA	Sam	npling Point: <u>C</u>)P-7u
Investigator(s): Rachael Hyland, Jacob Layman				Section, To	ownship, Range: 29,02	2N,03E	,SE	
Landform (hillslope, terrace, etc.): hillslope		Local	relie	f (concave,	convex, none): CONC	ave	Slope	(%): 1
Subregion (LRR): A2								
Soil Map Unit Name: Hesson clay loam, 8 to 20 per								
Are climatic / hydrologic conditions on the site typical for this	s time of yea	ar? Ye	s 🗷	No ☐ (I	f no, explain in Remarks	s.)		
Are Vegetation, Soil, or Hydrology sign	nificantly dis	turbed	?	Are "No	ormal Circumstances" pi	resent?	Yes 🗵 No	
Are Vegetation, Soil, or Hydrology natu				(If need	ed, explain any answers	in Rem	narks.)	
SUMMARY OF FINDINGS - Attach site map								ures, etc.
Hydrophytic Vegetation Present? Yes ☒ No ☐								
Hydric Soil Present? Yes ☒ No ☐				e Sampled				
Wetland Hydrology Present? Yes ☐ No 🗵			with	in a Wetlar	nd? Yes □	No 🔀		
Remarks:	nhvetia voaca	tation	and	hydria sail	procent Data collector	d in an ı	unland area	
Not all three wetland criteria met; only hydrogapproximately 20 feet from the western prope			and	nyaric son	present. Data collected	ı ın an ı	upiano area	
P P		J.						
VEGETATION – Use scientific names of plan	ts.							
Troe Stratum (Plot size: 20 ft)	Absolute			Indicator	Dominance Test wo			
Tree Stratum (Plot size: 30 ft)	% Cover				Number of Dominant That Are OBL, FACW			(A)
1 2					That Ale OBL, I ACW	, or rac). <u>L</u>	(^)
3					Total Number of Dom Species Across All St		3	(B)
4								(D)
	0			over	Percent of Dominant : That Are OBL, FACW	Species	: 67%	(A/R)
Sapling/Shrub Stratum (Plot size: 15 ft)								(,,,,,,
1					Prevalence Index wo			
2					Total % Cover of:			
3					OBL species			
4					FACW species			
5		= To	tal C	Over	FACU species			
Herb Stratum (Plot size: 5 ft)					UPL species		·	
1. Poa pratensis	40	Yes	3		Column Totals:			
2. Alopecurus pratensis	30	Yes		FAC				
3. Dactylis glomerata	20	Yes	<u> </u>	FACU	Prevalence Inde			_
4. Schedonorus arundinaceus	<u>5</u> 5	No		FAC FACW	Hydrophytic Vegetat			
5. Juncus effusus		No			Rapid Test for Hy Dominance Test i		ic vegetation	
6					☐ Prevalence Index			
7					☐ Morphological Ad			oporting
8 9							n a separate sh	
10					☐ Wetland Non-Vas	cular Pla	ants ¹	
11					☐ Problematic Hydro		•	. ,
	100	= To	tal C	over	¹ Indicators of hydric s be present, unless dis			
Woody Vine Stratum (Plot size: 30 ft)					be present, unless us	- iuibeu (oi pioblematic.	
1					Hydrophytic			
2	^				Vegetation	, 	N- 🗆	
% Bare Ground in Herb Stratum 0	0	= To	tal C	over	Present? Y	′es ⊠	NO 📙	
Domorko					1			
Hydrophytic vegetation met through do	ominance	test						

Depth	Matrix				ox Featur			_		
(inches)	Color (moist)	<u>%</u>		r (moist)	<u>%</u>	Type ¹	Loc ²	Textu		Remarks
0-6	2.5Y 3/1	90		YR 2.5/3	10			SiLo		Silty Loam w/ manure
6-12	2.5Y 3/1	80		R 3/4	20	<u>C</u>	M	SiLo		Silty Loam
12-16	2.5Y 3/1	90	10	/R 4/4	10	<u>C</u>	M	CI		Clay
	· -									
4-										
	Concentration, D=E il Indicators: (App						ed Sand G			tion: PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :
☐ Histoso		ilicable to				ieu.)				Muck (A10)
	Epipedon (A2)			Sandy Redox (Stripped Matrix						arent Material (TF2)
	Histic (A3)			oamy Mucky I	` '	1) (excep	MLRA 1)			shallow Dark Surface (TF12)
	gen Sulfide (A4)			oamy Gleyed	•		,	_	-	(Explain in Remarks)
	ed Below Dark Surf	ace (A11)		Depleted Matri						
☐ Thick D	Dark Surface (A12)		×	Redox Dark Su	ırface (F6)		3	Indicators	of hydrophytic vegetation and
	Mucky Mineral (S1)			Depleted Dark		F7)				d hydrology must be present,
	Gleyed Matrix (S4)			Redox Depress	sions (F8)				unless	disturbed or problematic.
	e Layer (if present):								
Type: N	inches):									
	inches)							Hydr	ric Soil P	resent? Yes ⊠ No □
Remarks:										
Hydric so	ils met through	indicato	r F6.							
HYDROLO	OGY									
	lydrology Indicato	rs:								
	dicators (minimum d									
	•	JI OHO ICA	uired; che	eck all that app	oly)				Second	ary Indicators (2 or more required)
	e Water (A1)	or one requ	uired; che			ves (B9) (e	xcept MLF	RA		ary Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1.:
	e Water (A1) /ater Table (A2)	or one requ	uired; che	☐ Water-Sta	ined Leav		xcept MLF	RA	☐ Wat	er-Stained Leaves (B9) (MLRA 1, 2
☐ High W	/ater Table (A2)	or one requ	uired; che	☐ Water-Sta	nined Leav		xcept MLF	RA	☐ Wat	er-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)
☐ High W ☐ Saturat	/ater Table (A2) tion (A3)	or one requ	uired; che	☐ Water-Sta 1, 2, 4 ☐ Salt Crust	nined Leav A, and 4E (B11)	3)	xcept MLf	RA	☐ Wat	er-Stained Leaves (B9) (MLRA 1 , 2 4A, and 4B) inage Patterns (B10)
☐ High W ☐ Saturat ☐ Water N	/ater Table (A2) tion (A3) Marks (B1)	or one requ	uired; che	☐ Water-Sta 1, 2, 4 ☐ Salt Crust ☐ Aquatic In	nined Leav A, and 4E (B11) vertebrate	B) es (B13)	xcept MLF	RA	☐ Wat	er-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) nage Patterns (B10) Season Water Table (C2)
☐ High W ☐ Saturat ☐ Water N ☐ Sedime	/ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)	one requ	uired; che	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen	nined Leaven, A, and 4E (B11) overtebrate Sulfide C	es (B13) dor (C1)			☐ Wat	er-Stained Leaves (B9) (MLRA 1 , 2 4A, and 4B) nage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery (C
High W Saturat Water M Sedime Drift De	/ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3)	or one requ	uired; che	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I	nined Leaven. A, and 4E (B11) Invertebrate Sulfide Common Sulfide	es (B13) dor (C1) eres along	Living Roc		☐ Wat	er-Stained Leaves (B9) (MLRA 1, 24A, and 4B) nage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery (Comorphic Position (D2)
High W Saturat Water M Sedime Drift De	/ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) //at or Crust (B4)	or one requ	uired; che	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence	nined Leaver, A, and 4E (B11) evertebrate Sulfide C Rhizosphe of Reduce	es (B13) dor (C1) eres along ed Iron (C4	Living Roc 1)	ots (C3)	☐ Wat	er-Stained Leaves (B9) (MLRA 1, 24A, and 4B) nage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery (Comorphic Position (D2) Illow Aquitard (D3)
High W Saturat Water N Sedime Drift De Algal M Iron De	/ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) //at or Crust (B4) eposits (B5)	one requ	uired; che	Water-Star 1, 2, 4 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized If Presence Recent Iro	nined Leaver A, and 4E (B11) overtebrate Sulfide Carlicosphe of Reduction Reduction A, and a surface and Reduction Reduction Reduction A, and a surface and	es (B13) dor (C1) eres along ed Iron (C4) ion in Tille	Living Roc 4) d Soils (C6	ots (C3)	☐ Wat	er-Stained Leaves (B9) (MLRA 1, 24A, and 4B) nage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery (Comorphic Position (D2) Illow Aquitard (D3) C-Neutral Test (D5)
High W Saturat Water N Sedime Drift De Algal M Iron De Surface	Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Vat or Crust (B4) eposits (B5) e Soil Cracks (B6)			Water-Star 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Irc	nined Leaver, A, and 4E (B11) Evertebrate Sulfide C Rhizosphe of Reduct on Reduct r Stressec	es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (D	Living Roc 1)	ots (C3)	☐ Wat	er-Stained Leaves (B9) (MLRA 1, 24A, and 4B) Inage Patterns (B10) Season Water Table (C2) Irration Visible on Aerial Imagery (Comorphic Position (D2) Illow Aquitard (D3) C-Neutral Test (D5) Ised Ant Mounds (D6) (LRR A)
High W Saturat Water N Sedime Drift De Algal M Iron De Surface	Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Vat or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Aeria	al Imagery	(B7)	Water-Star 1, 2, 4 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized If Presence Recent Iro	nined Leaver, A, and 4E (B11) Evertebrate Sulfide C Rhizosphe of Reduct on Reduct r Stressec	es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (D	Living Roc 4) d Soils (C6	ots (C3)	☐ Wat	er-Stained Leaves (B9) (MLRA 1, 24A, and 4B) nage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery (Comorphic Position (D2) Illow Aquitard (D3) C-Neutral Test (D5)
High W Saturat Water M Sedime Drift De Algal M Iron De Surface Inundat Sparse	Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Vat or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Aeria	al Imagery	(B7)	Water-Star 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Irc	nined Leaver, A, and 4E (B11) Evertebrate Sulfide C Rhizosphe of Reduct on Reduct r Stressec	es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (D	Living Roc 4) d Soils (C6	ots (C3)	☐ Wat	er-Stained Leaves (B9) (MLRA 1, 24A, and 4B) Inage Patterns (B10) Season Water Table (C2) Irration Visible on Aerial Imagery (Comorphic Position (D2) Illow Aquitard (D3) C-Neutral Test (D5) Ised Ant Mounds (D6) (LRR A)
High W Saturat Water N Sedime Drift De Algal M Iron De Surface Inundat Sparse	Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Aeria ely Vegetated Conca	al Imagery ave Surfac	(B7) be (B8)	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Irc Stunted o Other (Ex	wined Leaver A, and 4E (B11) evertebrate Sulfide C Rhizosphe of Reduction Reductor Stressed plain in Reduction Reduc	es (B13) ador (C1) ares along add Iron (C4) aion in Tille I Plants (Demarks)	Living Roc 4) d Soils (C6	ots (C3)	☐ Wat	er-Stained Leaves (B9) (MLRA 1, 24A, and 4B) Inage Patterns (B10) Season Water Table (C2) Irration Visible on Aerial Imagery (Comorphic Position (D2) Illow Aquitard (D3) C-Neutral Test (D5) Ised Ant Mounds (D6) (LRR A)
High W Saturat Water N Sedime Drift De Algal M Iron De Surface Inundat Sparse Field Obse	Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Vat or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Aeria ely Vegetated Concae ervations: ater Present?	al Imagery ave Surfac Yes □	(B7) te (B8) No 🗵	Water-Star 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized If Presence Recent Irc Stunted or Other (Ex	wined Leaver A, and 4B (B11) evertebrate Sulfide OR Reduction Reductor Stressed plain in Reductor Stre	es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (D emarks)	Living Roc 4) d Soils (C6	ots (C3)	☐ Wat	er-Stained Leaves (B9) (MLRA 1, 24A, and 4B) Inage Patterns (B10) Season Water Table (C2) Irration Visible on Aerial Imagery (Comorphic Position (D2) Illow Aquitard (D3) C-Neutral Test (D5) Ised Ant Mounds (D6) (LRR A)
High W Saturat Water N Sedime Drift De Algal M Iron De Surface Inundat Sparse Field Obse Surface Water Table	Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Aeria ely Vegetated Conce ervations: ater Present?	al Imagery ave Surfac Yes □ Yes □	(B7) te (B8) No 🗵	Water-Star 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Irc Stunted o Other (Exp	ined Leaver A, and 4B (B11) Invertebrate Sulfide Con Reduct on Reduct or Stressed plain in Research Stressed St	es (B13) dor (C1) eres along ed Iron (C4) ion in Tille I Plants (D4) emarks)	Living Roo 4) d Soils (C6 1) (LRR A	ots (C3)	☐ Wat	er-Stained Leaves (B9) (MLRA 1, 24A, and 4B) nage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery (Comorphic Position (D2) Illow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)
High W Saturat Water M Sedime Drift De Algal M Iron De Surface Inundat Sparse Field Obse Surface Water Table Saturation (includes ca	/ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) //at or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Aeria ely Vegetated Conca ervations: ater Present? le Present? Present? expillary fringe)	al Imagery ave Surfac Yes Yes Yes Yes	(B7) te (B8) No 🗵 No 🗵 No 🗵	Water-Star 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized If Presence Recent Irc Stunted or Other (Exp	A, and 4E A, and 4E (B11) Invertebrate Sulfide Of Rhizosphe of Reduct on Reduct or Stressed plain in Re SS): None SS): None SS): None	es (B13) dor (C1) eres along ed Iron (C4) ion in Tille I Plants (D4) emarks)	Living Roc 4) d Soils (C6 1) (LRR A	ots (C3) (S) (S)	☐ Wat	er-Stained Leaves (B9) (MLRA 1, 24A, and 4B) Inage Patterns (B10) Season Water Table (C2) Irration Visible on Aerial Imagery (Comorphic Position (D2) Illow Aquitard (D3) C-Neutral Test (D5) Ised Ant Mounds (D6) (LRR A)
High W Saturat Water M Sedime Drift De Algal M Iron De Surface Inundat Sparse Field Obse Surface Wa Water Table Saturation (includes ca	Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Aeria ely Vegetated Conca ervations: ater Present? Present?	al Imagery ave Surfac Yes Yes Yes Yes	(B7) te (B8) No 🗵 No 🗵 No 🗵	Water-Star 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized If Presence Recent Irc Stunted or Other (Exp	A, and 4E A, and 4E (B11) Invertebrate Sulfide Of Rhizosphe of Reduct on Reduct or Stressed plain in Re SS): None SS): None SS): None	es (B13) dor (C1) eres along ed Iron (C4) ion in Tille I Plants (D4) emarks)	Living Roc 4) d Soils (C6 1) (LRR A	ots (C3) (S) (S)	☐ Wat	er-Stained Leaves (B9) (MLRA 1, 24A, and 4B) nage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery (Comorphic Position (D2) Illow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)
High W Saturat Water M Sedime Drift De Algal M Iron De Surface Inundat Sparse Field Obse Surface Water Table Saturation (includes ca	/ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) //at or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Aeria ely Vegetated Conca ervations: ater Present? le Present? Present? expillary fringe)	al Imagery ave Surfac Yes Yes Yes Yes	(B7) te (B8) No 🗵 No 🗵 No 🗵	Water-Star 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized If Presence Recent Irc Stunted or Other (Exp	A, and 4E A, and 4E (B11) Invertebrate Sulfide Of Rhizosphe of Reduct on Reduct or Stressed plain in Re SS): None SS): None SS): None	es (B13) dor (C1) eres along ed Iron (C4) ion in Tille I Plants (D4) emarks)	Living Roc 4) d Soils (C6 1) (LRR A	ots (C3) (S) (S)	☐ Wat	er-Stained Leaves (B9) (MLRA 1, 24A, and 4B) nage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery (Comorphic Position (D2) Illow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)
High W Saturat Water M Sedime Drift De Algal M Iron De Surface Inundat Sparse Field Obse Surface Wa Water Table Saturation (includes ca	/ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) //at or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Aeria ely Vegetated Conca ervations: ater Present? le Present? Present? expillary fringe)	al Imagery ave Surfac Yes Yes Yes Yes	(B7) te (B8) No 🗵 No 🗵 No 🗵	Water-Star 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized If Presence Recent Irc Stunted or Other (Exp	A, and 4E A, and 4E (B11) Invertebrate Sulfide Of Rhizosphe of Reduct on Reduct or Stressed plain in Re SS): None SS): None SS): None	es (B13) dor (C1) eres along ed Iron (C4) ion in Tille I Plants (D4) emarks)	Living Roc 4) d Soils (C6 1) (LRR A	ots (C3) (S) (S)	☐ Wat	er-Stained Leaves (B9) (MLRA 1, 24A, and 4B) nage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery (Comorphic Position (D2) Illow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)
High W Saturat Water N Sedime Drift De Algal M Iron De Surface Inundat Sparse Field Obset Surface Water Tabl Saturation (includes ca Describe R	Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Aeria ely Vegetated Conca ervations: ater Present? le Present? Present? expillary fringe) Recorded Data (stre	al Imagery ave Surfac Yes Yes Yes am gauge	No 🗵 No 🗵 No 🗵 No 🗵 ed. Soil	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized If Presence Recent Irc Stunted or Other (Exp	wined Leaver A, and 4B (B11) Invertebrate Sulfide Con Reduction Reductor Stressed plain in Research None (BS):	es (B13) dor (C1) eres along ed Iron (C4) ion in Tille I Plants (D4) emarks) each each each each each each each eac	Living Roc 4) d Soils (C6 1) (LRR A Wetl spections),	ots (C3) S) land Hy if availa	☐ Wat ☐ Dra ☐ Dry ☐ Satu ☐ Geo ☐ Sha ☐ FAC ☐ Rais ☐ Fros	er-Stained Leaves (B9) (MLRA 1, 24A, and 4B) Inage Patterns (B10) Season Water Table (C2) Paration Visible on Aerial Imagery (Comorphic Position (D2) Present Test (D5) Sed Ant Mounds (D6) (LRR A) St-Heave Hummocks (D7) Present? Yes No Vas collected early in the
High W Saturat Water N Sedime Drift De Algal M Iron De Surface Inundat Sparse Field Obse Surface Wa Water Tabl Saturation (includes ca Describe R	Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Aeria ely Vegetated Conca ervations: ater Present? le Present? Present? expillary fringe) Recorded Data (stre	al Imagery ave Surfac Yes Yes Yes am gauge	No 🗵 No 🗵 No 🗵 No 🗵 ed. Soil	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized If Presence Recent Irc Stunted or Other (Exp	wined Leaver A, and 4B (B11) Invertebrate Sulfide Con Reduction Reductor Stressed plain in Research None (BS):	es (B13) dor (C1) eres along ed Iron (C4) ion in Tille I Plants (D4) emarks) each each each each each each each eac	Living Roc 4) d Soils (C6 1) (LRR A Wetl spections),	ots (C3) S) land Hy if availa	☐ Wat ☐ Dra ☐ Dry ☐ Satu ☐ Geo ☐ Sha ☐ FAC ☐ Rais ☐ Fros	er-Stained Leaves (B9) (MLRA 1, 24A, and 4B) Inage Patterns (B10) Season Water Table (C2) Irration Visible on Aerial Imagery (Comorphic Position (D2) Illow Aquitard (D3) C-Neutral Test (D5) Sed Ant Mounds (D6) (LRR A) St-Heave Hummocks (D7) Present? Yes \(\Bar{\text{No}} \) No \(\Bar{\text{No}} \)

Project/Site: 1144.0027 E Vancouver E-Commerc	e Center	City/Co	ounty	. Camas	, Clark	_ Sampling	g Date: 04/0	6/2021
Applicant/Owner: Panattoni Development Compan							-	
Investigator(s): Rachael Hyland, Jacob Layman					<u></u>			
Landform (hillslope, terrace, etc.): hillslope								6): 1
Subregion (LRR): A2								
Soil Map Unit Name: Hesson clay loam, 0 to 8 percentage								
Are climatic / hydrologic conditions on the site typical for this	s time of yea	ar? Ye	s 🗷	No ☐ (I	f no, explain in Remarks.)		
Are Vegetation, Soil, or Hydrology sign	nificantly dis	turbed	?	Are "No	ormal Circumstances" pre	sent? Yes	s 🗵 No 🗌	J
Are Vegetation, Soil, or Hydrology natu	rally probler	matic?		(If need	ed, explain any answers	in Remarks	s.)	
SUMMARY OF FINDINGS - Attach site map				g point le	ocations, transects	, import	ant featur	es, etc.
Hydrophytic Vegetation Present? Yes ☒ No ☐								
Hydric Soil Present? Yes ☒ No ☐				e Sampled				
Wetland Hydrology Present? Yes ☐ No 🗵			with	in a Wetlar	nd? Yes □ I	10 ⊠		
Remarks: Not all three wetland criteria met; only hydro approximately 80 feet east of the western prop			and	hydric soil	ls present. Data collecte	d in an upl	land area	
VEGETATION – Use scientific names of plan	ts.							
	Absolute			Indicator	Dominance Test work	sheet:		
Tree Stratum (Plot size: 30 ft) 1	% Cover				Number of Dominant S That Are OBL, FACW,		2	_ (A)
2					Total Number of Domir	nant		
3					Species Across All Stra	ata:	2	_ (B)
4	0	= To	tal C	over	Percent of Dominant S That Are OBL, FACW,		100%	(A/B)
Sapling/Shrub Stratum (Plot size: 15 ft)								
1					Prevalence Index wor Total % Cover of:		Multiply by:	
2					OBL species			
3					FACW species			
4 5					FAC species			
·	_	= To	tal C	over	FACU species			
Herb Stratum (Plot size: 5 ft)					UPL species			
1. Schedonorus arundinaceus	50				Column Totals:			(B)
2. Poa pratensis	40	Yes		FAC				
3. Alopecurus pratensis	10	No		FAC	Prevalence Index			
4					Hydrophytic Vegetati			
5					Rapid Test for Hyd		getation	
6					■ Dominance Test is			
7					Prevalence Index is			
8					☐ Morphological Ada data in Remark	,		0
9					☐ Wetland Non-Vasc	ular Plants1	1	,
10					☐ Problematic Hydro	ohytic Vege	etation1 (Expl	ain)
11	100				¹ Indicators of hydric so	-		
Woody Vine Stratum (Plot size: 30 ft)		= To	tal C	over	be present, unless dist	urbed or pro	oblematic.	
1					Hydrophytic			
2	^	= To	tal C	over	Vegetation Present? Ye	s 🗵 No		
Remarks: Hydrophytic vegetation met through do	minance	test.						

Depth (in a land)	Matrix	0.1			ox Feature			-			
	Color (moist) 10YR 3/1	<u>%</u> 90		r (moist) R 3/4	<u>%</u> 10	Type ¹	Loc ²	<u>Textu</u> SiLo	re	Remarks Silty Loam	
					_						
10-16	10YR 4/2	90	7.5	YR 4/4	10	<u>C</u>	<u>M</u>	SiLo	<u> </u>	Silty Loam	
									·		
									·		
	ncentration, D=Dendicators: (Appli						ed Sand G			ation: PL=Pore Lining, M=M s for Problematic Hydric S	
☐ Histosol (A	A1)			Sandy Redox (S5)] 2 cm l	Muck (A10)	
☐ Histic Epip	pedon (A2)			Stripped Matrix					Red F	Parent Material (TF2)	
☐ Black Histi				₋oamy Mucky N			t MLRA 1)		-	Shallow Dark Surface (TF12	2)
	Sulfide (A4)			oamy Gleyed		2)			Other	(Explain in Remarks)	
•	Below Dark Surfa	ce (A11)		Depleted Matrix	. ,			0-			
_	k Surface (A12)			Redox Dark Su	, ,			3		s of hydrophytic vegetation	
•	cky Mineral (S1)			Depleted Dark	,	-7)				d hydrology must be presen	it,
	eyed Matrix (S4) ayer (if present):			Redox Depress	sions (F8)				uniess	disturbed or problematic.	
Type: Non											
Depth (inch				-				l			1
Remarks:	103)							Hydr	ic Soil F	Present? Yes ☒ No ☐]
YDROLOG	SY.										
Wetland Hydr	rology Indicators		uirod: obo	ook all that ann	lv)				Sagana	dany Indicators (2 or more re	aguirod)
Wetland Hydr Primary Indica	rology Indicators ators (minimum of					(DO) (a	wood MII			dary Indicators (2 or more re	
Wetland Hydr Primary Indica Surface W	rology Indicators ators (minimum of /ater (A1)			☐ Water-Sta	ined Leav		except MLF	RA	☐ Wa	ter-Stained Leaves (B9) (MI	
Wetland Hydr Primary Indica ☐ Surface W ☐ High Wate	rology Indicators ators (minimum of /ater (A1) er Table (A2)			☐ Water-Sta	ined Leav		except MLF	RA	☐ Wa	ter-Stained Leaves (B9) (MI	
Wetland Hydr Primary Indica ☐ Surface W ☐ High Wate ☐ Saturation	rology Indicators ators (minimum of /ater (A1) er Table (A2) (A3)			☐ Water-Sta 1, 2, 4	ined Leav A, and 4E (B11)	3)	except MLI	RA	☐ Wa	ter-Stained Leaves (B9) (Mi 4A, and 4B) iinage Patterns (B10)	
Vetland Hydr Primary Indica Surface W High Wate Saturation Water Mar	rology Indicators ators (minimum of /ater (A1) er Table (A2) i (A3) rks (B1)			☐ Water-Sta 1, 2, 4. ☐ Salt Crust ☐ Aquatic In	ined Leav A, and 4E (B11) vertebrate	s (B13)	except MLI	RA	☐ Wa	ter-Stained Leaves (B9) (Miles 4A, and 4B) tinage Patterns (B10) t-Season Water Table (C2)	LRA 1, 2,
Vetland Hydr Primary Indica Surface W High Wate Saturation Water Mar Sediment I	rology Indicators ators (minimum of /ater (A1) er Table (A2) i (A3) rks (B1) Deposits (B2)			Water-Sta 1, 2, 4 Salt Crust Aquatic In	ined Leav A, and 4E (B11) vertebrate Sulfide O	es (B13) dor (C1)			☐ Wa	ter-Stained Leaves (B9) (Miles 4A, and 4B) Alinage Patterns (B10) A-Season Water Table (C2) Auration Visible on Aerial Ima	LRA 1, 2,
Primary Indica Surface W High Wate Saturation Water Mar Sediment I Drift Depos	rology Indicators ators (minimum of /ater (A1) er Table (A2) a (A3) rks (B1) Deposits (B2) sits (B3)			Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized F	ined Leav A, and 4E (B11) vertebrate Sulfide O Rhizosphe	es (B13) dor (C1) eres along	Living Roc		☐ Wa	ter-Stained Leaves (B9) (Miles 4A, and 4B) Linage Patterns (B10) -Season Water Table (C2) Luration Visible on Aerial Image Comorphic Position (D2)	LRA 1, 2,
Primary Indica Surface W High Wate Saturation Water Mar Sediment I Drift Depos	rology Indicators ators (minimum of /ater (A1) er Table (A2) a (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4)			Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized F Presence	ined Leav A, and 4E (B11) vertebrate Sulfide O Rhizosphe of Reduce	es (B13) dor (C1) eres along ed Iron (C	Living Roc 4)	ots (C3)	☐ Wa	ter-Stained Leaves (B9) (Miles 4A, and 4B) unage Patterns (B10) r-Season Water Table (C2) uration Visible on Aerial Imagemorphic Position (D2) allow Aquitard (D3)	LRA 1, 2,
Primary Indica Surface W High Wate Saturation Water Mar Sediment I Drift Depos	rology Indicators ators (minimum of /ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5)			Water-Sta 1, 2, 4. Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro	ined Leaven A, and 4E (B11) vertebrate Sulfide ORhizosphe of Reduce on Reduction	es (B13) dor (C1) eres along ed Iron (Co on in Tille	Living Roc 4) d Soils (C6	ots (C3)	☐ Wa	ter-Stained Leaves (B9) (MI 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Ima omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5)	LRA 1, 2,
Primary Indica Surface W High Wate Saturation Water Mar Sediment I Drift Depos Iron Depos	rology Indicators ators (minimum of /ater (A1) er Table (A2) a (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) oil Cracks (B6)	one requ		Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or	ined Leaven A, and 4E (B11) vertebrate Sulfide O Rhizosphe of Reduce Reductor Stressed	es (B13) dor (C1) eres along ed Iron (Coon in Tille Plants (D	Living Roc 4) d Soils (C6	ots (C3)	☐ Wa	ter-Stained Leaves (B9) (MI 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Ima omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR	LRA 1, 2,
Primary Indica Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat o Iron Depos Surface So Inundation	rology Indicators ators (minimum of /ater (A1) er Table (A2) a (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) oil Cracks (B6) a Visible on Aerial	one requ	(B7)	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro	ined Leaven A, and 4E (B11) vertebrate Sulfide O Rhizosphe of Reduce Reductor Stressed	es (B13) dor (C1) eres along ed Iron (Coon in Tille Plants (D	Living Roc 4) d Soils (C6	ots (C3)	☐ Wa	ter-Stained Leaves (B9) (MI 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Ima omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5)	LRA 1, 2,
Wetland Hydr Primary Indica Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat o Iron Depos Surface So Inundation Sparsely V	rology Indicators ators (minimum of /ater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) oil Cracks (B6) n Visible on Aerial //egetated Concav	one requ	(B7)	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or	ined Leaven A, and 4E (B11) vertebrate Sulfide O Rhizosphe of Reduce Reductor Stressed	es (B13) dor (C1) eres along ed Iron (Coon in Tille Plants (D	Living Roc 4) d Soils (C6	ots (C3)	☐ Wa	ter-Stained Leaves (B9) (MI 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Ima omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR	LRA 1, 2,
Primary Indica Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat o Iron Depos Surface So Inundation Sparsely V	rology Indicators ators (minimum of rater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) oil Cracks (B6) n Visible on Aerial regetated Concavations:	Imagery ve Surface	(B7) e (B8)	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or	ined Leav A, and 4E (B11) vertebrate Sulfide O Rhizosphe of Reduce on Reduct Stressed	es (B13) dor (C1) dores along ed Iron (Coon in Tille Plants (Demarks)	Living Roc 4) d Soils (C6	ots (C3)	☐ Wa	ter-Stained Leaves (B9) (MI 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Ima omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR	LRA 1, 2,
Wetland Hydr Primary Indica Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat o Iron Depos Surface So Inundation Sparsely V Field Observa Surface Water	rology Indicators ators (minimum of /ater (A1) er Table (A2) a (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) oil Cracks (B6) a Visible on Aerial //egetated Concav ations: r Present?	Imagery ve Surface	(B7) e (B8) No ⊠	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leav A, and 4E (B11) vertebrate Sulfide O Rhizosphe of Reduce on Reduce Stressed blain in Re	es (B13) dor (C1) eres along ed Iron (Co on in Tille Plants (Demarks)	Living Roc 4) d Soils (C6	ots (C3)	☐ Wa	ter-Stained Leaves (B9) (MI 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Ima omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR	LRA 1, 2,
Wetland Hydr Primary Indica Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat o Iron Depos Surface So Inundation Sparsely V Field Observa Surface Water	rology Indicators ators (minimum of /ater (A1) er Table (A2) a (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) oil Cracks (B6) a Visible on Aerial //egetated Concavations: ar Present?	Imagery ve Surface Yes Yes Yes	(B7) e (B8) No 🗵	Water-Sta 1, 2, 4. Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leav A, and 4E (B11) vertebrate Sulfide O Rhizosphe of Reduce on Reduce Stressed blain in Re s): None	es (B13) dor (C1) eres along ed Iron (C- on in Tille Plants (D- ermarks)	Living Roo 4) d Soils (C6 1) (LRR A	ots (C3) (5)	☐ Wa	ter-Stained Leaves (B9) (MI 4A, and 4B) linage Patterns (B10) r-Season Water Table (C2) uration Visible on Aerial Ima omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR st-Heave Hummocks (D7)	LRA 1, 2, agery (C9)
Wetland Hydr Primary Indica Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat o Iron Depos Surface So Inundation Sparsely V Field Observa Surface Water Water Table P Saturation Pre (includes capil	rology Indicators ators (minimum of /ater (A1) er Table (A2) a (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) oil Cracks (B6) a Visible on Aerial /egetated Concavations: r Present? Present? esent?	Imagery ve Surface Yes Yes Yes Yes Yes Yes	(B7) e (B8) No 🔀 No 🔀 No 🗷	Water-Sta 1, 2, 4. Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leaven A, and 4E (B11) vertebrate Sulfide O Rhizosphe of Reduction Reduction Stressed Dain in Research Si: None Si:	es (B13) dor (C1) eres along ed Iron (C- on in Tille Plants (Demarks)	Living Roc 4) d Soils (C6 1) (LRR A	ots (C3) (S) (S)	☐ Wa ☐ Dra ☐ Dry ☐ Sat ☐ Gee ☐ Sha ☐ FAG ☐ Rai ☐ Fro	ter-Stained Leaves (B9) (MI 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Ima omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR	LRA 1, 2, agery (C9)
Wetland Hydr Primary Indica Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat o Iron Depos Surface So Inundation Sparsely V Field Observa Surface Water Water Table P Saturation Pre (includes capil	rology Indicators ators (minimum of /ater (A1) er Table (A2) a (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) oil Cracks (B6) a Visible on Aerial /egetated Concavations: ar Present? esent?	Imagery ve Surface Yes Yes Yes Yes Yes Yes	(B7) e (B8) No 🔀 No 🔀 No 🗷	Water-Sta 1, 2, 4. Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leaven A, and 4E (B11) vertebrate Sulfide O Rhizosphe of Reduction Reduction Stressed Dain in Research Si: None Si:	es (B13) dor (C1) eres along ed Iron (C- on in Tille Plants (Demarks)	Living Roc 4) d Soils (C6 1) (LRR A	ots (C3) (S) (S)	☐ Wa ☐ Dra ☐ Dry ☐ Sat ☐ Gee ☐ Sha ☐ FAG ☐ Rai ☐ Fro	ter-Stained Leaves (B9) (MI 4A, and 4B) linage Patterns (B10) r-Season Water Table (C2) uration Visible on Aerial Ima omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR st-Heave Hummocks (D7)	LRA 1, 2, agery (C9)
Primary Indica Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat o Iron Depos Surface So Inundation Sparsely V Field Observa Surface Water Water Table P Saturation Pre (includes capil	rology Indicators ators (minimum of /ater (A1) er Table (A2) a (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) oil Cracks (B6) a Visible on Aerial /egetated Concavations: r Present? Present? esent?	Imagery ve Surface Yes Yes Yes Yes Yes Yes	(B7) e (B8) No 🔀 No 🔀 No 🗷	Water-Sta 1, 2, 4. Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leaven A, and 4E (B11) vertebrate Sulfide O Rhizosphe of Reduction Reduction Stressed Dain in Research Si: None Si:	es (B13) dor (C1) eres along ed Iron (C- on in Tille Plants (Demarks)	Living Roc 4) d Soils (C6 1) (LRR A	ots (C3) (S) (S)	☐ Wa ☐ Dra ☐ Dry ☐ Sat ☐ Gee ☐ Sha ☐ FAG ☐ Rai ☐ Fro	ter-Stained Leaves (B9) (MI 4A, and 4B) linage Patterns (B10) r-Season Water Table (C2) uration Visible on Aerial Ima omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR st-Heave Hummocks (D7)	LRA 1, 2, agery (C9)
Wetland Hydr Primary Indica Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat o Iron Depos Inundation Sparsely V Field Observa Surface Water Water Table P Saturation Pre (includes capill Describe Reco	rology Indicators ators (minimum of /ater (A1) er Table (A2) a (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) oil Cracks (B6) a Visible on Aerial /egetated Concav ations: r Present? Present? esent? ellary fringe) orded Data (streat	Imagery ve Surface Yes Yes Yes Yes m gauge,	(B7) e (B8) No ☑ No ☑ no ☑ monitori	Water-Sta 1, 2, 4. Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp Depth (inche) Depth (inche) Depth (inche) ing well, aerial	ined Leaven A, and 4E (B11) vertebrate Sulfide Of Reduce on Reduction Stressed Dain in Research Si: None Si: None photos, p	es (B13) dor (C1) eres along ed Iron (C- on in Tille Plants (Demarks) e	Living Roc 4) d Soils (C6 1) (LRR A	ots (C3) S) Jand Hy if availa	☐ Wa ☐ Dra ☐ Dry ☐ Sat ☐ Gee ☐ Sha ☐ FAG ☐ Rai ☐ Fro	ter-Stained Leaves (B9) (MI 4A, and 4B) inage Patterns (B10) -Season Water Table (C2) uration Visible on Aerial Imagement (D3) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR st-Heave Hummocks (D7)	LRA 1, 2, agery (C9
Primary Indica Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat o Iron Depos Surface So Inundation Sparsely V Field Observa Surface Water Vater Table P Saturation Pre Includes capill Describe Reco	rology Indicators ators (minimum of /ater (A1) er Table (A2) a (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) oil Cracks (B6) a Visible on Aerial /egetated Concavations: r Present? Present? esent? ellary fringe) orded Data (streat	Imagery ve Surface Yes Yes Yes Yes m gauge,	(B7) e (B8) No 🗵 No 🗵 monitori d. Soil	Water-Sta 1, 2, 4. Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp Depth (inchedule)	ined Leaven A, and 4E (B11) vertebrate Sulfide Of Reduce on Reduct Stressed blain in Research None Spi: None Spi: None Sphotos, photos, pavated to A, and A,	es (B13) dor (C1) eres along ed Iron (C- on in Tille Plants (C- emarks) e- e- erevious in	Living Roc 4) d Soils (C6 11) (LRR A Wetl spections),	ots (C3) S) land Hy if availa	☐ Wa ☐ Dra ☐ Dry ☐ Sat ☐ Gee ☐ Sha ☐ FAG ☐ Rai ☐ Fro drology able:	ter-Stained Leaves (B9) (MI 4A, and 4B) linage Patterns (B10) r-Season Water Table (C2) uration Visible on Aerial Ima omorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR st-Heave Hummocks (D7)	A)

Project/Site: 1144.0027 E Vancouver E-Commerce	e Center	City/Cou	_{unty:} Camas	, Clark	Sampling Date: 04/06/2021
Applicant/Owner: Panattoni Development Company			-		· -
Investigator(s): Rachael Hyland, Jacob Layman			Section, To	ownship, Range: 29,02N	I,03E,SE
Landform (hillslope, terrace, etc.): hillslope		_Local r	elief (concave,	convex, none): none	Slope (%): 1
Subregion (LRR): A2	_ Lat: 45.	62799	4	Long: -122.459256	18 Datum: WGS 84
Soil Map Unit Name: Powell silt loam, 0 to 8 percent					
Are climatic / hydrologic conditions on the site typical for this					
Are Vegetation, Soil, or Hydrology sign	-			ormal Circumstances" pres	sent? Yes ☒ No ☐
Are Vegetation, Soil, or Hydrology natu	-			ed, explain any answers ir	
SUMMARY OF FINDINGS – Attach site map					
Hydrophytic Vogototics Procest2					
Hydrophytic Vegetation Present? Yes ☒ No ☐ Hydric Soil Present? Yes ☒ No ☐			the Sampled		
Wetland Hydrology Present? Yes ☐ No 🗵		w	ithin a Wetlar	nd? Yes □ N	o 🗷
Remarks:	-1	4-4:	4 14	D-41141	
Not all three wetland criteria met; only hydron northwest portion of the property.	phytic vege	tation a	nd hydric soils	s present. Data collected	in an upland area on the
northwest portion of the property.					
VEGETATION – Use scientific names of plant	ts.				
True Otrature (Plateires 00 ft)	Absolute		ant Indicator	Dominance Test works	sheet:
Tree Stratum (Plot size: 30 ft) 1. Fraxinus latifolia	% Cover 35	Yes	es? Status FACW	Number of Dominant Sp	
				That Are OBL, FACW, o	or FAC: <u>3</u> (A)
3				Total Number of Domina Species Across All Strat	
4			_		、,
	35	= Tota	al Cover	Percent of Dominant Sp That Are OBL, FACW, of	
Sapling/Shrub Stratum (Plot size: 15 ft)	70	Vaa	EAC		
1. Rubus aremiacus 2. Lonicera involucrata	70 5	Yes No	FAC FAC	Prevalence Index work	
3. Symphoricarpos albus	5	No	FAC		Multiply by: x 1 =
4	<u> </u>				x 2 =
5.					x 3 =
	80	= Tota	al Cover		x 4 =
Herb Stratum (Plot size: 5 ft)	40	V	540		x 5 =
1. Geum macrophyllum	40	Yes	FAC	Column Totals:	(A) (B)
2. Carex hoodii 3. Epilobium cilliatum	<u>5</u>	No No	<u>FACU</u> FACW	Prevalence Index	= B/A =
4. Urtica dioica	1	No	FAC	Hydrophytic Vegetatio	
5. Lotus corniculatus	1	No	FAC	☐ Rapid Test for Hydro	
6				■ Dominance Test is :	. ,
7				☐ Prevalence Index is	≤3.0 ¹
8					tations ¹ (Provide supporting
9				data in Remarks ☐ Wetland Non-Vascu	or on a separate sheet)
10					hytic Vegetation ¹ (Explain)
11				- , ,	and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft)	48	= Tota	al Cover	be present, unless distu	rbed or problematic.
1					
2			<u> </u>	Hydrophytic Vegetation	
	0	= Tota	al Cover		s⊠ No 🗆
% Bare Ground in Herb Stratum 2					
Remarks: Hydrophytic vegetation met through do	minance	test. /	Approximate	ely 50% moss was ob	served in the
herbaceous stratum.					

Depth	<u>Matrix</u>				dox Featur			_		
(inches)	Color (moist)	<u>%</u>	Cold	or (moist)	%	Type ¹	Loc ²	Textu		Remarks
0-12	10YR 3/2	100						SiLo		am with roots
12-16	10YR 4/1	30						SiLo	Silty Lo	am
12-16	10YR 4/2	65	10`	YR 3/4	5	<u>C</u>	M	SiLo	Silty Lo	am
		<u> </u>								
			_						·	
	Concentration, D=D						ed Sand G			=Pore Lining, M=Matrix.
	Indicators: (App	licable to				oted.)				blematic Hydric Soils ³ :
Histosol	, ,			Sandy Redox				_	2 cm Muck (A1	,
	pipedon (A2)			Stripped Matrix	. ,	=1) (oveen	4 MI D A 1\	=	Red Parent Ma	, ,
	istic (A3) en Sulfide (A4)			Loamy Mucky Loamy Gleyed			t WLKA 1)	L	.	Dark Surface (TF12)
	d Below Dark Surfa	aca (Δ11)		Depleted Matri		2)		L	J Otriei (Expiairi	III Remarks)
	ark Surface (A12)	100 (ATT)		Redox Dark S	. ,	3)		3	ndicators of hydro	ophytic vegetation and
	Mucky Mineral (S1)			Depleted Dark	`	,				ogy must be present,
	Gleyed Matrix (S4)			Redox Depres					-	d or problematic.
Restrictive	Layer (if present)	:		<u> </u>	· · · · · ·	-				·
Туре: <u></u> N o	one			_						
Depth (in	nches):			-				Hydr	ic Soil Present?	Yes ⊠ No 🗌
Remarks:										
Hydric soil	l criteria met the	rough in	dicato	r Δ11						
i iyano son	i ontona met un	ougii ii	idiodioi	, , , , , , ,						
Wetland Hy	drology Indicator									
Wetland Hy Primary Indi	drology Indicator		uired; ch							cators (2 or more required)
Wetland Hy Primary Indi Surface	ydrology Indicator icators (minimum o Water (A1)		uired; ch	☐ Water-Sta	ained Lea		except MLF	RA	☐ Water-Stain	ed Leaves (B9) (MLRA 1, 2,
Wetland Hy Primary Indi Surface High Wa	ydrology Indicator icators (minimum o Water (A1) ater Table (A2)		uired; ch	☐ Water-Sta	ained Lea 4 A, and 4		except MLF	RA	☐ Water-Stain	ed Leaves (B9) (MLRA 1, 2, 4B)
Wetland Hy Primary Indi ☐ Surface ☐ High Wa ☐ Saturation	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3)		uired; ch	☐ Water-Sta	ained Lea 4A, and 4 st (B11)	В)	except MLF	RA	☐ Water-Stain 4A, and ☐ Drainage Pa	ed Leaves (B9) (MLRA 1, 2, 4B) atterns (B10)
Wetland Hy Primary Indi Surface High Wa Saturati	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) Marks (B1)		uired; ch	☐ Water-Sta 1, 2, 4 ☐ Salt Crus ☐ Aquatic In	ained Lea 4 A, and 4 at (B11) nvertebrat	B) tes (B13)	except MLF	RA	Water-Stain 4A, and Drainage Pa Dry-Season	ed Leaves (B9) (MLRA 1, 2, 4B) atterns (B10) Water Table (C2)
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimen	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2)		uired; ch	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir	ained Lea 4A, and 4 it (B11) nvertebrat n Sulfide (es (B13) Odor (C1)			Water-Stain 4A, and Drainage Pa Dry-Season Saturation V	ed Leaves (B9) (MLRA 1, 2, 4B) atterns (B10) Water Table (C2) (risible on Aerial Imagery (C9)
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Drift Dep	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3)		uired; ch	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized	ained Lea 4A, and 4 It (B11) Invertebrat In Sulfide (Rhizosph	es (B13) Odor (C1) eres along	Living Roc		Water-Stain 4A, and Drainage Pa Dry-Season Saturation V Geomorphic	ed Leaves (B9) (MLRA 1, 2, 4B) atterns (B10) Water Table (C2) risible on Aerial Imagery (C9) Position (D2)
Wetland Hy Primary Indi Surface High Wa Saturatia Water M Sedimen Drift Dep Algal Ma	vdrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)		uired; ch	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence	ained Lea 4A, and 4 it (B11) invertebrat in Sulfide (Rhizosph e of Reduc	tes (B13) Odor (C1) eres along ced Iron (C	Living Roo 4)	ots (C3)	Water-Stain 4A, and Drainage Pa Dry-Season Saturation V	ed Leaves (B9) (MLRA 1, 2, 4B) atterns (B10) Water Table (C2) risible on Aerial Imagery (C9) Position (D2)
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Drift Dep Algal Ma	vdrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)		uired; ch	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir	ained Lea 4A, and 4 It (B11) Invertebrat In Sulfide (I) Rhizosph It of Reduct In Reduct In Reduct In Reduct	es (B13) Odor (C1) eres along ced Iron (C- tion in Tille	Living Roo 4) d Soils (C6	ots (C3)	Water-Stain 4A, and Drainage Pa Dry-Season Saturation V Geomorphic	ed Leaves (B9) (MLRA 1, 2, 4B) atterns (B10) Water Table (C2) risible on Aerial Imagery (C9) Position (D2) uitard (D3)
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Drift Dep Algal Ma	vdrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)		uired; ch	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir	ained Lea 4A, and 4 It (B11) Invertebrat In Sulfide (I) Rhizosph It of Reduct In Reduct In Reduct In Reduct	es (B13) Odor (C1) eres along ced Iron (C- tion in Tille	Living Roo 4)	ots (C3)	Water-Stain 4A, and Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu FAC-Neutra	ed Leaves (B9) (MLRA 1, 2, 4B) atterns (B10) Water Table (C2) risible on Aerial Imagery (C9) Position (D2) uitard (D3)
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	vdrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	f one requ		Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir	ained Lea 4A, and 4 it (B11) nvertebrate Sulfide (Rhizosph of Reduct on Reduct or Stresse	B) des (B13) Odor (C1) eres along ded Iron (C- tion in Tille d Plants (D	Living Roo 4) d Soils (C6	ots (C3)	Water-Stain 4A, and Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu FAC-Neutra Raised Ant	ed Leaves (B9) (MLRA 1, 2, 4B) atterns (B10) Water Table (C2) (isible on Aerial Imagery (C9) Position (D2) uitard (D3) I Test (D5)
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Algal Ma Iron Dep Surface Inundati Sparsely	widrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) widres (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria by Vegetated Concar	f one requ	r (B7)	Water-Start, 2, 4 1, 2, 4 Salt Crus Aquatic In Hydroger Oxidized Presence Recent Ir Stunted of	ained Lea 4A, and 4 it (B11) nvertebrate Sulfide (Rhizosph of Reduct on Reduct or Stresse	B) des (B13) Odor (C1) eres along ded Iron (C- tion in Tille d Plants (D	Living Roo 4) d Soils (C6	ots (C3)	Water-Stain 4A, and Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu FAC-Neutra Raised Ant	ed Leaves (B9) (MLRA 1, 2, 4B) atterns (B10) Water Table (C2) (sible on Aerial Imagery (C9) Position (D2) uitard (D3) I Test (D5) Mounds (D6) (LRR A)
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	widrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) widres (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria by Vegetated Concar	f one requ	r (B7)	Water-Start, 2, 4 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted of Other (Ex	ained Lea 4A, and 4 it (B11) nvertebrate in Sulfide (Rhizosph e of Reduct on Reduct or Stresse xplain in R	ees (B13) Odor (C1) eres along ced Iron (Cotion in Tille d Plants (Cotemarks)	Living Roo 4) d Soils (C6	ots (C3)	Water-Stain 4A, and Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu FAC-Neutra Raised Ant	ed Leaves (B9) (MLRA 1, 2, 4B) atterns (B10) Water Table (C2) (sible on Aerial Imagery (C9) Position (D2) uitard (D3) I Test (D5) Mounds (D6) (LRR A)
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely	widrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) widres (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria by Vegetated Concar	f one requ	r (B7)	Water-Start, 2, 4 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted of Other (Ex	ained Lea 4A, and 4 it (B11) nvertebrate in Sulfide (Rhizosph ie of Reduct on Reduct on Reduct or Stresse cplain in R es): Non	tes (B13) Odor (C1) eres along ced Iron (Cation in Tille d Plants (Catemarks)	Living Roo 4) d Soils (C6	ots (C3)	Water-Stain 4A, and Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu FAC-Neutra Raised Ant	ed Leaves (B9) (MLRA 1, 2, 4B) atterns (B10) Water Table (C2) (sible on Aerial Imagery (C9) Position (D2) uitard (D3) I Test (D5) Mounds (D6) (LRR A)
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely	wdrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) where (B1) arts (B1) arts (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria by Vegetated Concauter Present?	l Imagery	r (B7) ce (B8)	Water-Start, 2, 4 1, 2, 4 Salt Crus Aquatic In Hydroger Oxidized Presence Recent In Stunted of Other (Ex	ained Lea 4A, and 4 it (B11) nvertebrate in Sulfide C Rhizosph is of Reduct on Reduct on Reduct or Stresse kplain in R es): Non Non	tes (B13) Ddor (C1) eres along ced Iron (C- tion in Tille d Plants (C- temarks)	Living Roo 4) d Soils (C6	ots (C3)	Water-Stain 4A, and Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu FAC-Neutra Raised Ant	ed Leaves (B9) (MLRA 1, 2, 4B) atterns (B10) Water Table (C2) (sible on Aerial Imagery (C9) Position (D2) uitard (D3) I Test (D5) Mounds (D6) (LRR A)
Wetland Hy Primary Indi Surface High Wa Saturatie Water M Sedimen Algal Ma Iron Dep Surface Inundati Sparsely Field Obser Surface Wa Water Table Saturation F	widrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria by Vegetated Conca rvations: ater Present? Present?	I Imagery	e (B7) ce (B8) No 🗵	Water-Start, 2, 4 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted of Other (Ex	ained Lea 4A, and 4 it (B11) nvertebrate in Sulfide C Rhizosph is of Reduct on Reduct on Reduct or Stresse kplain in R es): Non Non	tes (B13) Ddor (C1) eres along ced Iron (C- tion in Tille d Plants (C- temarks)	Living Roo 4) d Soils (C6 11) (LRR A	ots (C3)	Water-Stain 4A, and Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu FAC-Neutra Raised Ant	ed Leaves (B9) (MLRA 1, 2, 4B) atterns (B10) Water Table (C2) Sisible on Aerial Imagery (C9) Position (D2) Sitard (D3) I Test (D5) Mounds (D6) (LRR A) Hummocks (D7)
Primary Indi Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely Field Obser Surface Water Table Saturation F (includes ca	ydrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) at or Crust (B4) posits (B5) soil Cracks (B6) ion Visible on Aeria y Vegetated Concarvations: ter Present? Present? pipilary fringe)	Il Imagery ve Surfac Yes Yes Yes Yes Yes Yes	(B7) ce (B8) No 🗵 No 🗵 No 🗵	Water-Start, 2, 4 1, 2, 4 Salt Crus Aquatic In Hydroger Oxidized Presence Recent In Stunted of Other (Ex	ained Lea 4A, and 4 it (B11) nvertebrate in Sulfide C Rhizosph is of Reduct on Reduct on Reduct or Stresse kplain in R es): Non es): Non Non	tes (B13) Ddor (C1) eres along ced Iron (C- tion in Tille d Plants (C- temarks)	Living Roo 4) d Soils (C6 01) (LRR A	ots (C3) s) land Hyd	Water-Stain 4A, and Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu FAC-Neutra Raised Ant Frost-Heave	ed Leaves (B9) (MLRA 1, 2, 4B) atterns (B10) Water Table (C2) Sisible on Aerial Imagery (C9) Position (D2) Sitard (D3) I Test (D5) Mounds (D6) (LRR A) Hummocks (D7)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimen Algal Ma Iron Dep Iron Dep Iron Dep Surface Inundati Sparsely Field Obset Surface Water Table Saturation F (includes ca	widrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria by Vegetated Conca rvations: ater Present? Present?	Il Imagery ve Surfac Yes Yes Yes Yes Yes Yes	(B7) ce (B8) No 🗵 No 🗵 No 🗵	Water-Start, 2, 4 1, 2, 4 Salt Crus Aquatic In Hydroger Oxidized Presence Recent In Stunted of Other (Ex	ained Lea 4A, and 4 it (B11) nvertebrate in Sulfide C Rhizosph is of Reduct on Reduct on Reduct or Stresse kplain in R es): Non es): Non Non	tes (B13) Ddor (C1) eres along ced Iron (C- tion in Tille d Plants (C- temarks)	Living Roo 4) d Soils (C6 1) (LRR A	ots (C3) s) land Hyd	Water-Stain 4A, and Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu FAC-Neutra Raised Ant Frost-Heave	ed Leaves (B9) (MLRA 1, 2, 4B) atterns (B10) Water Table (C2) Sisible on Aerial Imagery (C9) Position (D2) Sitard (D3) I Test (D5) Mounds (D6) (LRR A) Hummocks (D7)
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Algal Ma Iron Dep Surface Inundati Sparsely Field Obser Surface Water Table Saturation F (includes ca	ydrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) at or Crust (B4) posits (B5) soil Cracks (B6) ion Visible on Aeria y Vegetated Concarvations: ter Present? Present? pipilary fringe)	Il Imagery ve Surfac Yes Yes Yes Yes Yes Yes	(B7) ce (B8) No 🗵 No 🗵 No 🗵	Water-Start, 2, 4 1, 2, 4 Salt Crus Aquatic In Hydroger Oxidized Presence Recent In Stunted of Other (Ex	ained Lea 4A, and 4 it (B11) nvertebrate in Sulfide C Rhizosph is of Reduct on Reduct on Reduct or Stresse kplain in R es): Non es): Non Non	tes (B13) Ddor (C1) eres along ced Iron (C- tion in Tille d Plants (C- temarks)	Living Roo 4) d Soils (C6 1) (LRR A	ots (C3) s) land Hyd	Water-Stain 4A, and Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu FAC-Neutra Raised Ant Frost-Heave	ed Leaves (B9) (MLRA 1, 2, 4B) atterns (B10) Water Table (C2) Sisible on Aerial Imagery (C9) Position (D2) Sitard (D3) I Test (D5) Mounds (D6) (LRR A) Hummocks (D7)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Algal Ma Iron Dep Iron Dep Iron Dep Surface Inundati Sparsely Field Obsel Surface Wa Water Table Saturation F (includes ca Describe Re	rdrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria by Vegetated Concar rvations: ater Present? Present? apillary fringe) ecorded Data (streat	Il Imagery ve Surfac Yes Yes Yes Am gauge	No 🗵 No 🗵 No 🗵 No 🗵	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted C Other (Ex Depth (inche Depth (inche ring well, aeria	ained Lea 4A, and 4 it (B11) nvertebrat in Sulfide C Rhizosph ie of Reduct on Reduct on Reduct or Stresse explain in R es): Non es): Non li photos,	tes (B13) Ddor (C1) eres along ced Iron (C- tion in Tille d Plants (C- temarks) e e e previous in	Living Roo 4) d Soils (C6 01) (LRR A) Wetl	ots (C3) S) Jand Hydif availa	Water-Stain 4A, and Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu FAC-Neutra Raised Ant Frost-Heave	ed Leaves (B9) (MLRA 1, 2, 4B) atterns (B10) Water Table (C2) (isible on Aerial Imagery (C9) Position (D2) uitard (D3) I Test (D5) Mounds (D6) (LRR A) Hummocks (D7) ? Yes No \(\)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimen Algal Ma Iron Dep Iron Dep Inundati Sparsely Field Obsel Surface Wa Water Table Saturation F (includes ca Describe Re	widrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria by Vegetated Conca rvations: ater Present? Present? Present? apillary fringe) pecorded Data (streat	I Imagery ve Surface Yes Yes Yes Yes am gauge	No 🗵 No 🗵 No 🗵 No 🗵	Water-Stanta 1, 2, 4 1, 2, 4 Salt Crus Aquatic In Hydroger Oxidized Presence Recent In Stunted of Other (Ex Depth (incher Depth (incher) Depth (incher) Depth (incher) Depth (incher) Depth (incher) Depth (incher)	ained Lea 4A, and 4 it (B11) nvertebrate in Sulfide C Rhizosph is of Reduct on Reduct on Reduct or Stresse explain in R es): Non es): Non li photos, i	tes (B13) Ddor (C1) eres along ced Iron (C- tion in Tille d Plants (C- temarks) ee e e	Living Roo 4) d Soils (C6 01) (LRR A) Wetl	ots (C3) (S) (and Hydir availates. Date (C3)	Water-Stain 4A, and Drainage Pa Dry-Season Saturation V Geomorphic Shallow Aqu FAC-Neutra Raised Ant Frost-Heave	ed Leaves (B9) (MLRA 1, 2, 4B) atterns (B10) Water Table (C2) Sisible on Aerial Imagery (C9) Position (D2) Sitard (D3) I Test (D5) Mounds (D6) (LRR A) Hummocks (D7)

Project/Site: 1144.0027 E Vancouver E-Commerc	e Center	City/C	ounty	: Camas	, Clark	Sampling Date: 04/06/2021
Applicant/Owner: Panattoni Development Company		-				· -
Investigator(s): Jacob Layman				Section, To	ownship, Range: 29, 02 i	N, 03E, SE
Landform (hillslope, terrace, etc.): Hillslope						
Subregion (LRR): A2						
Soil Map Unit Name: Hesson clay loam, 0 to 8 percentage						
Are climatic / hydrologic conditions on the site typical for this					f no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology sign	-				ormal Circumstances" pres	sent? Yes ☒ No ☐
Are Vegetation, Soil, or Hydrology natu	-				ed, explain any answers ir	
SUMMARY OF FINDINGS – Attach site map						
Hydrophytic Vegetation Present? Yes ☒ No ☐						
Hydric Soil Present? Yes ☒ No ☐				e Sampled		_
Wetland Hydrology Present? Yes ☒ No ☐			with	in a Wetlar	nd? Yes ເເ	0 🗌
Remarks:		I				
All three wetland criteria met. Data	collecte	d on	the	eastern	portion of the prop	erty, inside Wetland C.
VEGETATION – Use scientific names of plan	ts.					
	Absolute				Dominance Test works	sheet:
Tree Stratum (Plot size: 30 ft) 1	% Cover				Number of Dominant Sp That Are OBL, FACW, o	
2					Total Number of Domina	ant
3					Species Across All Stra	
4					Percent of Dominant Sp	pacies
One line of Ohmula Otto Loren (Dietaine 45 (t)	0	= To	tal C	over	That Are OBL, FACW, of	
Sapling/Shrub Stratum (Plot size: 15 ft)					Prevalence Index work	rshoot:
1 2						Multiply by:
3						x 1 =
4						x 2 =
5.						x 3 =
	0		tal C		FACU species	x 4 =
Herb Stratum (Plot size: <u>5 ft</u>)	25	Va	_	ΓΛC	UPL species	x 5 =
1. Holcus lanatus	35 25	Yes	_	FAC FACW	Column Totals:	(A) (B)
2. Juncus effusus 3. Poa pratensis	15	Yes No	_	FAC	Prevalence Index	= B/A =
4. Alopecurus aequalis	10	No	_	OBL	Hydrophytic Vegetation	
5. Schedonorus arundinaceus	10	No	_	FAC	Rapid Test for Hydro	
6					➤ Dominance Test is :	· ·
7					☐ Prevalence Index is	≤3.0 ¹
8					☐ Morphological Adap	tations ¹ (Provide supporting
9						or on a separate sheet)
10					Wetland Non-Vascu	
11.					_ , ,	hytic Vegetation ¹ (Explain)
Woody Vine Stratum (Plot size: 30 ft)	95	= To	tal C	over	be present, unless distu	and wetland hydrology must irbed or problematic.
1					Unada a minuri -	
2					Hydrophytic Vegetation	
8/8 8 11 11 1 2 1 5	0	= To	tal C	over		s⊠ No□
% Bare Ground in Herb Stratum 5						
Remarks: Hydrophytic vegetation criteria met three	ough dom	ninan	ce te	est.		
						ļ

(inches)	Color (moist)	%	Colo	r (moist)	lox Featur %	Type ¹	Loc ²	Texture	Remarks
0-4	10YR 2/2	100		-	-	<u> </u>	-	-	Silt Clay Loam
4-11	7.5 YR 3/2	93	2.5	YR 3/4	7	С	M	SiCILo	Clay Loam
11-16	7.5 YR 3/3	98	5 Y	'R 4/4	2	С	С	GrSaClLo	Gravelly, Sandy, Clay Loam
							. <u></u>		
	oncentration, D=De Indicators: (Appl						ted Sand G		ocation: PL=Pore Lining, M=Matrix. ors for Problematic Hydric Soils ³ :
Histosol				Sandy Redox		ŕ		□ 2 c	m Muck (A10)
	ipedon (A2)			Stripped Matrix					d Parent Material (TF2)
Black His				_oamy Mucky	, ,	1) (excep	t MLRA 1)		y Shallow Dark Surface (TF12)
	n Sulfide (A4)			_oamy Gleyed			,		er (Explain in Remarks)
	l Below Dark Surfa	ce (A11)		Depleted Matri		_,			(=- р-з
	rk Surface (A12)	(, , , ,		Redox Dark Si	. ,	3)		3Indicat	ors of hydrophytic vegetation and
_	lucky Mineral (S1)			Depleted Dark	,	•			and hydrology must be present,
	leyed Matrix (S4)			Redox Depres					ss disturbed or problematic.
	Layer (if present):	<u> </u>		, 2 op100	(1 0)	•		4.110	
Туре: <u>No</u>				-					
Depth (inc	ches):							Hydric So	il Present? Yes ⊠ No □
emarks:									
ydric soil	criteria met thr	ough in	dicator	F6.					
/DROLO	GY		dicator	F6.					
YDROLO	GY drology Indicator	s:			ply)			Seco	ondary Indicators (2 or more required)
/DROLO	GY drology Indicator cators (minimum of	s:		eck all that app		ves (B9) (except ML		ondary Indicators (2 or more required) Vater-Stained Leaves (B9) (MLRA 1, 2
OROLO Vetland Hydrimary Indical Surface N	GY drology Indicator	s:		eck all that app			except ML		
'DROLO 'etland Hyo rimary Indio] Surface \ I High War	GY drology Indicators cators (minimum of Water (A1) ter Table (A2)	s:		eck all that app	ained Lea 4A, and 4 l		except ML	RA 🗆 \	Vater-Stained Leaves (B9) (MLRA 1, 2
'DROLO 'etland Hyo rimary Indio] Surface \ I High War	GY drology Indicator cators (minimum of Water (A1) ter Table (A2) on (A3)	s:		eck all that app Water-Sta	ained Lea 4A, and 4 l t (B11)	В)	except ML	RA U	Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)
'DROLO 'etland Hydrimary Indic Surface N High War Saturatio Water Ma	GY drology Indicator cators (minimum of Water (A1) ter Table (A2) on (A3)	s:		eck all that app Water-Sta 1, 2, 4	ained Lear 4A, and 4I t (B11) nvertebrat	B) es (B13)	except ML	RA	Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2)
/DROLO /etland Hydrimary Indic] Surface Note: High Ward Staturation] Water Mater M	GY drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2)	s:		eck all that app Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger	ained Lear 4A, and 4I t (B11) nvertebrate n Sulfide C	B) es (B13) Odor (C1)		RA	Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS
/DROLO /etland Hydrimary Indic Surface \(\) High Wat Saturatio Water Mater Ma	GY drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) oosits (B3)	s:		eck all that app Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized	ained Lead 4A, and 4 t (B11) nivertebrate Sulfide C Rhizospho	es (B13) Odor (C1) eres along	ı Living Roo	RA	Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS) Geomorphic Position (D2)
/DROLO /etland Hydrimary Indic Surface \(\) High War Saturatio Water Ma Sedimen Drift Dep Algal Ma	GY drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) ot Deposits (B2) osits (B3) t or Crust (B4)	s:		eck all that app Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence	ained Lead 4A, and 4I t (B11) nivertebrate n Sulfide C Rhizosphe e of Reduce	es (B13) Odor (C1) eres along ed Iron (C	ı Living Roo 4)	RA	Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS) Geomorphic Position (D2) Shallow Aquitard (D3)
/DROLO /etland Hydrimary Indic] Surface \(\) High War] Saturatio] Water Ma] Sedimen] Drift Dep] Algal Ma] Iron Depo	drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) t or Crust (B4) osits (B5)	s:		eck all that app Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir	ained Lear 4A, and 4I t (B11) nivertebrate n Sulfide C Rhizosphe e of Reduct on Reduct	es (B13) Odor (C1) eres along ed Iron (C	J Living Roo 4) ed Soils (Cé	RA	Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
/DROLO /etland Hydrimary Indic Surface Note: High Water Mater Mat	GY drology Indicator cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6)	s: f one requ	uired; che	eck all that app Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir	ained Leat 4A, and 4I t (B11) nvertebrat Sulfide C Rhizospho of Reduct on Reduct or Stressed	es (B13) Odor (C1) eres along ed Iron (C tion in Tille d Plants (E	ı Living Roo 4)	RA	Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
/DROLO /etland Hydrimary Indic Surface Nater Mail Sedimen Drift Dep Algal Mail Iron Depoil Surface Salinundation	GY drology Indicator cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aeria	s: f one requ	uired; che	eck all that app Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir	ained Leat 4A, and 4I t (B11) nvertebrat Sulfide C Rhizospho of Reduct on Reduct or Stressed	es (B13) Odor (C1) eres along ed Iron (C tion in Tille d Plants (E	J Living Roo 4) ed Soils (Cé	RA	Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
/DROLO /etland Hydrimary Indic Surface \(\) High Water Ma Sedimen Drift Dep Algal Ma Iron Depi Surface \(\) Inundatio Sparsely	drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) tt Deposits (B2) oosits (B3) t or Crust (B4) oosits (B5) Soil Cracks (B6) on Visible on Aeria Vegetated Conca	s: f one requ	uired; che	eck all that app Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir	ained Leat 4A, and 4I t (B11) nvertebrat Sulfide C Rhizospho of Reduct on Reduct or Stressed	es (B13) Odor (C1) eres along ed Iron (C tion in Tille d Plants (E	J Living Roo 4) ed Soils (Cé	RA	Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Verland Hydrimary India Surface V High War Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Depo Surface S Inundatic Sparsely ield Observield	drology Indicators cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aeria Vegetated Concavations:	s: f one requ I Imagery ve Surfac	uired; che	eck all that app Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted of	ained Lear 4A, and 4I t (B11) nvertebrat n Sulfide C Rhizospho e of Reduct on Reduct or Stressed cplain in R	es (B13) Dodor (C1) eres along ed Iron (C tion in Tille d Plants (E emarks)	J Living Roo 4) ed Soils (Cé	RA	Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
YDROLO Vetland Hyd virimary Indic Surface N High Wat Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Depe Surface S Inundatic Sparsely ield Observator	GY drology Indicator cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aeria Vegetated Conca vations: er Present?	s: f one requ I Imagery ve Surfac	uired; che (B7) e (B8)	eck all that app Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted of Other (Ex	ained Lear 4A, and 4I t (B11) nvertebrat n Sulfide C Rhizospho e of Reduct on Reduct or Stressed xplain in R es): None	es (B13) Dodor (C1) eres along ed Iron (C tion in Tille d Plants (E emarks)	J Living Roo 4) ed Soils (Cé	RA	Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
YDROLO Vetland Hyd Primary Indic Surface N Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Depo Surface S Inundatic Sparsely Field Observ Surface Water	GY drology Indicator cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) tt Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aeria Vegetated Conca vations: er Present? Present?	s: f one requ I Imagery ve Surfac Yes Yes Yes X	(B7) e (B8) No ⊠ No □	eck all that app Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted of Other (Ex	ained Lear 4A, and 4I t (B11) nvertebrat n Sulfide C Rhizospho e of Reduct on Reduct or Stressed xplain in R es): Non- es): 5"	es (B13) Dodor (C1) eres along ed Iron (C tion in Tille d Plants (E emarks)	J Living Roo 4) ed Soils (Co 01) (LRR A	RA	Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
YDROLO Vetland Hyd Primary Indic Surface N High Wat Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Depe Surface S Inundatic Sparsely Field Observ Surface Water Table Saturation Princludes cap	GY drology Indicator cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aeria Vegetated Conca vations: er Present? Present? present?	s: f one requ I Imagery ve Surfac Yes Yes Yes Yes Yes Yes Yes	(B7) Pe (B8) No 🖾 No 🗆	eck all that app Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted of Other (Ex	ained Lear 4A, and 4I t (B11) nvertebrat n Sulfide C Rhizospho e of Reduct on Reduct or Stressed xplain in R es): Non- es): 5" es): 2"	es (B13) Dodor (C1) eres along ed Iron (C tion in Tille d Plants (E emarks)	J Living Roo 4) ed Soils (Ce 01) (LRR A	RA	Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
YDROLO Vetland Hyd Primary Indic Surface N High Wat Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Depe Surface S Inundatic Sparsely Field Observ Surface Water Table Saturation Princludes cap	GY drology Indicator cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aeria Vegetated Conca vations: er Present? Present?	s: f one requ I Imagery ve Surfac Yes Yes Yes Yes Yes Yes Yes	(B7) Pe (B8) No 🖾 No 🗆	eck all that app Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted of Other (Ex	ained Lear 4A, and 4I t (B11) nvertebrat n Sulfide C Rhizospho e of Reduct on Reduct or Stressed xplain in R es): Non- es): 5" es): 2"	es (B13) Dodor (C1) eres along ed Iron (C tion in Tille d Plants (E emarks)	J Living Roo 4) ed Soils (Ce 01) (LRR A	RA	Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
YDROLO Vetland Hyd Primary Indic Surface V High War Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Depo Surface S Inundatic Sparsely Field Observ Surface Water Vater Table Saturation Princludes cap Describe Rec	GY drology Indicator cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aeria Vegetated Conca vations: er Present? Present? present?	s: f one requ I Imagery ve Surfac Yes Yes Yes Yes Yes Yes Yes	(B7) Pe (B8) No 🖾 No 🗆	eck all that app Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted of Other (Ex	ained Lear 4A, and 4I t (B11) nvertebrat n Sulfide C Rhizospho e of Reduct on Reduct or Stressed xplain in R es): Non- es): 5" es): 2"	es (B13) Dodor (C1) eres along ed Iron (C tion in Tille d Plants (E emarks)	J Living Roo 4) ed Soils (Ce 01) (LRR A	RA	Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (CS) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
/DROLO /etland Hydrimary Indic Surface Now High Ware Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Depe Surface Solution Procludes cape describe Recommendation Procludes cape describe Recommen	GY drology Indicator cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aeria Vegetated Conca vations: er Present? Present? present?	s: f one required from the second requirement of the second requiremen	(B7) e (B8) No 🔀 No 🗆 , monitor	eck all that app Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted of Other (Ex	ained Lear 4A, and 4I t (B11) nvertebrat n Sulfide C Rhizospho of Reduct on Reduct or Stressed xplain in R Bes): Non- Bes): 2" I photos, p	es (B13) Dodor (C1) eres along ed Iron (C tion in Tille d Plants (E emarks) e	Living Roo 4) ed Soils (Ce 01) (LRR A Wet	RA	Vater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) Orainage Patterns (B10) Ory-Season Water Table (C2) Saturation Visible on Aerial Imagery (Cs Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

Project/Site: 1144.0027 E Vancouver E-Commerc	e Center (City/Cou	_{nty:} Camas	, Clark	Sam	pling Date: 04/	06/2021
Applicant/Owner: Panattoni Development Company	y, Inc.			State: WA	Sam	pling Point: DF	Դ-11u
Investigator(s): Jacob Layman			_ Section, To	ownship, Range: 2	29, 02N, 03	E, SE	
Landform (hillslope, terrace, etc.): Hillslope							%): <u>5%</u>
Subregion (LRR): A2	Lat: 45.	62570	5	Long: -122.45	602020	Datum: \	NGS 84
Soil Map Unit Name: Hesson clay loam, 0 to 8 perce	ent slopes	5		NWI cl	lassification: _	N/A	
Are climatic / hydrologic conditions on the site typical for this	s time of yea	ır? Yes [× No □ (I	f no, explain in Rer	marks.)		
Are Vegetation, Soil, or Hydrology sign	nificantly dist	turbed?	Are "No	ormal Circumstance	es" present?	Yes 🗵 No 🗆]
Are Vegetation, Soil, or Hydrology natu	rally probler	natic?	(If need	ed, explain any ans	swers in Rem	arks.)	
SUMMARY OF FINDINGS - Attach site map	showing	sampli	ing point l	ocations, trans	sects, imp	ortant featu	res, etc.
Hydrophytic Vegetation Present? Yes ☒ No ☐							
Hydric Soil Present? Yes ☐ No 🗵			the Sampled		- C N- S		
Wetland Hydrology Present? Yes ☐ No 🗵		WI	thin a Wetlar	nd? Yes	s □ No 🗵		
Remarks: Not all three wetland criteria not met; only hy outside Wetland C.	drophytic v	egetatio	n present. Da	ata collected on th	e eastern por	tion of the prop	perty
VEGETATION - Use scientific names of plan	ts.						
<u>Tree Stratum</u> (Plot size: <u>30 ft</u>) 1	% Cover	Species		Dominance Tes Number of Domi That Are OBL, F	inant Species		(A)
2				Total Number of Species Across	Dominant	2	
4	_	= Total		Percent of Domi		: <u>100%</u>	_ (A/B)
Sapling/Shrub Stratum (Plot size: 15 ft) 1				Prevalence Inde	ex worksheef	<u> </u>	
2.						Multiply by:	:
3.				OBL species			
4				FACW species			
5				FAC species			
	0	= Total	Cover	FACU species		x 4 =	
Herb Stratum (Plot size: 5 ft)				UPL species		x 5 =	
1. Holcus lanatus	<u>40</u> 30	Yes	FAC FAC	Column Totals:		(A)	(B)
2. Poa pratensis 3. Alopecurus pratensis	10	No	FAC FAC	Prevalence	a Index – R/A	· =	
Juncus effusus	5	No	FACW	Hydrophytic Ve		·	-
				Rapid Test fo	_		
5				✓ Dominance	, , ,	o vegetation	
6				☐ Prevalence I			
7						s1 (Provide supp	oorting
8						a separate she	
9				☐ Wetland Nor	n-Vascular Pla	ants ¹	
10 11				☐ Problematic	Hydrophytic V	/egetation1 (Exp	olain)
Woody Vine Stratum (Plot size: 30 ft)	85	= Total	Cover	¹ Indicators of hyd be present, unles			jy must
1				Hydrophytic			
2				Vegetation	<u>–</u>	–	
% Bare Ground in Herb Stratum 15	0	= Total	Cover	Present?	Yes ⊠	No 🗌	
Remarks: Hydrophytic vegetation criteria met thro	ough dom	inanco	toet	I.			
r iyaropriyilo vegetalion ontena met tilii	cagii aoiii	iii iai ice	iosi.				

Depth	Matrix		— 		ox Features			_		- .	
(inches)	Color (moist)	<u>%</u>	Colc	or (moist)	%	Type ¹	Loc ²	Texture	<u>e</u> _	Remarks	
0-16	7.5 YR 3/2	100		-						Clay Loam	
•	_							-			
								-			
	-										
	_							-			
	-							-	 .		
	Concentration, D=D						ed Sand G			ation: PL=Pore Lining, M=Matri	
-	Indicators: (App	licable to				ed.)				s for Problematic Hydric Soil	S°:
Histosol	• •			Sandy Redox (Muck (A10)	
	pipedon (A2)			Stripped Matrix	` '	\	MIDAA)			Parent Material (TF2)	
	istic (A3) en Sulfide (A4)			Loamy Mucky Loamy Gleyed	,		(WILKA 1)		-	Shallow Dark Surface (TF12) (Explain in Remarks)	
	d Below Dark Surfa	ace (Δ11)		Depleted Matri	, ,	'			Other	(Explain in Remarks)	
	ark Surface (A12)	200 (ATT)		Redox Dark Su	` '			³ In	ndicator	s of hydrophytic vegetation and	
	Mucky Mineral (S1)			Depleted Dark		7)		•••		d hydrology must be present,	
-	Gleyed Matrix (S4)			Redox Depress		,				disturbed or problematic.	
	Layer (if present)	:		· · · · · · · · · · · · · · · · · · ·	. ,					<u> </u>	
Type: No	one			_							
Depth (ir	nches):_ 			-				Hvdri	c Soil F	Present? Yes ☐ No 🗵	
Remarks:								,			
Wetland Hy	drology Indicator										
Wetland Hy			uired; che						Second	dary Indicators (2 or more requi	red)
Wetland Hy Primary Indi	ydrology Indicator icators (minimum o Water (A1)		uired; che	☐ Water-Sta	ained Leave	, , ,	xcept MLF		☐ Wa	ter-Stained Leaves (B9) (MLRA	
Wetland Hy Primary Indi Surface High Wa	ydrology Indicator icators (minimum o Water (A1) ater Table (A2)		uired; ch	☐ Water-Sta	ained Leave	, , ,	xcept MLF		☐ Wa	ter-Stained Leaves (B9) (MLRA	
Wetland Hy Primary Indi Surface High Wa	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3)		uired; ch	☐ Water-Sta	ained Leave	, , ,	xcept MLF		☐ Wa	ter-Stained Leaves (B9) (MLRA	
Wetland Hy Primary Indi Surface High Wa Saturati Water M	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) Marks (B1)		uired; che	☐ Water-Sta 1, 2, 4 ☐ Salt Crust ☐ Aquatic In	ained Leave A, and 4B) (B11) (vertebrates) s (B13)	xcept MLF	RA	☐ Wa	ter-Stained Leaves (B9) (MLRA 4A, and 4B) ainage Patterns (B10) r-Season Water Table (C2)	A 1, 2,
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimen	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2)		uired; chi	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen	ined Leave A, and 4B (B11) evertebrates Sulfide Od	s (B13) dor (C1)	·	RA	☐ Wa	ter-Stained Leaves (B9) (MLRA 4A, and 4B) hinage Patterns (B10) r-Season Water Table (C2) curation Visible on Aerial Image	A 1, 2,
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3)		uired; cho	Water-Sta 1, 2, 4 Salt Crust Aquatic Ir Hydrogen Oxidized	And 4B) (B11) (B15) (B16) (B16) (B17) (Calculate of the column of the co	s (B13) dor (C1) res along	Living Roo	RA	☐ Wa	ter-Stained Leaves (B9) (MLRA 4A, and 4B) hinage Patterns (B10) r-Season Water Table (C2) huration Visible on Aerial Image comorphic Position (D2)	A 1, 2,
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimel Drift Del Algal Ma	vdrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)		uired; cho	Water-Sta 1, 2, 4 Salt Crust Aquatic Ir Hydrogen Oxidized Presence	ined Leave A, and 4B, (B11) evertebrates Sulfide Od Rhizospher of Reduce	s (B13) dor (C1) res along d Iron (C4	Living Roo 4)	RA	☐ Wa	ter-Stained Leaves (B9) (MLRA 4A, and 4B) ainage Patterns (B10) r-Season Water Table (C2) curation Visible on Aerial Image comorphic Position (D2) allow Aquitard (D3)	A 1, 2,
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimel Drift De Algal Ma	vdrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)		uired; cho	Water-Sta 1, 2, 4 Salt Crust Aquatic Ir Hydrogen Oxidized Presence	And 4B) (B11) (B15) (B16) (B16) (B17) (Calculate of the column of the co	s (B13) dor (C1) res along d Iron (C4	Living Roo 4)	RA	☐ Wa	ter-Stained Leaves (B9) (MLRA 4A, and 4B) ainage Patterns (B10) r-Season Water Table (C2) curation Visible on Aerial Image comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5)	A 1, 2,
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Drift Der Algal Ma Iron Der Surface	vdrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6)	f one requ		Water-Sta 1, 2, 4 Salt Crust Aquatic Ir Hydrogen Oxidized Presence Recent Iro Stunted o	ained Leave A, and 4B, (B11) avertebrates Sulfide Od Rhizospher of Reduce on Reduction	s (B13) dor (C1) res along d Iron (C4 on in Tille Plants (D	Living Roo 4) d Soils (C6	RA ots (C3)	Dra Dry Sat Ge Sha	ter-Stained Leaves (B9) (MLRA 4A, and 4B) ainage Patterns (B10) r-Season Water Table (C2) curation Visible on Aerial Image comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A)	A 1, 2,
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Drift De Algal Ma Iron Dep Surface	vdrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria	one requal	(B7)	Water-Sta 1, 2, 4 Salt Crust Aquatic Ir Hydrogen Oxidized Presence Recent Iro Stunted o	sined Leave A, and 4B, (B11) evertebrates Sulfide Od Rhizospher of Reduce on Reduction	s (B13) dor (C1) res along d Iron (C4 on in Tille Plants (D	Living Roo 4) d Soils (C6	RA ots (C3)	Dra Dry Sat Ge Sha	ter-Stained Leaves (B9) (MLRA 4A, and 4B) ainage Patterns (B10) r-Season Water Table (C2) curation Visible on Aerial Image comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5)	A 1, 2,
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Algal Ma Iron Dep Surface Inundati	widrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) widres (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria by Vegetated Concar	one requal	(B7)	Water-Sta 1, 2, 4 Salt Crust Aquatic Ir Hydrogen Oxidized Presence Recent Iro Stunted o	ained Leave A, and 4B, (B11) avertebrates Sulfide Od Rhizospher of Reduce on Reduction	s (B13) dor (C1) res along d Iron (C4 on in Tille Plants (D	Living Roo 4) d Soils (C6	RA ots (C3)	Dra Dry Sat Ge Sha	ter-Stained Leaves (B9) (MLRA 4A, and 4B) ainage Patterns (B10) r-Season Water Table (C2) curation Visible on Aerial Image comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A)	A 1, 2,
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Drift De Algal Ma Iron Dep Surface	widrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) widres (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria by Vegetated Concar	one requal	(B7)	Water-Sta 1, 2, 4 Salt Crust Aquatic Ir Hydrogen Oxidized Presence Recent Irc Stunted o Other (Ex	ained Leave A, and 4B, (B11) avertebrates Sulfide Od Rhizospher of Reduce on Reduction r Stressed plain in Rei	s (B13) dor (C1) res along d Iron (C4 on in Tille Plants (D marks)	Living Roo 4) d Soils (C6	RA ots (C3)	Dra Dry Sat Ge Sha	ter-Stained Leaves (B9) (MLRA 4A, and 4B) ainage Patterns (B10) r-Season Water Table (C2) curation Visible on Aerial Image comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A)	A 1, 2,
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Drift Der Algal Ma Iron Der Surface Inundati Sparsel	widrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) widres (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria by Vegetated Concar	one requal	(B7)	Water-Sta 1, 2, 4 Salt Crust Aquatic Ir Hydrogen Oxidized Presence Recent Irc Stunted o Other (Ex	sined Leave A, and 4B; (B11) evertebrates Sulfide Oc Rhizospher of Reduces on Reduction r Stressed plain in Res	s (B13) for (C1) res along d Iron (C4 on in Tille Plants (D marks)	Living Roo 4) d Soils (C6	RA ots (C3)	Dra Dry Sat Ge Sha	ter-Stained Leaves (B9) (MLRA 4A, and 4B) ainage Patterns (B10) r-Season Water Table (C2) curation Visible on Aerial Image comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A)	A 1, 2,
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Drift Der Algal Ma Iron Der Surface Inundati Sparsel	wdrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) where (B1) arts (B1) arts (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria by Vegetated Concauter Present?	I Imagery	(B7) e (B8)	Water-Sta 1, 2, 4 Salt Crust Aquatic Ir Hydrogen Oxidized Presence Recent Ir Stunted o Other (Ex	ined Leave A, and 4B, (B11) Evertebrates Sulfide Oc Rhizospher of Reduces on Reduction r Stressed plain in Res es): None	s (B13) for (C1) res along d Iron (C4 on in Tille Plants (D marks)	Living Roo 4) d Soils (C6	RA ots (C3)	Dra Dry Sat Ge Sha	ter-Stained Leaves (B9) (MLRA 4A, and 4B) ainage Patterns (B10) r-Season Water Table (C2) curation Visible on Aerial Image comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A)	A 1, 2,
Primary Indi Surface High Wa Saturati Water M Sedimen Drift De Algal Ma Iron Dep Surface Inundati Sparsely Field Obser Surface Wa Water Table Saturation F	widrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria by Vegetated Conca rvations: ater Present? Present?	Il Imagery	(B7) de (B8) No ⊠	Water-Sta 1, 2, 4 Salt Crust Aquatic Ir Hydrogen Oxidized Presence Recent Irc Stunted o Other (Ex	ined Leave A, and 4B, (B11) Evertebrates Sulfide Oc Rhizospher of Reduces on Reduction r Stressed plain in Res es): None	s (B13) for (C1) res along d Iron (C4 on in Tille Plants (D marks)	Living Roo 4) d Soils (C6 1) (LRR A)	ets (C3)	☐ Wa	ter-Stained Leaves (B9) (MLRA 4A, and 4B) ainage Patterns (B10) r-Season Water Table (C2) curation Visible on Aerial Image comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A)	A 1, 2,
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Algal Ma Iron Dep Iron Dep Inundati Sparsely Field Obset Surface Wa Water Table Saturation F (includes ca	wdrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) warks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria by Vegetated Concarvations: ter Present?	al Imagery ave Surface Yes □ Yes ⊠ Yes ⊠	(B7) te (B8) No ⊠ No ⊠ No □	Water-Sta 1, 2, 4 Salt Crust Aquatic Ir Hydrogen Oxidized Presence Recent Ir Stunted o Other (Ex Depth (inche	sined Leave A, and 4B, (B11) Evertebrates Sulfide Oc Rhizospher of Reduces on Reduction r Stressed plain in Res as): None BS: 16"	s (B13) dor (C1) res along d Iron (C4 on in Tille Plants (D marks)	Living Roo 4) d Soils (C6 1) (LRR A)	ets (C3)	☐ Wa ☐ Dra ☐ Dry ☐ Sat ☐ Ge ☐ Sha ☐ FAI ☐ Rai ☐ Fro	ter-Stained Leaves (B9) (MLRA 4A, and 4B) sinage Patterns (B10) r-Season Water Table (C2) curation Visible on Aerial Imager comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)	A 1, 2,
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Algal Ma Iron Dep Iron Dep Inundati Sparsely Field Obset Surface Wa Water Table Saturation F (includes ca	ydrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) at or Crust (B4) posits (B5) soil Cracks (B6) ion Visible on Aeria y Vegetated Concarvations: ter Present? Present? pipilary fringe)	al Imagery ave Surface Yes □ Yes ⊠ Yes ⊠	(B7) te (B8) No ⊠ No ⊠ No □	Water-Sta 1, 2, 4 Salt Crust Aquatic Ir Hydrogen Oxidized Presence Recent Ir Stunted o Other (Ex Depth (inche	sined Leave A, and 4B, (B11) Evertebrates Sulfide Oc Rhizospher of Reduces on Reduction r Stressed plain in Res as): None BS: 16"	s (B13) dor (C1) res along d Iron (C4 on in Tille Plants (D marks)	Living Roo 4) d Soils (C6 1) (LRR A)	ets (C3)	☐ Wa ☐ Dra ☐ Dry ☐ Sat ☐ Ge ☐ Sha ☐ FAI ☐ Rai ☐ Fro	ter-Stained Leaves (B9) (MLRA 4A, and 4B) sinage Patterns (B10) r-Season Water Table (C2) curation Visible on Aerial Imager comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)	A 1, 2,
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Algal Ma Iron Dep Iron Dep Inundati Sparsely Field Obset Surface Wa Water Table Saturation F (includes ca	ydrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) at or Crust (B4) posits (B5) soil Cracks (B6) ion Visible on Aeria y Vegetated Concarvations: ter Present? Present? pipilary fringe)	al Imagery ave Surface Yes □ Yes ⊠ Yes ⊠	(B7) te (B8) No ⊠ No ⊠ No □	Water-Sta 1, 2, 4 Salt Crust Aquatic Ir Hydrogen Oxidized Presence Recent Ir Stunted o Other (Ex Depth (inche	sined Leave A, and 4B, (B11) Evertebrates Sulfide Oc Rhizospher of Reduces on Reduction r Stressed plain in Res as): None BS: 16"	s (B13) dor (C1) res along d Iron (C4 on in Tille Plants (D marks)	Living Roo 4) d Soils (C6 1) (LRR A)	ets (C3)	☐ Wa ☐ Dra ☐ Dry ☐ Sat ☐ Ge ☐ Sha ☐ FAI ☐ Rai ☐ Fro	ter-Stained Leaves (B9) (MLRA 4A, and 4B) sinage Patterns (B10) r-Season Water Table (C2) curation Visible on Aerial Imager comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)	A 1, 2,
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Algal Ma Iron Dep Iron Dep Iron Dep Surface Inundati Sparsely Field Obset Surface Wa Water Table Saturation F (includes ca Describe Re	ydrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) at or Crust (B4) posits (B5) soil Cracks (B6) ion Visible on Aeria y Vegetated Concarvations: ter Present? Present? pipilary fringe)	one requal Imagery ave Surface Yes □ Yes □ Yes ⊠ Am gauge	(B7) te (B8) No ⊠ No ⊠ No □	Water-Sta 1, 2, 4 Salt Crust Aquatic Ir Hydrogen Oxidized Presence Recent Ir Stunted o Other (Ex Depth (inche	sined Leave A, and 4B, (B11) Evertebrates Sulfide Oc Rhizospher of Reduces on Reduction r Stressed plain in Res as): None BS: 16"	s (B13) dor (C1) res along d Iron (C4 on in Tille Plants (D marks)	Living Roo 4) d Soils (C6 1) (LRR A)	ets (C3)	☐ Wa ☐ Dra ☐ Dry ☐ Sat ☐ Ge ☐ Sha ☐ FAI ☐ Rai ☐ Fro	ter-Stained Leaves (B9) (MLRA 4A, and 4B) sinage Patterns (B10) r-Season Water Table (C2) curation Visible on Aerial Imager comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)	A 1, 2,
Wetland Hy Primary Indi Surface High Wa Saturati Water M Sedimer Algal Ma Iron Dep Iron Dep Iron Dep Surface Inundati Sparsely Field Obset Surface Wa Water Table Saturation F (includes ca Describe Re	rdrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria by Vegetated Concar rvations: ater Present? Present? apillary fringe) ecorded Data (streat	one requal Imagery ave Surface Yes □ Yes □ Yes ⊠ Am gauge	(B7) te (B8) No ⊠ No ⊡	Water-Sta 1, 2, 4 Salt Crust Aquatic Ir Hydrogen Oxidized Presence Recent Ir Stunted o Other (Ex Depth (inche	sined Leave A, and 4B, (B11) Evertebrates Sulfide Oc Rhizospher of Reduces on Reduction r Stressed plain in Res as): None BS: 16"	s (B13) dor (C1) res along d Iron (C4 on in Tille Plants (D marks)	Living Roo 4) d Soils (C6 1) (LRR A)	ets (C3)	☐ Wa ☐ Dra ☐ Dry ☐ Sat ☐ Ge ☐ Sha ☐ FAI ☐ Rai ☐ Fro	ter-Stained Leaves (B9) (MLRA 4A, and 4B) sinage Patterns (B10) r-Season Water Table (C2) curation Visible on Aerial Imager comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)	A 1, 2,

Project/Site: 1144.0027 E Vancouver E-Commerc	e Center	City/Cou	_{ınty:} Camas	s, Clark	Sampling Date:_	04/06/2021
Applicant/Owner: Panattoni Development Compan		-	-	State: WA		
Investigator(s): Rachel Hyland, Jacob Layman			Section, To	ownship, Range: 29, 0	2N, 03E, SE	
Landform (hillslope, terrace, etc.): Hillslope		_Local r	elief (concave	, convex, none): Conv	ex Slor	ре (%): <u>1%</u>
Subregion (LRR): A2	_ Lat: _ 45	5.6280	98	Long: -122.46040	961 Datun	n: WGS 84
Soil Map Unit Name: Powell silt loam, 0 to 8 percen						
Are climatic / hydrologic conditions on the site typical for this						
Are Vegetation, Soil, or Hydrology sign	nificantly dis	turbed?	Are "No	ormal Circumstances" pr	resent? Yes 🗷 N	lo 🗌
Are Vegetation, Soil, or Hydrology natu	ırally problei	matic?	(If need	ed, explain any answers	s in Remarks.)	
SUMMARY OF FINDINGS - Attach site map	showing	sampl	ling point l	ocations, transect	s, important fea	atures, etc.
Hydrophytic Vegetation Present? Yes ☒ No ☐						
Hydric Soil Present? Yes ☒ No ☐			the Sampled		Na 🗆	
Wetland Hydrology Present? Yes ☒ No ☐		W	rithin a Wetlaı	nd? Yes 🗷	NO 📙	
Remarks: All three wetland criteria not met. Data collection Wetland D. VEGETATION – Use scientific names of plan		northwe	st portion of t	he property, near the w	zestern property bou	ındary, inside
	Absolute		ant Indicator	Dominance Test wor	rksheet:	
Tree Stratum (Plot size: 30 ft) 1. Fraxinus latifolia	% Cover 30	Specie Yes	es? Status FACW	Number of Dominant		(4)
2. Crataegus monogyna	10	Yes	FAC	That Are OBL, FACW	/, or FAC: <u>6</u>	(A)
3. Salix sp.*	10	Yes	FACW	Total Number of Dom Species Across All St		(B)
4.			<u> </u>			(D)
	50	= Tota	I Cover	Percent of Dominant S That Are OBL, FACW	Species Lor FAC: 100%	(A/B)
Sapling/Shrub Stratum (Plot size: 15 ft)	00	V	EA 0\A/			(, , , _)
1. Fraxinus latifolia	20 15	Yes Yes	<u>FACW</u> FAC	Prevalence Index wo		
2. Rubus armeniacus 3. Crataegus monogyna	2	No	FAC FAC		: Multiply	
4. Symphiocarpus alba	1	No	FACU	OBL species		
5	<u> </u>		_ 17.00	FAC species		
- J	38	= Tota	l Cover	FACU species		
Herb Stratum (Plot size: 5 ft)		•		·	x 5 =	
1. Poa pratensis	-	Yes	FAC	Column Totals:		
2		-		Dravalance Inde	D/A	
3				Hydrophytic Vegetat	ex = B/A =	<u> </u>
4					drophytic Vegetation	1
5				■ Rapid Test Iol Flys ■ Dominance Test is		,
6 7				☐ Prevalence Index		
8.				☐ Morphological Ada	aptations1 (Provide s	supporting
9.					rks or on a separate	sheet)
10.				Wetland Non-Vas		
11.				-	ophytic Vegetation ¹ (` ' '
Woody Vine Stratum (Plot size: 30 ft)	1	= Tota	Il Cover	¹ Indicators of hydric s be present, unless dis		
1	-			Hydrophytic		
2		· 		Vegetation		
% Bare Ground in Herb Stratum 99	0	= Tota	I Cover	Present? Y	′es ⊠ No 🗌	
Remarks: Hydrophytic vegetation criteria met thr	ough do~	ninana	n toet	1		
*Salix species considered FACW for s						

Depth	cription: (Descri Matri:	x			ox Featur		. 0. 00	iii tiic abc		or indicators.
(inches)	Color (moist)	%		r (moist)	%	Type ¹	Loc ²	Texture		Remarks Programme Remarks
0-11	10 YR 3/2	90	2.5	YR 3/6	10	С	M	SaCIL	0	Sandy Clay Loam
11-16	10 YR 4/2	94	7.5	YR 4/1	5	D	M	SaCIL	_0	Sandy Clay Loam
11-16	-	-	2.5	YR 3/6	1	С	M	SaCIL	0	Sandy Clay Loam
					-					
								-		
		· ·	-			 .				
			-		_					
					_					
	-									
	oncentration, D=[ted Sand G			cation: PL=Pore Lining, M=Matrix.
	Indicators: (App	olicable to				oted.)				ors for Problematic Hydric Soils ³ :
Histosol	, ,			Sandy Redox (_		Muck (A10)
	oipedon (A2)			Stripped Matrix .oamy Mucky N	. ,	-1\ (o voor	4 MI DA 1\			Parent Material (TF2) Shallow Dark Surface (TF12)
	n Sulfide (A4)			.oamy Mucky r .oamy Gleyed			T WILKA 1)) <u> </u>	-	er (Explain in Remarks)
	d Below Dark Surf	ace (A11)		Depleted Matrix		۷)			Othe	(Explain in Remarks)
	ark Surface (A12)	acc (/)		Redox Dark Su	. ,	5)		³ In	dicato	ors of hydrophytic vegetation and
☐ Sandy M	lucky Mineral (S1)		Depleted Dark	•	•				nd hydrology must be present,
	Gleyed Matrix (S4)		□ F	Redox Depress	sions (F8))			unles	s disturbed or problematic.
	Layer (if present):								
Type: No										
Depth (in	ches):							Hydrid	Soil	Present? Yes ⊠ No □
Remarks:										
Hydric soil	criteria throug	h indicate	ors F6	and A11.						
HYDROLO	GY									
	drology Indicato	rs.								
•	cators (minimum		red: che	eck all that app	ılv)				Secor	ndary Indicators (2 or more required)
	Water (A1)	o. oo .oqu.		☐ Water-Sta		ves (B0) (evcent MI			dater-Stained Leaves (B9) (MLRA 1, 2,
	iter Table (A2)				A, and 4		cxccpt IIIL		**	4A, and 4B)
➤ Saturation				☐ Salt Crust		-,			Пр	rainage Patterns (B10)
	arks (B1)			Aquatic In		es (B13)				ry-Season Water Table (C2)
	nt Deposits (B2)			☐ Hydrogen						aturation Visible on Aerial Imagery (C9)
	posits (B3)						Living Ro			eomorphic Position (D2)
	at or Crust (B4)			☐ Presence		_	-			hallow Aquitard (D3)
	osits (B5)						ed Soils (Co	6)	F/	AC-Neutral Test (D5)
-	Soil Cracks (B6)						01) (LRR A	•		aised Ant Mounds (D6) (LRR A)
☐ Inundation	on Visible on Aeri	al Imagery ((B7)	☐ Other (Exp	plain in R	emarks)			☐ Fr	ost-Heave Hummocks (D7)
☐ Sparsely	Vegetated Conc	ave Surface	(B8)							
Field Obser	vations:									
Surface Wat	ter Present?	Yes 🗌	No 🗵	Depth (inche	s): Non	e				
Water Table	Present?	Yes 🗵	No 🗌	Depth (inche	s): <u>12"</u>					
Saturation P		Yes 🛚	No 🗌	Depth (inche			Wet	tland Hyd	rolog	y Present? Yes ⊠ No 🗌
	pillary fringe) corded Data (stre	am dauga	monitor			orevious is	enections)	if availab	ılo:	
Describe Re	corded Data (Stre	am gauge,	monitori	ing weii, aenai	priotos, p	orevious ir	ispections)	i, ii avallad	ne.	
Remarks:										
	criteria obser	ved thro	iah pri	mary indica	tore 22	and ∆2				
. ry ar ologic	, orneria obser	100 till 00	ישיי איי	inary indica	.013 72	and As	•			

Project/Site: 1144.0027 E Vancouver E-Commerce	e Center (City/Co	_{unty:} Cam	as, Clark	Sampling Date: 04/07/2021
Applicant/Owner: Panattoni Development Company		-	-		· -
Investigator(s): Rachael Hyland, Jacob Layman					· · · · ·
Landform (hillslope, terrace, etc.): hillsope				·	
Subregion (LRR): A2					
Soil Map Unit Name: Powell silt loam, 0 to 8 percent				NWI classifi	
Are climatic / hydrologic conditions on the site typical for this	time of yea	ır? Yes	No 🗆	(If no, explain in Remarks	3.)
Are Vegetation, Soil, or Hydrology sign	ificantly dist	turbed?	Are	'Normal Circumstances" pr	resent? Yes ⊠ No □
Are Vegetation, Soil, or Hydrology natu	rally probler	natic?	(If ne	eded, explain any answers	in Remarks.)
SUMMARY OF FINDINGS - Attach site map			ling poin	t locations, transect	s, important features, etc.
Hydrophytic Vegetation Present? Yes ☒ No ☐					
Hydric Soil Present? Yes ☐ No 🗵			s the Sampl		
Wetland Hydrology Present? Yes ☐ No 🗵		\ \ \	vithin a Wet	land? Yes □	No 🗷
Remarks: Not all three wetland criteria met, only hydrop	shutic vecet	tation n	recent Dat	a collected on the northw	est portion of the subject
property, near the western property boundary,		_		a conected on the northw	est portion of the subject
property, and are necessity as an analy,					
VEGETATION – Use scientific names of plant	s.				
Tree Charture (Diet size, 20 th)	Absolute		ant Indicato		ksheet:
Tree Stratum (Plot size: 30 ft) 1. Fraxinus latifolia	% Cover 20	Yes	es? Status FACV	, I Number of Dominant	
2. Crataegus monogyna	15	Yes		That Are OBL, FACW	, or FAC: <u>4</u> (A)
3			_	Total Number of Dom	_
4				Species Across All St	dia. <u>0</u> (b)
	35	= Tota	al Cover	Percent of Dominant S	Species , or FAC: <u>67%</u> (A/B)
Sapling/Shrub Stratum (Plot size: 15 ft)				That Ale Obc, I ACW	, 01 1 AC. <u>01 70</u> (A/B)
1. Rubus armeniacus	30	Yes		Prevalence Index wo	
2. Rubus laciniatus	10	Yes		- -	Multiply by:
3. Symphoricarpos albus	10	Yes	FACL	-	x 1 =
4				=	x 2 =
5	50			-	x 3 =
Herb Stratum (Plot size: 5 ft)	30	= I ota	al Cover	•	x 4 =
1. Geum macrophyllum	50	Yes	FAC	·	x 5 = (A) (B)
2. Geranium molle	3	No	UPL	Goldmin Totals.	(A) (D)
3. Epilobium ciliatum	2	No	FACV	V Prevalence Inde	ex = B/A =
4				Hydrophytic Vegetat	ion Indicators:
5				Rapid Test for Hy	· · ·
6				Dominance Test is	
7				Prevalence Index	
8					aptations ¹ (Provide supporting ks or on a separate sheet)
9				- ☐ Wetland Non-Vas	· · · · · · · · · · · · · · · · · · ·
10				- ☐ Problematic Hydro	ophytic Vegetation¹ (Explain)
11	EE			_ ·	oil and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft)		= I ota	al Cover	be present, unless dis	sturbed or problematic.
1					
2				Hydrophytic Vegetation	
	^	= Tota	al Cover		′es ⊠ No 🗆
% Bare Ground in Herb Stratum 45					
Remarks: Hydrophytic vegetation criteria met thro	ough dom	inanc	e test. Ap	proximately 20% mos	s was observed in the
herbaceous stratum.				-	

	Color (moist)	%	Colo	or (moist)	dox Featur %	Type ¹	Loc ²	Texture	e Remarks
(inches) 0-12	10YR 3/2	100	-	. (1110101)	-	<u>- 1,400</u>	-	SiLo	Silt Loam
12-14	10YR 3/2	78	10	YR 4/2	20		М	SiLo	Silt Loam
12-14	10YR 3/4	2					M	SiLo	Silt Loam
<u></u>	10111 0/ 1	_ =							
	-								
									
						_			
	Concentration, D=D						ed Sand G		² Location: PL=Pore Lining, M=Matrix.
-	Indicators: (App	licable to				itea.)			dicators for Problematic Hydric Soils ³ :
☐ Histoso ☐ Histic E	pipedon (A2)			Sandy Redox Stripped Matri					2 cm Muck (A10) Red Parent Material (TF2)
	istic (A3)			Loamy Mucky	` '	1) (excen	t MI RA 1)		
	en Sulfide (A4)			Loamy Gleyed			t MERCE 1)		
	d Below Dark Surfa	ace (A11)		Depleted Matr	•	_,			(=,
	ark Surface (A12)	, ,		Redox Dark S	. ,)		³ In	dicators of hydrophytic vegetation and
☐ Sandy I	Mucky Mineral (S1)			Depleted Dark	Surface (F7)			wetland hydrology must be present,
	Gleyed Matrix (S4)			Redox Depres	sions (F8)	1			unless disturbed or problematic.
	Layer (if present)	:							
Type: N				-					
Depth (II	nches):							Hydri	c Soil Present? Yes ☐ No ⊠
temarks:	soil indicators r								
·									
		·e·							
Wetland H	drology Indicator		iired: che	eck all that an	nlv)				Secondary Indicators (2 or more required)
Vetland Hy	drology Indicator		iired; che			ves (B0) (aycent MI i		Secondary Indicators (2 or more required) Water-Stained Leaves (BQ) (MI RA 1 2
Vetland Hy Primary Ind	ydrology Indicator icators (minimum o Water (A1)		iired; che	☐ Water-St	ained Lea		except MLF		☐ Water-Stained Leaves (B9) (MLRA 1, 2,
Vetland Hyrimary Ind Surface High W	ydrology Indicator icators (minimum o Water (A1) ater Table (A2)		iired; che	☐ Water-St	ained Lea 4 A, and 4 I		except MLF		Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Vetland Hy Primary Ind Surface High W Saturati	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3)		iired; che	☐ Water-St 1, 2,	ained Lear 4A, and 4 lear st (B11)	В)	except MLF		☐ Water-Stained Leaves (B9) (MLRA 1, 2,
Vetland Hyprimary Ind Surface High Walls Saturati	ydrology Indicator icators (minimum o Water (A1) ater Table (A2)		iired; che	☐ Water-St 1, 2, 4 ☐ Salt Crus ☐ Aquatic I	ained Lea 4 A, and 4 I	B) es (B13)	except MLF	RA	 Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2)
Vetland Hyrimary Ind Surface High W Saturati Water M Sedime	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2)		ired; che	☐ Water-St 1, 2, 4 ☐ Salt Crus ☐ Aquatic I ☐ Hydroger	ained Lear 4A, and 4let (B11) nvertebrate Sulfide C	es (B13) Odor (C1)	except MLF	RA	 Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9
Primary Ind Surface High W Saturati Water N Sedime Drift De	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) Marks (B1)		nired; che	Water-St 1, 2, 4 Salt Crus Aquatic I Hydroger Oxidized	ained Lear 4A, and 4let (B11) nvertebrate Sulfide C	es (B13) Odor (C1) eres along	Living Roc	RA	 Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9
Primary Ind Surface High W Saturati Water M Sedime Drift De Algal M	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3)		nired; che	Water-St 1, 2, 4 Salt Crus Aquatic I Hydroger Oxidized Presence	ained Lear 4A, and 4I at (B11) nvertebrate Sulfide C Rhizosphe of Reduce	es (B13) Odor (C1) eres along ed Iron (C	Living Roc	RA ots (C3)	 Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9 □ Geomorphic Position (D2)
Primary Ind Surface High W Saturati Water N Sedime Drift De Algal M	vdrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)		ired; che	Water-St 1, 2, 4 Salt Crus Aquatic I Hydroger Oxidized Presence	ained Lead 4A, and 4I at (B11) Invertebrate In Sulfide Countries Rhizosphote of Reduction Reduction	es (B13) Odor (C1) eres along ed Iron (C	Living Roc 4)	RA obts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3)
Vetland Hyrimary Ind Surface High W Saturati Water N Sedime Drift De Algal M Iron De Surface	vdrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	f one requ		Water-St 1, 2, 4 Salt Crus Aquatic I Hydroger Oxidized Presence Recent Ir	ained Lead 4A, and 4I at (B11) Invertebrate In Sulfide Countries Rhizosphote of Reduction Reduction	es (B13) Odor (C1) eres along ed Iron (C tion in Tille d Plants (E	Living Roc 4) d Soils (C6	RA obts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Primary Ind Surface High W Saturati Water N Sedime Drift De Algal M Iron De Surface	vdrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6)	one requ	(B7)	Water-St 1, 2, 4 Salt Crus Aquatic I Hydroger Oxidized Presence Recent Ir	ained Leat 4A, and 4l at (B11) nvertebrat n Sulfide C Rhizospho of Reduct on Reduct or Stressed	es (B13) Odor (C1) eres along ed Iron (C tion in Tille d Plants (E	Living Roc 4) d Soils (C6	RA obts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Vetland Hyprimary Ind Surface High W Saturati Water M Sedime Drift De Algal M Iron De Surface Inundat Sparsel	widrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) widres (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria by Vegetated Concar	one requ	(B7)	Water-St 1, 2, 4 Salt Crus Aquatic I Hydrogei Oxidized Presence Recent Ir Stunted of	ained Lear 4A, and 4I at (B11) nvertebrate Sulfide C Rhizosphe of Reduct on Reduct or Stressed kplain in R	es (B13) Odor (C1) eres along ed Iron (C tion in Tille d Plants (E emarks)	Living Roc 4) d Soils (C6	RA obts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Primary Ind Surface High W Saturati Water N Sedime Drift De Algal M Iron De Surface Inundat Sparsel	widrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) widres (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria by Vegetated Concar	one requal Imagery	(B7)	Water-St 1, 2, 4 Salt Crus Aquatic I Hydroger Oxidized Presence Recent Ir Stunted of Other (Ex	ained Lear 4A, and 4I at (B11) nvertebrate n Sulfide C Rhizospho e of Reduct on Reduct or Stressed xplain in R es): None	es (B13) Ddor (C1) eres along ed Iron (C tion in Tille d Plants (E emarks)	Living Roc 4) d Soils (C6	RA obts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Primary Ind Surface High W Saturati Water N Sedime Drift De Algal M Iron De Surface Inundat Sparsel	wdrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) where (B1) arts (B1) arts (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria by Vegetated Concauter Present?	one requal Imagery ave Surface	(B7) e (B8)	Water-St 1, 2, 4 Salt Crus Aquatic I Hydrogei Oxidized Presence Recent Ir Stunted of	ained Lear 4A, and 4I at (B11) nvertebrate n Sulfide C Rhizospho e of Reduct on Reduct or Stressed xplain in R es): None	es (B13) Ddor (C1) eres along ed Iron (C tion in Tille d Plants (E emarks)	Living Roc 4) d Soils (C6	RA obts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Primary Ind Surface High W Saturati Water M Sedime Drift De Algal M Iron De Surface Inundat Sparsel Field Obse Surface Water Table Saturation I	widrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria by Vegetated Conca rvations: ater Present? Present?	I Imagery ve Surface Yes Yes Yes	(B7) e (B8) No 🗷	Water-St 1, 2, 4 Salt Crus Aquatic I Hydroger Oxidized Presence Recent Ir Stunted of Other (Ex	ained Lear 4A, and 4I at (B11) nvertebrate an Sulfide C Rhizospho e of Reduct on Reduct or Stressed explain in R es): Non-	es (B13) Dodor (C1) eres along ed Iron (C tion in Tille d Plants (E emarks) e	Living Roc 4) d Soils (C6 01) (LRR A	ets (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Wetland Hy Primary Ind Surface High W Saturati Water N Sedime Drift De Algal M Iron De Surface Inundat Sparsel Field Obse Surface Water Table Saturation I includes ca	wdrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) warks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria by Vegetated Concarvations: ter Present?	Il Imagery ve Surface Yes Yes Yes Yes Yes Yes Yes Yes	(B7) e (B8) No 🗵 No 🗵 No 🗷	Water-St 1, 2, 4 Salt Crus Aquatic I Hydroger Oxidized Presence Recent Ir Stunted of Other (Ex	ained Lear 4A, and 4I at (B11) nvertebrate n Sulfide C Rhizospho e of Reduct on Reduct or Stressed explain in R es): Non- es): Non- Non-	es (B13) Dodor (C1) eres along ed Iron (C tion in Tille d Plants (E emarks) e e	Living Roc 4) d Soils (C6 01) (LRR A	RA ots (C3) iii)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) rology Present? Yes □ No 区
Wetland Hy Primary Ind Surface High W Saturati Water N Sedime Drift De Algal M Iron De Surface Inundat Sparsel Field Obse Surface Water Table Saturation I includes ca	ydrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) at or Crust (B4) posits (B5) soil Cracks (B6) ion Visible on Aeria y Vegetated Concarvations: ter Present? Present? pipilary fringe)	Il Imagery ve Surface Yes Yes Yes Yes Yes Yes Yes Yes	(B7) e (B8) No 🗵 No 🗵 No 🗷	Water-St 1, 2, 4 Salt Crus Aquatic I Hydroger Oxidized Presence Recent Ir Stunted of Other (Ex	ained Lear 4A, and 4I at (B11) nvertebrate n Sulfide C Rhizospho e of Reduct on Reduct or Stressed explain in R es): Non- es): Non- Non-	es (B13) Dodor (C1) eres along ed Iron (C tion in Tille d Plants (E emarks) e e	Living Roc 4) d Soils (C6 01) (LRR A	RA ots (C3) iii)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) rology Present? Yes □ No 区
Primary Ind Surface High W Saturati Water N Sedime Drift De Algal M Iron De Surface Inundat Sparsel Field Obse Surface Water Table Saturation I	ydrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) at or Crust (B4) posits (B5) soil Cracks (B6) ion Visible on Aeria y Vegetated Concarvations: ter Present? Present? pipilary fringe)	Il Imagery ve Surface Yes Yes Yes Yes Yes Yes Yes Yes	(B7) e (B8) No 🗵 No 🗵 No 🗷	Water-St 1, 2, 4 Salt Crus Aquatic I Hydroger Oxidized Presence Recent Ir Stunted of Other (Ex	ained Lear 4A, and 4I at (B11) nvertebrate n Sulfide C Rhizospho e of Reduct on Reduct or Stressed explain in R es): Non- es): Non- Non-	es (B13) Dodor (C1) eres along ed Iron (C tion in Tille d Plants (E emarks) e e	Living Roc 4) d Soils (C6 01) (LRR A	RA ots (C3) iii)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) rology Present? Yes □ No 区
Vetland Hyrimary Ind Surface High W Saturati Water N Sedime Drift De Algal M Iron De Surface Inundat Sparsel ield Obse surface Wa Vater Table saturation I Includes ca	ydrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) at or Crust (B4) posits (B5) soil Cracks (B6) ion Visible on Aeria y Vegetated Concarvations: ter Present? Present? pipilary fringe)	Il Imagery Ive Surface Yes Yes Yes Yes The surface Yes And The surface Yes And The surface And The surface Yes Yes And The surface Yes Yes Yes Yes Yes Yes Yes Ye	(B7) e (B8) No 🗷 No 🗹 No 🗹 monitor	Water-St 1, 2, 4 Salt Crus Aquatic I Hydroger Oxidized Presence Recent Ir Stunted of Other (Ex	ained Lear 4A, and 4I at (B11) nvertebrate n Sulfide C Rhizospho e of Reduct on Reduct or Stressed explain in R es): Non- es): Non- Non-	es (B13) Dodor (C1) eres along ed Iron (C tion in Tille d Plants (E emarks) e e	Living Roc 4) d Soils (C6 01) (LRR A	RA ots (C3) ii)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) rology Present? Yes □ No ☒
Vetland Hyrimary Ind Surface High W Saturati Water N Sedime Drift De Algal M Iron De Surface Inundat Sparsel Water Table Saturation Includes ca	rdrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria by Vegetated Concar rvations: ater Present? Present? apillary fringe) ecorded Data (streat	Il Imagery Ive Surface Yes Yes Yes Yes The surface Yes And The surface Yes And The surface And The surface Yes Yes And The surface Yes Yes Yes Yes Yes Yes Yes Ye	(B7) e (B8) No 🗷 No 🗹 No 🗹 monitor	Water-St 1, 2, 4 Salt Crus Aquatic I Hydroger Oxidized Presence Recent Ir Stunted of Other (Ex	ained Lear 4A, and 4I at (B11) nvertebrate n Sulfide C Rhizospho e of Reduct on Reduct or Stressed explain in R es): Non- es): Non- Non-	es (B13) Dodor (C1) eres along ed Iron (C tion in Tille d Plants (E emarks) e e	Living Roc 4) d Soils (C6 01) (LRR A	RA ots (C3) ii)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7) rology Present? Yes □ No ☒

Project/Site: 1144.0027 E Vancouver E-Commerc	e Center	City/C	ounty	. Camas	, Clark	Sam	npling Date: 04	4/07/2021
Applicant/Owner: Panattoni Development Compan	y, Inc.	-			State: WA	Sam	npling Point: <u>C</u>)P-14U
Investigator(s): Rachael Hyland, Jacob Layman				Section, To	ownship, Range: 29,02	2N,03E	,SE	
Landform (hillslope, terrace, etc.): hillslope								(%): 2
Subregion (LRR): A2								
Soil Map Unit Name: Powell silt loam, 0 to 8 percen					NWI classifi			
Are climatic / hydrologic conditions on the site typical for this	s time of yea	ar? Ye	s 🗷	No ☐ (I	f no, explain in Remarks	s.)		
Are Vegetation, Soil, or Hydrology sign	nificantly dis	turbed	!?	Are "No	ormal Circumstances" pr	esent?	Yes 🗵 No	
Are Vegetation, Soil, or Hydrology natu	ırally probler	matic?		(If need	ed, explain any answers	in Rem	narks.)	
SUMMARY OF FINDINGS - Attach site map				g point l	ocations, transect	s, imp	ortant feat	ures, etc.
Hydrophytic Vegetation Present? Yes ☒ No ☐				_				
Hydric Soil Present? Yes ☐ No 🗵				e Sampled		N - 57		
Wetland Hydrology Present? Yes ☐ No 🗵			with	in a Wetlar	nd? Yes □	No 🔀		
Remarks: Not all three wetland criteria met; only hydro	phytic vege	tation	pres	ent. Data	collected in an upland a	area on	the northeast	portion of
the property.					_			
VEGETATION – Use scientific names of plan	ts.							
T. 0 (Th	Absolute			Indicator	Dominance Test wor	ksheet		
Tree Stratum (Plot size: 30 ft) 1	% Cover				Number of Dominant S That Are OBL, FACW			(A)
2). <u></u>	(/\)
3					Total Number of Domi Species Across All Str		3	(B)
4					·		·-	(D)
	0			over	Percent of Dominant S That Are OBL, FACW	3pecies , or FA0	c: 67%	(A/B)
Sapling/Shrub Stratum (Plot size: 15 ft)								
1					Prevalence Index wo			
2					Total % Cover of: OBL species			
3					FACW species			
4			_		FAC species			
o		= To	tal C	over	FACU species			
Herb Stratum (Plot size: 5 ft)					UPL species		· · · · · · · · · · · · · · · · · · ·	
1. Poa pratensis	35				Column Totals:			
2. Schedonorus arundinaceus	20	Yes		FAC				
3. Leucantheum vulgare	20	Yes	<u>S</u>	FACU	Prevalence Inde			
4. Lupinus sp.	15	No		FACU FACU	Hydrophytic Vegetat			
5. Hypochaeris radicata Trifolium repens	<u>5</u> 5	No No		FAC	Rapid Test for Hyd Dominance Test is		ic vegetation	
				FAC	☐ Prevalence Index			
7					☐ Morphological Ada			nnorting
8					data in Remar			
9		-			☐ Wetland Non-Vase	cular Pla	ants ¹	
10 11	-			-	☐ Problematic Hydro	phytic \	Vegetation ¹ (E	xplain)
	100	= To	tal C	over	¹ Indicators of hydric so			
Woody Vine Stratum (Plot size: 30 ft)			iai O	0101	be present, unless dis	turbea	or problematic	
1					Hydrophytic			
2					Vegetation		_	
% Bare Ground in Herb Stratum 0	0	= To	tal C	over	Present? Y	es 🗵	No 🗌	
Remarks:					<u> </u>			
Hydrophytic vegetation criteria met thr Lupinus species considered facultative								

Depth	Matrix	(Red	lox Featu	res			·
(inches)	Color (moist)	%	Colo	or (moist)	%	Type ¹	Loc ²	Texture	e Remarks
0-4	10YR 3/2	100			-			Lo	Loam
4-8	10YR 3/2	98	2.5	SYR 5/8	2	С	M	Lo	Loam
8-16	7.5YR 3/3	98	5Y	R 4/6	2	С	M	SiCILo	Silty Clay Loam
-			_						
		_							
									
	oncentration, D=D						ed Sand G		² Location: PL=Pore Lining, M=Matrix.
_	Indicators: (App	ilcable to				otea.)			dicators for Problematic Hydric Soils ³ :
☐ Histosol	(A1) pipedon (A2)			Sandy Redox (Stripped Matrix					2 cm Muck (A10) Red Parent Material (TF2)
☐ Black Hi				Suipped Math Loamy Mucky	` '	=1) (excen	t MI RA 1)		
	en Sulfide (A4)			Loamy Macky Loamy Gleyed			t wiertz i j		
	d Below Dark Surfa	ace (A11)		Depleted Matri		,		_	
☐ Thick Da	ark Surface (A12)			Redox Dark Si	urface (F6	6)		³ In	dicators of hydrophytic vegetation and
	lucky Mineral (S1)	1		Depleted Dark		. ,			wetland hydrology must be present,
	Bleyed Matrix (S4)			Redox Depres	sions (F8)			unless disturbed or problematic.
Type: No	Layer (if present)):							
	ches):			_				l	
, ,				-				Hydri	c Soil Present? Yes □ No ⊠
Remarks:									
No hydric :	soil indicators i	met.							
HYDROLO	GY								
_	drology Indicator								
Wetland Hy Primary Indi	drology Indicator		uired; ch	eck all that app	ply)				Secondary Indicators (2 or more required)
Wetland Hy Primary Indi ☐ Surface	drology Indicator cators (minimum o Water (A1)		uired; ch	☐ Water-Sta	ained Lea		except MLI		□ Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hy Primary India Surface High Wa	rdrology Indicator cators (minimum c Water (A1) ater Table (A2)		uired; ch	☐ Water-Sta	ained Lea 4 A, and 4		except MLI		Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Wetland Hy Primary India Surface High Wa Saturation	cators (minimum c Water (A1) ater Table (A2) on (A3)		uired; ch	☐ Water-Sta 1, 2, 4 ☐ Salt Crus	ained Lea 4A, and 4 t (B11)	В)	except MLI	RA	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)□ Drainage Patterns (B10)
Wetland Hy Primary India Surface High Wa Saturatio Water M	cators (minimum c Water (A1) ater Table (A2) on (A3) larks (B1)		uired; ch	☐ Water-Sta 1, 2, 4 ☐ Salt Crus ☐ Aquatic Ir	ained Lea 4A, and 4 t (B11) nvertebrat	B) tes (B13)	except MLI	RA	 Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer	cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) on Deposits (B2)		uired; ch	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger	ained Lea 4A, and 4 t (B11) nvertebrat n Sulfide (es (B13) Odor (C1)		RA	 Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep	cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) on Deposits (B2) cosits (B3)		uired; ch	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized	ained Lea 4A, and 4 t (B11) nvertebrat n Sulfide (Rhizosph	es (B13) Odor (C1) eres along	Living Roc	RA ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma	cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) oosits (B3) at or Crust (B4)		uired; ch	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence	ained Lea 4A, and 4 t (B11) nvertebrat n Sulfide (Rhizosph e of Reduce	tes (B13) Odor (C1) eres along ced Iron (C	Living Roo 4)	RA ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma	cators (minimum of water (A1) ater Table (A2) on (A3) alarks (B1) on Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5)		uired; ch	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir	ained Lea 4A, and 4 t (B11) nvertebrat n Sulfide (Rhizosph e of Reduction on Reduction	es (B13) Odor (C1) eres along ced Iron (C	Living Roc 4) d Soils (C6	RA obts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6)	of one requ		Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir	ained Lea 4A, and 4 t (B11) envertebrate a Sulfide (Rhizosph e of Reduct on Reduct or Stresse	es (B13) Odor (C1) eres along ced Iron (C tion in Tille d Plants (E	Living Roo 4)	RA obts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	cators (minimum of water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria	of one requ	(B7)	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir	ained Lea 4A, and 4 t (B11) envertebrate a Sulfide (Rhizosph e of Reduct on Reduct or Stresse	es (B13) Odor (C1) eres along ced Iron (C tion in Tille d Plants (E	Living Roc 4) d Soils (C6	RA obts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio	cators (minimum of water (A1) ater Table (A2) on (A3) larks (B1) on Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Conca	of one requ	(B7)	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir	ained Lea 4A, and 4 t (B11) envertebrate a Sulfide (Rhizosph e of Reduct on Reduct or Stresse	es (B13) Odor (C1) eres along ced Iron (C tion in Tille d Plants (E	Living Roc 4) d Soils (C6	RA obts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely	cators (minimum of cators (minim	of one requ al Imagery ave Surfac	(B7) be (B8)	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted o	ained Lea 4A, and 4 t (B11) nvertebrat n Sulfide (Rhizosph e of Reduc on Reduc or Stresse xplain in R	ees (B13) Odor (C1) eres along eed Iron (C tion in Tille d Plants (E temarks)	Living Roc 4) d Soils (C6	RA obts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser	cators (minimum of cators (minimum of cators (minimum of water (A1)) ater Table (A2) on (A3) larks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concators ter Present?	al Imagery ave Surfac	e (B7) ee (B8) No 🗵	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted of Other (Ex	ained Lea 4A, and 4 t (B11) nvertebrat n Sulfide (Rhizosph e of Reduct on Reduct or Stresse xplain in R es): Non	tes (B13) Odor (C1) eres along ced Iron (C tion in Tille d Plants (E temarks)	Living Roc 4) d Soils (C6	RA obts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatic Sparsely Field Obser Surface Water Table	cators (minimum of cators (minimum of cators (minimum of water (A1)) ater Table (A2) on (A3) larks (B1) on Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concar or vations: ter Present?	of one required in the second of the second	(B7) te (B8) No 🗵	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted o Other (Ex	ained Lea 4A, and 4 t (B11) nvertebrat n Sulfide (Rhizosph e of Reduct on Reduct or Stresse xplain in R es): Non Non	es (B13) Ddor (C1) eres along ced Iron (C tion in Tille d Plants (C temarks)	Living Roo 4) d Soils (C6 01) (LRR A	RA (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca	cators (minimum of cators (minim	al Imagery ave Surfac Yes Yes Yes Yes	(B7) ee (B8) No 🗵 No 🗵 No 🗵	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted o Other (Ex	ained Lea 4A, and 4 t (B11) nvertebrat n Sulfide (Rhizosph e of Reduct on Reduct or Stresse xplain in R es): Non es): Non es): Non	es (B13) Ddor (C1) eres along ced Iron (C tion in Tille d Plants (C temarks)	Living Roo 4) d Soils (C6 01) (LRR A	RA ots (C3) ii)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca	cators (minimum of cators (minim	al Imagery ave Surfac Yes Yes Yes Yes	(B7) ee (B8) No 🗵 No 🗵 No 🗵	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted o Other (Ex	ained Lea 4A, and 4 t (B11) nvertebrat n Sulfide (Rhizosph e of Reduct on Reduct or Stresse xplain in R es): Non es): Non es): Non	es (B13) Ddor (C1) eres along ced Iron (C tion in Tille d Plants (C temarks)	Living Roo 4) d Soils (C6 01) (LRR A	RA ots (C3) ii)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
Wetland Hy Primary India Surface High Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Water Table Saturation P (includes ca Describe Re	cators (minimum of cators (minim	al Imagery ave Surfac Yes Yes Yes Yes	(B7) ee (B8) No 🗵 No 🗵 No 🗵	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted o Other (Ex	ained Lea 4A, and 4 t (B11) nvertebrat n Sulfide (Rhizosph e of Reduct on Reduct or Stresse xplain in R es): Non es): Non es): Non	es (B13) Ddor (C1) eres along ced Iron (C tion in Tille d Plants (C temarks)	Living Roo 4) d Soils (C6 01) (LRR A	RA ots (C3) ii)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca Describe Re	cators (minimum of cators (minimum of cators (minimum of water (A1)) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concar vations: ter Present? Present? pillary fringe) corded Data (streat	al Imagery ave Surfac Yes Yes Yes am gauge	No 🗵 No 🗵 No 🗵 No 🗵	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted of Other (Ex	ained Lea 4A, and 4 t (B11) nvertebrat n Sulfide (Rhizosph e of Reduct on Reduct or Stresse xplain in R es): Non es): Non I photos,	tes (B13) Ddor (C1) eres along ced Iron (C tion in Tille d Plants (C temarks) e e e	Living Roc 4) d Soils (C6 01) (LRR A	ets (C3) Si) Siland Hyd The desired in the second in th	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca Describe Re	cators (minimum of cators (minim	al Imagery ave Surfac Yes Yes Yes am gauge	No 🗵 No 🗵 No 🗵 No 🗵	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted of Other (Ex	ained Lea 4A, and 4 t (B11) nvertebrat n Sulfide (Rhizosph e of Reduct on Reduct or Stresse xplain in R es): Non es): Non I photos,	tes (B13) Ddor (C1) eres along ced Iron (C tion in Tille d Plants (C temarks) e e e	Living Roc 4) d Soils (C6 01) (LRR A	ets (C3) Si) Siland Hyd The desired in the second in th	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Water Table Saturation P (includes ca Describe Re	cators (minimum of cators (minimum of cators (minimum of water (A1)) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concar vations: ter Present? Present? pillary fringe) corded Data (streat	al Imagery ave Surfac Yes Yes Yes am gauge	No 🗵 No 🗵 No 🗵 No 🗵	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted of Other (Ex	ained Lea 4A, and 4 t (B11) nvertebrat n Sulfide (Rhizosph e of Reduct on Reduct or Stresse xplain in R es): Non es): Non I photos,	tes (B13) Ddor (C1) eres along ced Iron (C tion in Tille d Plants (C temarks) e e e	Living Roc 4) d Soils (C6 01) (LRR A	ets (C3) Si) Siland Hyd The desired in the second in th	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)

Project/Site: 1144.0027 E Vancouver E-Commerc	e Center	City/Co	ounty	: Camas	, Clark	Samp	oling Date: 04/	/07/2021
Applicant/Owner: Panattoni Development Compan	y, Inc.				State: WA	Samp	oling Point: DI	P-15U
Investigator(s): Rachael Hyland, Jacob Layman				Section, To	ownship, Range: 29,02	N,03E	SE	
Landform (hillslope, terrace, etc.): Toe of Slope								_{(%):} 1
Subregion (LRR): A2								
Soil Map Unit Name: Cove silty clay loam, thin solut								
Are climatic / hydrologic conditions on the site typical for this					f no, explain in Remarks			
Are Vegetation, Soil, or Hydrology sign	-				ormal Circumstances" pr	•	Yes ⊠ No [٦
Are Vegetation, Soil, or Hydrology natu					ed, explain any answers			_
SUMMARY OF FINDINGS – Attach site map				,	•		ŕ	ıres, etc.
Hydrophytic Vegetation Present? Yes ☒ No ☐								
Hydric Soil Present? Yes ☒ No ☐				e Sampled		N. SZ		
Wetland Hydrology Present? Yes ☐ No 🗵			with	in a Wetlar	nd? Yes □	No 🗷		
Remarks: Not all three wetland criteria met; only hydro	phytic vege	tation	and	hydric soil	s present. Data collecte	ed on the	e west-central	portion of
the property, outside Wetland B.								
VEGETATION – Use scientific names of plan	ts.							
	Absolute	Domi	nant	Indicator	Dominance Test wor	ksheet:		
<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	% Cover	Spec	ies?	Status	Number of Dominant	Species	0	
1					That Are OBL, FACW	, or FAC:	2	(A)
2					Total Number of Domi		2	(D)
3			_		Species Across All Str	ata:	3	(B)
4	0	= To	tal C	over	Percent of Dominant S That Are OBL, FACW	Species . or FAC:	67%	(A/B)
Sapling/Shrub Stratum (Plot size: 15 ft)								_ (' - '
1. Rubus armeniacus					Prevalence Index wo			
2					Total % Cover of:			 '
3					OBL species			
4			_		FAC species			
5	_	= To	tal C	over	FACU species			
Herb Stratum (Plot size: 5 ft)					· · · · · · · · · · · · · · · · · · ·		x 5 =	
1. Agrostis capillaris	40				Column Totals:			(B)
2. Hypochaeris radicata	20	Yes	<u> </u>	FACU				
3. Schedonorus arundinaceus	10	No		FAC	Prevalence Inde		<u> </u>	_
4. Trifolium repens	10	No No		FACU	Hydrophytic Vegetat			
5. Leucanthemum vulgare 6. Holcus lanatus	<u>5</u> 5	No		FAC	Rapid Test for Hyd Dominance Test is		vegetation	
6. Holcus lanatus 7. Taraxacum officinale	3	No No		FACU	☐ Prevalence Index			
8. Ranunculus repens	2	No	_	FAC	☐ Morphological Ada		1 (Provide sun	norting
	-	110		1710	data in Remark			
9 10					☐ Wetland Non-Vase	cular Plar	nts ¹	
11			_		☐ Problematic Hydro	phytic V	egetation ¹ (Ex	plain)
	95	= To	tal C	over	¹Indicators of hydric so			gy must
Woody Vine Stratum (Plot size: 30 ft)		. 3		-	be present, unless dis	turbed 01	problematic.	
1					Hydrophytic			
2					Vegetation		. –	
% Bare Ground in Herb Stratum 5	0	= To	tal C	over	Present? Y	es 🗵 I	No ∐	
Pomorko:					1			
Hydrophytic vegetation criteria met thr	ough dom	ıınanı	ce te	est.				

Depth	Matrix			Red	lox Featur	es				
(inches)	Color (moist)	%		or (moist)	%	Type ¹	Loc ²	Textu		Remarks
0-6	7.5YR 4/1	98	5Y	R 3/4	2	_ <u>C</u>	PL	SiCIL	.0	Silty Clay Loam
6-11	5YR 4/1	_ 2						SiCIL	.0	Silty Clay Loam; Mixed Matrix
6-11	10YR 5/2	35	7.5	YR 4/6	5	С	M/PL	SiCIL	.0	Silty Clay Loam; Mixed Matrix
11-13	10YR 5/2	90	7.5	YR 5/8	10	С	M	SiCIL	0	Silty Clay Loam
13-16	10YR 4/1	98	5Y	R 4/6	2	С	PL	SiCIL	0	Silty Clay Loam
1T C. C	Name and the state of the state				20. 00				21	etien. Di Deve Lining M Matrix
	Concentration, D=D Indicators: (App						ea Sana Gi			ration: PL=Pore Lining, M=Matrix. rs for Problematic Hydric Soils ³ :
☐ Histosol				Sandy Redox		,				Muck (A10)
	pipedon (A2)			Stripped Matri				F		Parent Material (TF2)
	istic (A3)			Loamy Mucky	, ,	1) (excep	MLRA 1)			Shallow Dark Surface (TF12)
	en Sulfide (A4)			Loamy Gleyed					-	r (Explain in Remarks)
□ Deplete	d Below Dark Surfa	ace (A11)	X [Depleted Matr	ix (F3)					
☐ Thick Da	ark Surface (A12)			Redox Dark S	urface (F6)		3	ndicato	rs of hydrophytic vegetation and
-	Mucky Mineral (S1)			Depleted Dark						nd hydrology must be present,
	Gleyed Matrix (S4)			Redox Depres	sions (F8)				unles	s disturbed or problematic.
	Layer (if present)	:								
Type: No										
Depth (ir	nches):							Hydr	ic Soil	Present? Yes ⊠ No □
Remarks:										
Hyaric soil	I criteria met thi	rougn ir	idicator	F3.						
ı										
HYDROLO	OGY									
Wetland Hy	drology Indicator	s:								
Primary Indi	icators (minimum o	f one requ	uired; che	eck all that ap	ply)				Secor	dary Indicators (2 or more required)
☐ Surface	Water (A1)			☐ Water-St	ained Leav	(00 (PO) (e				
☐ High Wa	ater Table (A2)					ves (D9) (e	xcept MLF	RA	□ W	ater-Stained Leaves (B9) (MLRA 1, 2,
☐ Saturati	on (A3)			، 1, 2,	4A, and 4I		xcept MLF	RA	□ W	ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
					4A, and 4I		xcept MLF	RA		
Water №	/larks (B1)			1, 2, 4 Salt Crus Aquatic II	4A, and 4I t (B11)	В)	xcept MLF	AS	☐ Dr	4A, and 4B) ainage Patterns (B10)
	Marks (B1) nt Deposits (B2)			☐ Salt Crus	4A, and 4l t (B11) nvertebrate	B) es (B13)	xcept MLF	RA	Dr	4A, and 4B)
☐ Sedime	nt Deposits (B2)			☐ Salt Crus ☐ Aquatic II ☐ Hydroger	4A, and 4I t (B11) nvertebrate n Sulfide C	es (B13) Odor (C1)			☐ Dr	4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) aturation Visible on Aerial Imagery (C9)
☐ Sedime	nt Deposits (B2) posits (B3)			☐ Salt Crus ☐ Aquatic II ☐ Hydroger ☐ Oxidized	4A, and 4l t (B11) nvertebrate n Sulfide C Rhizosphe	es (B13) Odor (C1) eres along	Living Roo		Dr Dr Dr Sa	4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) attraction Visible on Aerial Imagery (C9) ecomorphic Position (D2)
☐ Sedimel ☐ Drift De ☐ Algal Ma	nt Deposits (B2) posits (B3) at or Crust (B4)			Salt Crus Aquatic II Hydroger Oxidized Presence	4A, and 4B t (B11) nvertebrate n Sulfide C Rhizosphe e of Reduc	es (B13) Odor (C1) eres along ed Iron (C4	Living Roo 1)	ots (C3)	Dr Dr Sa	4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) atturation Visible on Aerial Imagery (C9) ecomorphic Position (D2) hallow Aquitard (D3)
☐ Sedimer ☐ Drift Dep ☐ Algal Ma ☐ Iron Dep	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)			Salt Crus Aquatic II Hydroger Oxidized Presence Recent Ir	4A, and 4I t (B11) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct	es (B13) Odor (C1) eres along ed Iron (C4	Living Roo 4) d Soils (C6	ots (C3)	☐ Dr ☐ Dr ☐ Sa ☐ Ge ☐ Sr ☐ FA	4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) attration Visible on Aerial Imagery (C9) emorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5)
Sedimer Drift Der Algal Ma Iron Der Surface	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6)	ıl Imagery	(B7)	Salt Crus Aquatic II Hydroger Oxidized Presence Recent Ir	4A, and 4I t (B11) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct	es (B13) Dodor (C1) Deres along	Living Roo 1)	ots (C3)	☐ Dri ☐ Sa ☐ Ga ☐ Sh ☐ FA	4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) atturation Visible on Aerial Imagery (C9) ecomorphic Position (D2) hallow Aquitard (D3)
Sedimer Drift De Algal Ma Iron Dep Surface	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria			Salt Crus Aquatic II Hydroger Oxidized Presence Recent Ir	4A, and 4I t (B11) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct or Stressed	es (B13) Dodor (C1) Deres along	Living Roo 4) d Soils (C6	ots (C3)	☐ Dri ☐ Sa ☐ Ga ☐ Sh ☐ FA	4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) atturation Visible on Aerial Imagery (C9) emorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Sedimer Drift De Algal Ma Iron Dep Surface	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca			Salt Crus Aquatic II Hydroger Oxidized Presence Recent Ir	4A, and 4I t (B11) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct or Stressed	es (B13) Dodor (C1) Deres along	Living Roo 4) d Soils (C6	ots (C3)	☐ Dri ☐ Sa ☐ Ga ☐ Sh ☐ FA	4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) atturation Visible on Aerial Imagery (C9) emorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Sedimer Drift De Algal Ma Iron Dep Surface Inundati Sparsely	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca rvations:	ve Surfac	ce (B8)	Salt Crus Aquatic II Hydroger Oxidized Presence Recent Ir Stunted of	4A, and 4B t (B11) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct or Stressec cplain in Re	es (B13) Dodor (C1) eres along ed Iron (Cotion in Tille d Plants (Demarks)	Living Roo 4) d Soils (C6	ots (C3)	☐ Dri ☐ Sa ☐ Ga ☐ Sh ☐ FA	4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) atturation Visible on Aerial Imagery (C9) emorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Sedimer Drift De Algal Ma Iron Dep Surface Inundati Sparsely Field Obser	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca rvations: ter Present?	Yes	e (B8)	Salt Crus Aquatic II Hydroger Oxidized Presence Recent Ir Stunted C Other (Ex	4A, and 4B t (B11) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct or Stressed cplain in Re es): None	es (B13) Dodor (C1) eres along ed Iron (Cotion in Tille d Plants (Demarks)	Living Roo 4) d Soils (C6	ots (C3)	☐ Dri ☐ Sa ☐ Ga ☐ Sh ☐ FA	4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) atturation Visible on Aerial Imagery (C9) emorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Sedimer Drift De Algal Ma Iron Dep Surface Inundati Sparsely Field Obser Surface Wa Water Table	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca rvations: tter Present?	Yes Yes	No 🔀	Salt Crus Aquatic II Hydroger Oxidized Presence Recent Ir Stunted c Other (Ex	44, and 48 t (B11) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct or Stressed collain in Re es): None	es (B13) Dodor (C1) Deres along ed Iron (C4 Diction in Tille d Plants (D4 Demarks) Demarks) Demarks	Living Roo 4) d Soils (C6 1) (LRR A)	ots (C3)	☐ Dri ☐ Sa ☐ Ge ☐ Sh ☐ F#	4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) ecomorphic Position (D2) hallow Aquitard (D3) hC-Neutral Test (D5) hissed Ant Mounds (D6) (LRR A) host-Heave Hummocks (D7)
Sedimer Drift De Algal Ma Iron Dep Surface Inundati Sparsely Field Obser Surface Wa Water Table Saturation F	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca rvations: tter Present?	Yes	e (B8)	Salt Crus Aquatic II Hydroger Oxidized Presence Recent Ir Stunted C Other (Ex	44, and 48 t (B11) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct or Stressed collain in Re es): None	es (B13) Dodor (C1) Deres along ed Iron (C4 Diction in Tille d Plants (D4 Demarks) Demarks)	Living Roo 4) d Soils (C6 1) (LRR A)	ots (C3)	☐ Dri ☐ Sa ☐ Ge ☐ Sh ☐ F#	4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) atturation Visible on Aerial Imagery (C9) emorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Sedimer Drift De Algal Ma Iron Dep Surface Inundati Sparsely Field Obser Surface Wa Water Table Saturation F (includes ca	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca rvations: ter Present? Present?	Yes Yes Yes Yes Yes	No X No X No X	Salt Crus Aquatic II Hydroger Oxidized Presence Recent Ir Stunted c Other (Ex	44, and 48 t (B11) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct or Stressec collain in Re es): None es): None None	es (B13) Dodor (C1) eres along ed Iron (C4 cion in Tille d Plants (D4 emarks) e e	Living Roo 4) d Soils (C6 1) (LRR A)	ots (C3) S)	☐ Dri ☐ Sa ☐ Gri ☐ Sri ☐ FA ☐ Ra ☐ Fr	4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) ecomorphic Position (D2) hallow Aquitard (D3) hC-Neutral Test (D5) hissed Ant Mounds (D6) (LRR A) host-Heave Hummocks (D7)
Sedimer Drift De Algal Ma Iron Dep Surface Inundati Sparsel Field Obser Surface Wa Water Table Saturation F (includes ca	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca rvations: ter Present? Present? apillary fringe)	Yes Yes Yes Yes Yes	No X No X No X	Salt Crus Aquatic II Hydroger Oxidized Presence Recent Ir Stunted c Other (Ex	44, and 48 t (B11) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct or Stressec collain in Re es): None es): None None	es (B13) Dodor (C1) eres along ed Iron (C4 cion in Tille d Plants (D4 emarks) e e	Living Roo 4) d Soils (C6 1) (LRR A)	ots (C3) S)	☐ Dri ☐ Sa ☐ Gri ☐ Sri ☐ FA ☐ Ra ☐ Fr	4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) ecomorphic Position (D2) hallow Aquitard (D3) hC-Neutral Test (D5) hissed Ant Mounds (D6) (LRR A) host-Heave Hummocks (D7)
Sediment Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely Field Observator Table Saturation F (includes carbes Remarks:	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca rvations: ter Present? Present? pillary fringe) ecorded Data (strea	Yes Yes Yes Area Yes Yes Yes Yes Yes Yes Yes Yes	No 🗵 No 🗵 No 🗵 , monitor	Salt Crus Aquatic II Hydroger Oxidized Presence Recent Ir Stunted c Other (Ex	4A, and 4B t (B11) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct or Stressed collain in Re es): None es): I photos, p	es (B13) Dodor (C1) Deres along ed Iron (C4 Diction in Tille d Plants (D4 Demarks) Demarks) Demarks	Living Roo 4) d Soils (C6 1) (LRR A) Wetl spections),	ots (C3) S) Jand Hydif availa	Dri Dri Sa GG Sri FA Ra Fri	ainage Patterns (B10) y-Season Water Table (C2) sturation Visible on Aerial Imagery (C9) eomorphic Position (D2) sallow Aquitard (D3) AC-Neutral Test (D5) sised Ant Mounds (D6) (LRR A) sost-Heave Hummocks (D7)
Sediment Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely Field Observator Table Saturation F (includes can Describe Remarks:	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca rvations: ater Present? Present? Present? pillary fringe) ecorded Data (streat	Yes Yes Yes Am gauge	No ⊠ No ⊠ No ⊠ No ⊠ No ⊠ No ⊠	Salt Crus Aquatic II Aquatic II Hydroger Oxidized Presence Recent Ir Stunted o Other (Ex) Depth (inched Depth (in	4A, and 4B t (B11) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct or Stressec collain in Re es): None es): I photos, p	es (B13) Description (C1) Description in Tille Desc	Living Roo 4) d Soils (C6 1) (LRR A) Wetl spections),	ots (C3) (S) (and Hyo if availa es. Dat	Dri Dri Sa GG St FA Ra Fr	ainage Patterns (B10) y-Season Water Table (C2) sturation Visible on Aerial Imagery (C9) eomorphic Position (D2) sallow Aquitard (D3) AC-Neutral Test (D5) sised Ant Mounds (D6) (LRR A) sost-Heave Hummocks (D7) y Present? Yes \Boxed No \Boxed collected early in the growing
Sediment Sediment Sediment Surface Inundating Sparsely Field Observator Field Observator Saturation Fincludes can Describe Reseason when the sediment of the season when the sediment of the s	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca rvations: ater Present? Present? Present? pillary fringe) ecorded Data (streat	Yes Yes Yes Am gauge	No ⋈	Salt Crus Aquatic II Hydroger Oxidized Presence Recent Ir Stunted o Other (Ex	4A, and 4B t (B11) nvertebrate n Sulfide C Rhizosphe e of Reduct on Reduct or Stressec (plain in Re es): None es): I photos, p	es (B13) Deres along ed Iron (C-1) circon in Tille d Plants (Demarks) e e e e crevious in a depth ce water y	Living Roo 4) d Soils (C6 1) (LRR A) Wetl spections), of 16 inch ear and t	and Hydif availa	Dri Dri Sa GG Sh FA Ra Fr	ainage Patterns (B10) y-Season Water Table (C2) sturation Visible on Aerial Imagery (C9) eomorphic Position (D2) sallow Aquitard (D3) AC-Neutral Test (D5) sised Ant Mounds (D6) (LRR A) sost-Heave Hummocks (D7)

Project/Site: 1144.0027 E Vancouver E-Commerce	e Center	City/Co	ounty	Camas	s, Clark	Samp	oling Date: 04	/07/2021
Applicant/Owner: Panattoni Development Compan		-					-	
Investigator(s): Rachael Hyland, Jacob Layman			,	Section, To	ownship, Range: 29,02	2N,03E,	SE	
Landform (hillslope, terrace, etc.): rolling								_{(%):} 1
Subregion (LRR): A2								
Soil Map Unit Name: Hesson clay loam, 0 to 8 perc								
Are climatic / hydrologic conditions on the site typical for this	s time of yea	ar? Ye	s 🗷	No ☐ (I	f no, explain in Remarks	3.)		
Are Vegetation, Soil, or Hydrology sign	nificantly dis	turbed	!?	Are "No	ormal Circumstances" pr	resent?	Yes 🗵 No [
Are Vegetation, Soil, or Hydrology natu	urally probler	matic?		(If need	ed, explain any answers	in Rema	arks.)	
SUMMARY OF FINDINGS - Attach site map				g point l	ocations, transect	s, impo	ortant featu	ıres, etc.
Hydrophytic Vegetation Present? Yes ☒ No ☐								
Hydric Soil Present? Yes ☐ No 🗵				Sampled				
Wetland Hydrology Present? Yes ☐ No 🗵			withi	n a Wetlar	nd? Yes 🗌	No 🗵		
Remarks: Not all three wetland criteria met; only hydro	mberti a vra a a			mt Data	aclicated on the cost of		ution of the mu	om outer
Not all three wetland criteria met; only nydro	pnyuc vege	tation	prese	ent. Data	conected on the east-ce	intrai por	rtion of the pr	operty.
VEGETATION – Use scientific names of plan	ts.							
	Absolute			Indicator	Dominance Test wor	rksheet:		
Tree Stratum (Plot size: 30 ft) 1	% Cover				Number of Dominant That Are OBL, FACW		3	(A)
2					Total Number of Dom	inant		
3					Species Across All St		3	(B)
4					Percent of Dominant S	Cassiss		
	0	= To	tal Co	over	That Are OBL, FACW	, or FAC:	100%	(A/B)
Sapling/Shrub Stratum (Plot size: 15 ft)					Prevalence Index wo	rkehoot	,	
1					Total % Cover of:			<i>r</i> ·
2 3					OBL species			
4					FACW species			
5					FAC species			
		= To	tal Co	over	FACU species			
Herb Stratum (Plot size: 5 ft)					UPL species		x 5 =	
1. Tritolium repens	30				Column Totals:			
2. Poa pratensis	25	Yes		FAC		5/4		
3. Alopecurus pratensis	20	Yes	<u> </u>	FACU	Prevalence Inde		<u> </u>	
4. Anthoxanthum odoratum	10	No		FACU FAC	Hydrophytic Vegetat			
5. Schedonorus arundinaceus 6. Taraxacum officinale	10 5	No		FACU	Rapid Test for Hy		vegetation	
	-	No		FACU	☐ Prevalence Index			
7					☐ Morphological Ada		1 (Provide sun	norting
8					data in Remar			
9					☐ Wetland Non-Vas	cular Plar	nts ¹	
10 11					☐ Problematic Hydro	ophytic V	egetation¹ (Ex	plain)
111.	100	- To	tal Co	over	¹ Indicators of hydric s			gy must
Woody Vine Stratum (Plot size: 30 ft)		- 10	itai Ot) VCI	be present, unless dis	turbed or	r problematic.	
1					Hydrophytic			
2					Vegetation			
% Bare Ground in Herb Stratum 0	0	= To	tal Co	over	Present? Y	'es ⊠ N	No 🗌	
Pomorko:								
Hydrophytic vegetation criteria met thr	ough dom	ninan	ce te	est.				

Depth	Matrix				ox Feature	<u>s</u>				
(inches)	Color (moist)	%_	Colo	or (moist)	%	Type ¹	Loc ²	Textur	<u>e</u>	<u>Remarks</u>
0-4	7.5YR 2.5/3	100						Lo		Loam
4-8	7.5YR 2.5/3	60						Lo		Loam; mixed matrix
4-8	7.5YR 2.5/1	40	_					SiCIL	0	Silty Clay Loam; mixed matrix
8-10	7.5YR 2.5/1	100						SiCIL	0	Silty Clay Loam
	-									
	Concentration, D=D Indicators: (Appl						ed Sand G			ation: PL=Pore Lining, M=Matrix. rs for Problematic Hydric Soils ³ :
☐ Histosol		ilcable to		Sandy Redox (eu. <i>)</i>				Muck (A10)
	pipedon (A2)			Stripped Matrix						Parent Material (TF2)
	istic (A3)			Loamy Mucky I	. ,) (excep	MLRA 1)			Shallow Dark Surface (TF12)
	en Sulfide (A4)			Loamy Gleyed			,			r (Explain in Remarks)
-	d Below Dark Surfa	ace (A11)		Depleted Matrix	x (F3)					
	ark Surface (A12)			Redox Dark Su	, ,			3 I		rs of hydrophytic vegetation and
-	Mucky Mineral (S1)			Depleted Dark	•	7)				nd hydrology must be present,
	Gleyed Matrix (S4) Layer (if present)			Redox Depress	sions (F8)				uniess	s disturbed or problematic.
Type: No		•								
	nches):			-				Hydri	ic Sail I	Present? Yes ☐ No ☒
Remarks:	,							Hydr	ic Joil	resent: res 🗀 NO 🖂
HYDROLO	OGY									
Wetland Hy		· e ·								
_	ydrology Indicator		uired: cho	eck all that ann	alv)				Secon	dary Indicators (2 or more required)
Primary Indi	ydrology Indicator icators (minimum o		uired; ch			as (BQ) (a	vcent MI F			dary Indicators (2 or more required)
Primary Indi	ydrology Indicator icators (minimum o Water (A1)		uired; ch	☐ Water-Sta	ined Leave	, , ,	xcept MLF	RA		ater-Stained Leaves (B9) (MLRA 1,
Primary Indi	ydrology Indicator icators (minimum o Water (A1) ater Table (A2)		uired; ch	☐ Water-Sta	nined Leave A, and 4B)	, , ,	xcept MLF	RA	☐ Wa	ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B)
Primary Indi Surface High Wa	ydrology Indicator icators (minimum o Water (A1) ater Table (A2)		uired; ch	☐ Water-Sta	ained Leave A, and 4B (B11))	xcept MLF	RA	☐ Wa	ater-Stained Leaves (B9) (MLRA 1,
Primary Indi Surface High Wa Saturation Water M	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3)		uired; ch	☐ Water-Sta 1, 2, 4 ☐ Salt Crust	ined Leave A, and 4B (B11) vertebrates	s (B13)	xcept MLF	RA	☐ Wa	ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) ainage Patterns (B10)
Primary Indi Surface High Wa Saturatie Water M	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) Marks (B1)		uired; ch	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen	ined Leave A, and 4B (B11) vertebrates	s (B13) lor (C1)	·		☐ Wa	ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2)
Primary Indi Surface High Wa Saturati Water M Sedimen Drift Dep	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2)		uired; che	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I	A, and 4B, (B11) vertebrates Sulfide Oc	s (B13) lor (C1) es along	Living Roo		☐ Wa	ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (
Primary Indi Surface High Wa Saturati Water M Sedimer Drift Der Algal Ma	ydrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)		uired; ch	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Iro	nined Leave A, and 4B (B11) vertebrates Sulfide Oc Rhizospher of Reduce on Reduction	s (B13) lor (C1) res along d Iron (C4 on in Tille	Living Roo 4) d Soils (C6	ots (C3)	☐ Wa	ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (Comorphic Position (D2)
Primary Indi Surface High Wa Saturati Water M Sedimel Drift Dep Algal Ma Iron Dep Surface	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6)	f one requ		Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Irc	nined Leave A, and 4B, (B11) Invertebrates Sulfide Oci Rhizospher of Reduce on Reduction	s (B13) lor (C1) es along d Iron (Co on in Tille Plants (D	Living Roo 4) d Soils (C6	ots (C3)	Dra Dra Ge	ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (Comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) ised Ant Mounds (D6) (LRR A)
Primary Indi Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Surface Inundati	ydrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria	f one requ	(B7)	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Irc	nined Leave A, and 4B (B11) vertebrates Sulfide Oc Rhizospher of Reduce on Reduction	s (B13) lor (C1) es along d Iron (Co on in Tille Plants (D	Living Roo 4) d Soils (C6	ots (C3)	Dra Dra Ge	ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (Ceomorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5)
Primary Indi Surface High Wa Saturati Water M Sedimer Drift Der Algal Ma Iron Der Surface Inundati Sparsely	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca	f one requ	(B7)	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Irc	nined Leave A, and 4B, (B11) Invertebrates Sulfide Oci Rhizospher of Reduce on Reduction	s (B13) lor (C1) es along d Iron (Co on in Tille Plants (D	Living Roo 4) d Soils (C6	ots (C3)	Dra Dra Ge	ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (Comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) ised Ant Mounds (D6) (LRR A)
Primary Indi Surface High Wa Saturation Water M Sedimen Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca	f one requ I Imagery ve Surfac	(B7) e (B8)	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Irc Stunted o Other (Ex	A, and 4B, (B11) Evertebrates Sulfide Oce Rhizospher of Reduce on Reduction r Stressed plain in Rei	s (B13) lor (C1) es along d Iron (Co on in Tille Plants (D	Living Roo 4) d Soils (C6	ots (C3)	Dra Dra Ge	ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (Comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) ised Ant Mounds (D6) (LRR A)
Primary Indi Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely Field Obset Surface Water	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca rvations: tter Present?	I Imagery ve Surfac	(B7) de (B8) No ⊠	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized If Presence Recent Irc Stunted or Other (Ex	wined Leave A, and 4B (B11) Evertebrates Sulfide Oc Rhizospher of Reduce on Reduction r Stressed plain in Ref	s (B13) lor (C1) es along d Iron (Co on in Tille Plants (D	Living Roo 4) d Soils (C6	ots (C3)	Dra Dra Ge	ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (Comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) ised Ant Mounds (D6) (LRR A)
Primary Indi Surface High Wa Saturati Water M Sedimer Drift Der Algal Ma Iron Der Surface Inundati Sparsely Field Obser Surface Water Table	ydrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Concarvations: ater Present?	I Imagery ve Surface Yes Yes	(B7) se (B8) No 🗷	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized If Presence Recent Irc Stunted o Other (Exp	wined Leave A, and 4B, (B11) Evertebrates Sulfide Oc Rhizospher of Reduce on Reduction or Stressed plain in Red as): None	s (B13) lor (C1) es along d Iron (Co on in Tille Plants (D	Living Roo 4) d Soils (C6 1) (LRR A)	ots (C3)	☐ Wa	ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (Comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)
Primary Indi Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely Field Obser Surface Water Table Saturation F	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca rvations: ater Present? Present?	I Imagery ve Surfac	(B7) de (B8) No ⊠	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized If Presence Recent Irc Stunted or Other (Ex	wined Leave A, and 4B, (B11) Evertebrates Sulfide Oc Rhizospher of Reduce on Reduction or Stressed plain in Red as): None	s (B13) lor (C1) es along d Iron (Co on in Tille Plants (D	Living Roo 4) d Soils (C6 1) (LRR A)	ots (C3)	☐ Wa	ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (Comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) ised Ant Mounds (D6) (LRR A)
Primary Indi Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely Field Obser Surface Wa Water Table Saturation F (includes ca	ydrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Concarvations: ater Present?	I Imagery ve Surfac Yes Yes Yes Yes Yes Yes	(B7) ee (B8) No 🗵 No 🗵 No 🗵	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Irc Stunted o Other (Exp	wined Leave A, and 4B (B11) Evertebrates Sulfide Oc Rhizospher of Reduce on Reduction or Stressed plain in Red as): None Sign: None Sign: None	s (B13) lor (C1) res along d Iron (C- on in Tille Plants (D marks)	Living Roo 4) d Soils (C6 1) (LRR A)	ots (C3) S)	☐ Wa	ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (Comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)
Primary Indi Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely Field Obser Surface Wa Water Table Saturation F (includes ca	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca rvations: ater Present? Present? Present?	I Imagery ve Surfac Yes Yes Yes Yes Yes	(B7) ee (B8) No 🗵 No 🗵 No 🗵	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Irc Stunted o Other (Exp	wined Leave A, and 4B (B11) Evertebrates Sulfide Oc Rhizospher of Reduce on Reduction or Stressed plain in Red as): None Sign: None Sign: None	s (B13) lor (C1) res along d Iron (C- on in Tille Plants (D marks)	Living Roo 4) d Soils (C6 1) (LRR A)	ots (C3) S)	☐ Wa	ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (Comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)
Primary Indi Surface High Wa Saturatio Water M Sedimel Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely Field Obser Surface Wa Water Table Saturation F (includes ca Describe Re	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca rvations: ater Present? Present? apillary fringe) ecorded Data (streat	I Imagery ve Surfac Yes Yes Yes Yes am gauge	(B7) se (B8) No ☑ No ☑ No ☑ , monitor	Water-Sta 1, 2, 4	wined Leave A, and 4B, (B11) Evertebrates Sulfide Oc Rhizospher of Reduce on Reduction of Reduct	s (B13) lor (C1) res along d Iron (C- on in Tille Plants (D marks) evious in	Living Roo 4) d Soils (C6 1) (LRR A) Wetl	ots (C3) S) Jand Hydif availa	☐ Wa	ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (Comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)
Primary Indi Surface High Wa Saturatio Water M Sedimel Drift Dep Algal Ma Iron Dep Surface Inundati Sparsely Field Obser Surface Wa Water Table Saturation F (includes ca Describe Re	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca rvations: ater Present? Present? Present?	I Imagery ve Surfac Yes Yes Yes Yes am gauge	(B7) se (B8) No ☑ No ☑ No ☑ , monitor	Water-Sta 1, 2, 4	wined Leave A, and 4B, (B11) Evertebrates Sulfide Oc Rhizospher of Reduce on Reduction of Reduct	s (B13) lor (C1) res along d Iron (C- on in Tille Plants (D marks) evious in	Living Roo 4) d Soils (C6 1) (LRR A) Wetl	ots (C3) S) Jand Hydif availa	☐ Wa	ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (Comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)
Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Der Algal Ma Iron Der Surface Inundati Sparsely Field Obser Surface Water Table Saturation F (includes ca Describe Re	ydrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca rvations: ater Present? Present? apillary fringe) ecorded Data (streat	I Imagery ve Surfac Yes Yes Yes Yes am gauge	(B7) se (B8) No ☑ No ☑ No ☑ , monitor	Water-Sta 1, 2, 4	wined Leave A, and 4B, (B11) Evertebrates Sulfide Oc Rhizospher of Reduce on Reduction of Reduct	s (B13) lor (C1) res along d Iron (C- on in Tille Plants (D marks) evious in	Living Roo 4) d Soils (C6 1) (LRR A) Wetl	ots (C3) S) Jand Hydif availa	☐ Wa	ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (Comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)

Project/Site: 1144.0027 E Vancouver E-Commerc	e Center	City/Count	y: Camas	s, Clark	Sampling Date: 04/07/2021
Applicant/Owner: Panattoni Development Compan	y, Inc.			State: WA	Sampling Point: DP-17u
Investigator(s): Rachel Hyland, Jacob Layman			Section, To	ownship, Range: <u>29, 02</u>	N, 03E, SE
Landform (hillslope, terrace, etc.): Terrace; Swale		_Local reli	ef (concave,	, convex, none): Conca	/e Slope (%): 2%
					59 Datum: WGS 84
Soil Map Unit Name: Hesson clay loam, 0 to 8 percentage	ent slopes	3		NWI classifica	ation: N/A
Are climatic / hydrologic conditions on the site typical for this	s time of yea	ar? Yes 🗵		f no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology sign	nificantly dis	turbed?	Are "No	ormal Circumstances" pres	sent? Yes 🗵 No 🗌
Are Vegetation, Soil, or Hydrology natu	rally probler	matic?	(If need	ed, explain any answers ir	n Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing	samplir	ng point le	ocations, transects,	, important features, etc.
Hydrophytic Vogetation Procent?					
Hydrophytic Vegetation Present? Yes ☒ No ☐ Hydric Soil Present? Yes ☒ No ☒			he Sampled		<u></u>
Wetland Hydrology Present? Yes ☐ No 🗵		with	nin a Wetlar	nd? Yes □ N	lo 🗵
Remarks: Not all three wetland criteria met; only hydro	abertia vaaa	tation nea	oont Data a	collected on the eastern n	aution of the authiost property
Two an tinee wedand cinena met, only nydro	pilytic vege	tation pic	sciii. Data c	concered on the eastern p	ortion of the subject property.
VEGETATION – Use scientific names of plan	te				
VEGETATION – Use scientific fiames of plan		Dominan	t Indicator	Dominance Test works	sheet
Tree Stratum (Plot size: 30 ft)	% Cover			Number of Dominant Sp	
1				That Are OBL, FACW, o	
2				Total Number of Domina	
3				Species Across All Strat	ta: <u>3</u> (B)
4	0		Cover	Percent of Dominant Sp	pecies
Sapling/Shrub Stratum (Plot size: 15 ft)	<u> </u>	= Total C	Jovei	That Are OBL, FACW, o	or FAC: <u>67%</u> (A/B)
1				Prevalence Index work	rsheet:
2					Multiply by:
3					x 1 =
4					x 2 =
5		= Total 0	Cover		x 3 = x 4 =
Herb Stratum (Plot size: 5 ft)		= rotar C	Jovei		x5=
1. Poa pratensis	40	Yes	FAC	· ·	(A) (B)
2. Trifolium repens	30	Yes	FAC		
3. Hypochaeris radicata	20	Yes	FACU		= B/A =
4. Agrostis capillaris	10	No	FAC	Hydrophytic Vegetatio	
5				Rapid Test for Hydro	· ·
6				☑ Dominance Test is :☑ Prevalence Index is	
7					stations ¹ (Provide supporting
8					s or on a separate sheet)
9 10				☐ Wetland Non-Vascu	ılar Plants ¹
11				☐ Problematic Hydrop	hytic Vegetation ¹ (Explain)
	100	= Total 0	Cover	¹ Indicators of hydric soil be present, unless distu	and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft)				be present, unless distu	ibed of problematic.
1				Hydrophytic	
2				Vegetation	
% Bare Ground in Herb Stratum 0	0	= Total (over	Present? Yes	s⊠ No□
Remarks: Hydrophytic vegetation criteria met thr			tost	I.	
r iyaropriyiic vegetation chtena met till	ough uon	mance l	co.		

Depth	Matrix	(Red	ox Feature	es			
(inches)	Color (moist)	%	Colo	or (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-9	7.5 YR 3/2	100		-				MeLo	Medium Loam
9-15	7.5 YR 3/2	98	7.5	YR 3/4	2	С	M	MeLo	Medium Loam
			_						
	-					_		-	
	-								<u> </u>
	-								
			_						
1Type: C-C	oncentration, D=D	Nonlotion [lugad Matrix C	·S-Covere	d or Coot	ad Sand C	roino	21 continue DI — Poro Lining M—Matrix
	Indicators: (App						eu Sanu G		² Location: PL=Pore Lining, M=Matrix. cators for Problematic Hydric Soils ³ :
☐ Histosol				Sandy Redox (,			2 cm Muck (A10)
	pipedon (A2)			Stripped Matrix					Red Parent Material (TF2)
☐ Black Hi	. ,			Loamy Mucky I	. ,	1) (excep	t MLRA 1)		Very Shallow Dark Surface (TF12)
☐ Hydroge	n Sulfide (A4)			Loamy Gleyed	Matrix (F2	2)			Other (Explain in Remarks)
	d Below Dark Surf	ace (A11)		Depleted Matri	. ,				
	ark Surface (A12)			Redox Dark Su	` ,				cators of hydrophytic vegetation and
-	lucky Mineral (S1))		Depleted Dark		7)			vetland hydrology must be present,
	leyed Matrix (S4) Layer (if present)	١-		Redox Depress	sions (F8)			T u	nless disturbed or problematic.
Type: No):							
	ches):			_				Hydric	Soil Present? Yes □ No ⊠
Remarks:				•				nyunc .	Soli Fleselit! Tes No M
	!!!!!	4							
No nyaric s	soil criteria me	τ.							
HYDROLO	GY								
	GY drology Indicato	rs:							
Wetland Hy			uired; che	eck all that app	oly)			<u>S</u>	econdary Indicators (2 or more required)
Wetland Hy	drology Indicato		uired; che	eck all that app		es (B9) (є	except MLF		econdary Indicators (2 or more required)] Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hy Primary India ☐ Surface	drology Indicato		uired; ch	☐ Water-Sta			except MLF		
Wetland Hy Primary India ☐ Surface ☐ High Wa ☐ Saturation	drology Indicato cators (minimum o Water (A1) tter Table (A2) on (A3)		uired; ch	☐ Water-Sta	ined Leav A, and 4E		except MLF		Water-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hy Primary India ☐ Surface ☐ High Wa ☐ Saturation	drology Indicato cators (minimum o Water (A1) tter Table (A2)		uired; ch	☐ Water-Sta	ined Leav A, and 4E (B11)	3)	except MLF	RA [Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimen	drology Indicato cators (minimum o Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2)		uired; che	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen	ined Leav A, and 4E (B11) vertebrate Sulfide O	es (B13) dor (C1)		RA [Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep	drology Indicato cators (minimum of Water (A1) tter Table (A2) on (A3) arks (B1) nt Deposits (B2) posits (B3)		uired; che	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I	A, and 4E (B11) (Vertebrate Sulfide O Rhizosphe	es (B13) dor (C1) res along	Living Roo	RA C	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma	drology Indicator cators (minimum of Water (A1) tter Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3) at or Crust (B4)		uired; che	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence	A, and 4E (B11) vertebrate Sulfide O Rhizosphe of Reduce	es (B13) dor (C1) res along ed Iron (C	Living Roo 4)	RA C	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma	drology Indicator cators (minimum of Water (A1) tter Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5)		uired; ch	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Iro	A, and 4E (B11) vertebrate Sulfide O Rhizosphe of Reduce	es (B13) dor (C1) res along ed Iron (C on in Tille	Living Roo 4) d Soils (C6	RA C	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	drology Indicator cators (minimum of Water (A1) tter Table (A2) on (A3) arks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6)	of one requ		Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Irc	nined Leaven, A, and 4E (B11) Evertebrate Sulfide O Rhizosphe of Reduce on Reduction	es (B13) dor (C1) res along ed Iron (C on in Tille Plants (E	Living Roo 4)	RA C	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundation	drology Indicator cators (minimum of Water (A1) Inter Table (A2) on (A3) arks (B1) Int Deposits (B2) cosits (B3) Int or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria	of one requ	(B7)	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Iro	nined Leaven, A, and 4E (B11) Evertebrate Sulfide O Rhizosphe of Reduce on Reduction	es (B13) dor (C1) res along ed Iron (C on in Tille Plants (E	Living Roo 4) d Soils (C6	RA C	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio	drology Indicator cators (minimum of Water (A1) ster Table (A2) on (A3) arks (B1) at Deposits (B2) sosits (B3) at or Crust (B4) sosits (B5) Soil Cracks (B6) on Visible on Aeria	of one requ	(B7)	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Irc	nined Leaven, A, and 4E (B11) Evertebrate Sulfide O Rhizosphe of Reduce on Reduction	es (B13) dor (C1) res along ed Iron (C on in Tille Plants (E	Living Roo 4) d Soils (C6	RA C	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely	drology Indicator cators (minimum of Water (A1) ther Table (A2) on (A3) arks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concar	of one requ al Imagery ave Surfac	(B7) e (B8)	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Irc Stunted o Other (Ex	A, and 4E (B11) Evertebrate Sulfide O Rhizosphe of Reduce on Reducti r Stressed plain in Re	es (B13) dor (C1) res along ed Iron (C on in Tille Plants (E emarks)	Living Roo 4) d Soils (C6	RA C	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser	drology Indicator cators (minimum of Water (A1) Inter Table (A2) on (A3) arks (B1) Int Deposits (B2) cosits (B3) Int or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concarvations:	al Imagery ave Surfac	(B7) ee (B8) No ⊠	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Irc Stunted o Other (Ex	ined Leav A, and 4E (B11) vertebrate Sulfide O Rhizosphe of Reduce on Reducti r Stressed plain in Re	es (B13) dor (C1) res along ed Iron (C on in Tille Plants (E emarks)	Living Roo 4) d Soils (C6	RA C	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatic Sparsely Field Obser Surface Water Table	drology Indicator cators (minimum of water (A1) after Table (A2) on (A3) arks (B1) arks (B1) arks (B3) at or Crust (B4) arks (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concavations: The resent?	al Imagery ave Surfac Yes Yes	(B7) ee (B8) No ⊠ No ⊠	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized If Presence Recent Irc Stunted o Other (Exp	inined Leaven A, and 4E (B11) evertebrate Sulfide O Rhizosphe of Reduce on Reduction Stressed plain in Research None	es (B13) dor (C1) res along ed Iron (C on in Tille Plants (D emarks)	Living Roo 4) d Soils (C6 01) (LRR A)	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Water Table Saturation P	drology Indicatoricators (minimum of Water (A1) after Table (A2) on (A3) arks (B1) arks (B1) arks (B3) after Crust (B4) arks (B5) Soil Cracks (B6) on Visible on Aeria (Vegetated Concavations: The Present? Present?	al Imagery ave Surfac	(B7) ee (B8) No ⊠	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized I Presence Recent Irc Stunted o Other (Ex	inined Leaven A, and 4E (B11) evertebrate Sulfide O Rhizosphe of Reduce on Reduction Stressed plain in Research None	es (B13) dor (C1) res along ed Iron (C on in Tille Plants (D emarks)	Living Roo 4) d Soils (C6 01) (LRR A)	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca	drology Indicator cators (minimum of water (A1) after Table (A2) on (A3) arks (B1) arks (B1) arks (B3) at or Crust (B4) arks (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concavations: The resent?	al Imagery ave Surfac Yes Yes Yes Yes Yes	(B7) e (B8) No 🗵 No 🗵 No 🗵	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized If Presence Recent Irc Stunted or Other (Exp	wined Leaven A, and 4E (B11) Invertebrate Sulfide Of Reduce on Reduction Reduction Results in Resul	es (B13) dor (C1) res along ed Iron (C on in Tille Plants (C emarks)	Living Roo 4) d Soils (C6 01) (LRR A)	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Water Table Saturation P (includes cal	drology Indicatoricators (minimum of Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (A2) Inter Table (B1) Inter Table (B3) Inter Table (B4) Inter Table (B6) Inter Trust (B4) Inter Table (A2) Inter Tab	al Imagery ave Surfac Yes Yes Yes Yes Yes	(B7) e (B8) No 🗵 No 🗵 No 🗵	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized If Presence Recent Irc Stunted or Other (Exp	wined Leaven A, and 4E (B11) Invertebrate Sulfide Of Reduce on Reduction Reduction Results in Resul	es (B13) dor (C1) res along ed Iron (C on in Tille Plants (C emarks)	Living Roo 4) d Soils (C6 01) (LRR A)	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatic Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca	drology Indicatoricators (minimum of Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (A2) Inter Table (B1) Inter Table (B3) Inter Table (B4) Inter Table (B6) Inter Trust (B4) Inter Table (A2) Inter Tab	al Imagery ave Surfac Yes Yes Yes Yes Yes	(B7) e (B8) No 🗵 No 🗵 No 🗵	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized If Presence Recent Irc Stunted or Other (Exp	wined Leaven A, and 4E (B11) Invertebrate Sulfide Of Reduce on Reduction Reduction Results in Resul	es (B13) dor (C1) res along ed Iron (C on in Tille Plants (C emarks)	Living Roo 4) d Soils (C6 01) (LRR A)	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Water Table Saturation P (includes ca) Describe Re	drology Indicatoricators (minimum of Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (A2) Inter Table (B1) Inter Table (B3) Inter Table (B4) Inter Table (B6) Inter Trust (B4) Inter Table (A2) Inter Tab	al Imagery ave Surfac Yes Yes Yes am gauge,	(B7) se (B8) No ☑ No ☑ No ☑ no ☑ no itor	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized If Presence Recent Irc Stunted or Other (Exp	wined Leaven A, and 4E (B11) Invertebrate Sulfide Of Reduce on Reduction Reduction Results in Results None (BS): None (BS	es (B13) dor (C1) res along ed Iron (C on in Tille Plants (E emarks)	Living Roo 4) d Soils (C6 01) (LRR A) Wetl	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Water Table Saturation P (includes ca) Describe Re	drology Indicatoricators (minimum of Water (A1) ster Table (A2) on (A3) arks (B1) on Exposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concarvations: are Present? Present? pillary fringe) corded Data (streen	al Imagery ave Surfac Yes Yes Yes am gauge,	(B7) se (B8) No ☑ No ☑ No ☑ no ☑ no itor	Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized If Presence Recent Irc Stunted or Other (Exp	wined Leaven A, and 4E (B11) Invertebrate Sulfide Of Reduce on Reduction Reduction Results in Results None (BS): None (BS	es (B13) dor (C1) res along ed Iron (C on in Tille Plants (E emarks)	Living Roo 4) d Soils (C6 01) (LRR A) Wetl	ts (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

Project/Site: 1144.0027 E Vancouver E-Commerc	e Center	City/Co	ounty:	Camas	, Clark	Samplir	ng Date: 04/0	7/2021
Applicant/Owner: Panattoni Development Compan	y, Inc.				State: WA	Samplir	ng Point: DP	-18u
Investigator(s): Jacob Layman			Se	ection, To	ownship, Range: 29, 0	2N, 03E,	SE	
Landform (hillslope, terrace, etc.): Terrace; Swale		Local	relief (concave,	, convex, none): Conc	ave	Slope (%	_{6):} 2%
Subregion (LRR): A2	_ Lat: _45	.6221	68		Long: -122.45612	2559	Datum: W	/GS 84
Soil Map Unit Name: Hesson clay loam, 0 to 8 percentage								
Are climatic / hydrologic conditions on the site typical for this				_	f no, explain in Remarks			
Are Vegetation, Soil, or Hydrology sign	•			•	ormal Circumstances" pi	,	es 🗵 No 🗌	
Are Vegetation, Soil, or Hydrology natu					ed, explain any answers			
SUMMARY OF FINDINGS – Attach site map				,	, ,		,	es, etc.
Hydrophytic Vegetation Present? Yes ☒ No ☐								
Hydric Soil Present? Yes ☐ No 🗵				Sampled				
Wetland Hydrology Present? Yes ☐ No ☒		'	within	a Wetlar	nd? Yes □	No 🔀		
Remarks: Not all three wetland criteria not met; only hy	drophytic v	enetati	ion pre	ecent Da	ata collected in an unla	nd area on	the southeas	t portion
of the property.	diopnytic v	egetan	ion pre	esciii. Da	ita conecteu in an upia	nu area on	the southeas	t portion
VEGETATION – Use scientific names of plan	ts.							
T. O. (D. (D.)	Absolute			ndicator	Dominance Test wo	rksheet:		
Tree Stratum (Plot size: 30 ft)	% Cover	-			Number of Dominant		2	(4)
1					That Are OBL, FACW	, or FAC:	3	_ (A)
2 3					Total Number of Dom		3	(B)
4.					Species Across All St	iala.	<u>. J</u>	_ (D)
	0			er	Percent of Dominant : That Are OBL, FACW	Species /. or FAC:	100%	(A/B)
Sapling/Shrub Stratum (Plot size: 15 ft)								_ (/
1					Prevalence Index wo		NA street to the co	
2					Total % Cover of:			
3					OBL species			
4. 5.					FAC species			
3.		- Tot	tal Cove	er	FACU species			
Herb Stratum (Plot size: 5 ft)					UPL species		·	
1. Poa pratensis	40				Column Totals:			
2. Trifolium repens	35	Yes		FAC_				
3. Agrostis capillaris	20	Yes		ACL	Prevalence Inde			
4. Hypochaeris radicata	2	No		FACU FACU	Hydrophytic Vegetat			
5. Taraxacum officinale		No		ACU	Rapid Test for Hy Dominance Test i	' '	egetation	
6					☐ Prevalence Index			
7					☐ Morphological Ad		Provide supp	orting
8					data in Remar			
9					☐ Wetland Non-Vas	cular Plants	s ¹	
10 11					☐ Problematic Hydro	ophytic Veg	jetation¹ (Expl	ain)
	99	= Tot	tal Cove	er	¹ Indicators of hydric s be present, unless dis			/ must
Woody Vine Stratum (Plot size: 30 ft)					be present, unless dis	surbed or p	TODIETTIALIC.	
1					Hydrophytic			
2		-			Vegetation	. –		
% Bare Ground in Herb Stratum 1	0	= Tot	tal Cove	er	Present? Y	′es ⊠ No	,	
Pomorko:					<u> </u>			
Hydrophytic vegetation criteria met thr	ough dom	ıınand	ce test	τ.				

Depth	Matrix	(Redo	x Feature	S .			
(inches)	Color (moist)	%	Color	(moist)	%	Type ¹	Loc ²	Texture	Remarks
0-10	7.5 YR 3/2	100		-		-		MeLo	Medium Loam
10-15	7.5 YR 3/2	99	7.5 `	YR 3/4	1	С	M	MeLo	Medium Loam
			_					-	
	-				-	-			
					-	-			
					_				
1T C. C			M Dadu	and Matrice CC					21 anations DI David Lining M Matrix
	oncentration, D=D Indicators: (App						ed Sand G		² Location: PL=Pore Lining, M=Matrix. icators for Problematic Hydric Soils ³ :
☐ Histosol				andy Redox (S		,			2 cm Muck (A10)
	oipedon (A2)			tripped Matrix					Red Parent Material (TF2)
☐ Black His	. ,			pamy Mucky M	. ,	1) (excep	t MLRA 1)		Very Shallow Dark Surface (TF12)
☐ Hydroge	n Sulfide (A4)		☐ Lo	namy Gleyed N	Matrix (F2)			Other (Explain in Remarks)
	d Below Dark Surf	ace (A11)		epleted Matrix	. ,				
	ark Surface (A12)			edox Dark Sur	` ,				dicators of hydrophytic vegetation and
-	lucky Mineral (S1))		epleted Dark S		7)			wetland hydrology must be present,
	Bleyed Matrix (S4)		□ R	edox Depressi	ons (F8)			1	unless disturbed or problematic.
Type: No	Layer (if present)):							
• •	ches):							Hydria	Soil Present? Yes □ No 🗵
Remarks:								пуштс	Soil Fresent? Tes No A
	11								
No nyaric s	soil criteria me	τ.							
HYDROLO	GY								
Wetland Hy									
	drology indicato	rs:							
Primary Indi	cators (minimum c		ired; ched	ck all that appl	y)			<u> </u>	Secondary Indicators (2 or more required)
				ck all that appl		es (B9) (•	except MLF		Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2,
☐ Surface	cators (minimum o			☐ Water-Stai			except MLF		
☐ Surface	cators (minimum o Water (A1) ater Table (A2)			☐ Water-Stai	ned Leav A, and 4E		except MLF		Water-Stained Leaves (B9) (MLRA 1, 2,
Surface High Wa	cators (minimum o Water (A1) ater Table (A2)			☐ Water-Stai	ned Leav A, and 4B (B11))	except MLF	RA [☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Surface High Wa Saturatio	cators (minimum o Water (A1) ster Table (A2) on (A3)			☐ Water-Stai 1, 2, 44 ☐ Salt Crust	ned Leav A, and 4B (B11) vertebrate	s (B13)	except MLF	RA [☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ☐ Drainage Patterns (B10)
Surface High Wa Saturatio Water M Sedimer Drift Dep	cators (minimum of Water (A1) Inter Table (A2) Ion (A3) Iarks (B1) Int Deposits (B2) Ionosits (B3)			Water-Stai 1, 2, 4,4 Salt Crust Aquatic Inv Hydrogen S Oxidized R	ned Leav A, and 4B (B11) vertebrate Sulfide O	s (B13) dor (C1) res along	Living Roo	RA [Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)
Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma	cators (minimum of Water (A1) ster Table (A2) on (A3) larks (B1) ont Deposits (B2) oosits (B3) at or Crust (B4)			Water-Stai 1, 2, 44 Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence C	ned Leav A, and 4B (B11) vertebrate Sulfide Ochizosphe of Reduce	s (B13) dor (C1) res along	Living Roo 4)	RA [Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3)
Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma	cators (minimum of Water (A1) Ater Table (A2) On (A3) Alarks (B1) At Deposits (B2) Dosits (B3) At or Crust (B4) Dosits (B5)			Water-Stai 1, 2, 44 Salt Crust Aquatic Inv Hydrogen Oxidized R Presence c Recent Iron	ned Leav A, and 4B (B11) Vertebrate Sulfide Or Chizosphe of Reduce	s (B13) dor (C1) res along d Iron (C on in Tille	Living Roo 4) d Soils (C6	RA [[[[[]]]] [] []]	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) on Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6)	of one requ]]]]]	Water-Stai 1, 2, 44 Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence C Recent Iron Stunted or	ned Leav A, and 4B (B11) vertebrate Sulfide Or chizosphe of Reducti Stressed	s (B13) dor (C1) res along d Iron (C on in Tille Plants (E	Living Roo 4) d Soils (C6	RA [[[[[]]]] [] []]	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria	of one requ	[[[[[[(B7)]	Water-Stai 1, 2, 44 Salt Crust Aquatic Inv Hydrogen Oxidized R Presence c Recent Iron	ned Leav A, and 4B (B11) vertebrate Sulfide Or chizosphe of Reducti Stressed	s (B13) dor (C1) res along d Iron (C on in Tille Plants (E	Living Roo 4) d Soils (C6	RA [[[[[]]]] [] []]	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio	cators (minimum of Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (B1) Int Deposits (B2) Int Deposits (B3) Int or Crust (B4) Interior (B4) Interior (B5) Interior (B5) Interior (B6) Interio	of one requ	[[[[[[(B7)]	Water-Stai 1, 2, 44 Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence C Recent Iron Stunted or	ned Leav A, and 4B (B11) vertebrate Sulfide Or chizosphe of Reducti Stressed	s (B13) dor (C1) res along d Iron (C on in Tille Plants (E	Living Roo 4) d Soils (C6	RA [[[[[]]]] [] []]	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely	cators (minimum of Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (A2) Inter Table (B2) Inter Table (B3) Inter Table (B4) Inter Table (B2) Inter Tabl	of one requ al Imagery ave Surface	[[[[[(B7) [e (B8)	Water-Stai 1, 2, 44 Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence C Recent Iron Stunted or Other (Exp	ned Leav A, and 4B (B11) vertebrate Sulfide Or chizosphe of Reduce n Reducti Stressed lain in Re	s (B13) dor (C1) res along d Iron (C on in Tille Plants (E marks)	Living Roo 4) d Soils (C6	RA [[[[[]]]] [] []]	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio	cators (minimum of Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (A2) Inter Table (B2) Inter Table (B3) Inter Table (B4) Inter Table (B2) Inter Tabl	of one requial Imagery ave Surface	[[[[[(B7) [e (B8)	Water-Stai 1, 2, 44 Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence C Recent Iron Stunted or Other (Exp	ned Leav A, and 4B (B11) vertebrate Sulfide Or chizosphe of Reduce n Reducti Stressed lain in Re	s (B13) dor (C1) res along d Iron (C on in Tille Plants (E marks)	Living Roo 4) d Soils (C6	RA [[[[[]]]] [] []]	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely	cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concar evations: ater Present?	al Imagery ave Surface Yes Yes	[[[[(B7) [e (B8)] No ⊠	Water-Stai 1, 2, 44 Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence C Recent Iron Stunted or Other (Exp Depth (inches	ned Leave A, and 4B (B11) Vertebrate Sulfide Or Chizosphe of Reduce In Reducti Stressed Jain in Re S): None	s (B13) dor (C1) res along d Iron (C on in Tille Plants (C marks)	Living Roo 4) d Soils (C6	RA [[[[[]]]] [] []]	Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P	cators (minimum of Water (A1) water Table (A2) on (A3) larks (B1) on Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concar of Vations: eer Present? Present?	al Imagery ave Surface Yes Yes	[[[[[(B7) [e (B8)	Water-Stai 1, 2, 44 Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence C Recent Iron Stunted or Other (Exp	ned Leave A, and 4B (B11) Vertebrate Sulfide Or Chizosphe of Reduce In Reducti Stressed Jain in Re S): None	s (B13) dor (C1) res along d Iron (C on in Tille Plants (C marks)	Living Roo 4) d Soils (C6 11) (LRR A)	RA [Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca	cators (minimum of Water (A1) water Table (A2) on (A3) larks (B1) on Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concarvations: water Present?	al Imagery ave Surface Yes Yes Yes Yes Yes Yes	[Water-Stai 1, 2, 44 Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence C Recent Iror Stunted or Other (Exp Depth (inches	ned Leave A, and 4B (B11) Vertebrate Sulfide Or Chizosphe of Reduce In Reducti Stressed Jain in Re Si: None None	s (B13) dor (C1) res along d Iron (C on in Tille Plants (C marks)	Living Roo 4) d Soils (C6 01) (LRR A)	RA [Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca	cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concar creations: arer Present? aresent? aresent? aresent? aresent?	al Imagery ave Surface Yes Yes Yes Yes Yes Yes	[Water-Stai 1, 2, 44 Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence C Recent Iror Stunted or Other (Exp Depth (inches	ned Leave A, and 4B (B11) Vertebrate Sulfide Or Chizosphe of Reduce In Reducti Stressed Jain in Re Si: None None	s (B13) dor (C1) res along d Iron (C on in Tille Plants (C marks)	Living Roo 4) d Soils (C6 01) (LRR A)	RA [Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca	cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concar creations: arer Present? aresent? aresent? aresent? aresent?	al Imagery ave Surface Yes Yes Yes Yes Yes Yes	[Water-Stai 1, 2, 44 Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence C Recent Iror Stunted or Other (Exp Depth (inches	ned Leave A, and 4B (B11) Vertebrate Sulfide Or Chizosphe of Reduce In Reducti Stressed Jain in Re Si: None None	s (B13) dor (C1) res along d Iron (C on in Tille Plants (C marks)	Living Roo 4) d Soils (C6 01) (LRR A)	RA [Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Water Table Saturation P (includes ca) Describe Re	cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concar creations: arer Present? aresent? aresent? aresent? aresent?	al Imagery ave Surface Yes Yes Yes am gauge,	(B7) [(B7) [(B8) No 🗵 No 🗵 monitorin	Water-Stai 1, 2, 44 Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iron Stunted or Other (Exp Depth (inches Depth (inches	ned Leave A, and 4B (B11) Vertebrate Sulfide Or Chizosphe of Reduce n Reducti Stressed Jain in Re Si: None None	s (B13) dor (C1) res along d Iron (C on in Tille Plants (E marks)	Living Roo 4) d Soils (C6 01) (LRR A) Wetl spections),	ets (C3) [Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Water Table Saturation P (includes ca) Describe Re	cators (minimum of Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (A2) Inter Table (A2) Inter Table (B2) Inter Toust (B3) Inter Toust (B4) Inter Table (A2) Inter Table (B2) Inter Tabl	al Imagery ave Surface Yes Yes Yes am gauge,	(B7) [(B7) [(B8) No 🗵 No 🗵 monitorin	Water-Stai 1, 2, 44 Salt Crust Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iron Stunted or Other (Exp Depth (inches Depth (inches	ned Leave A, and 4B (B11) Vertebrate Sulfide Or Chizosphe of Reduce n Reducti Stressed Jain in Re Si: None None	s (B13) dor (C1) res along d Iron (C on in Tille Plants (E marks)	Living Roo 4) d Soils (C6 01) (LRR A) Wetl spections),	ets (C3) [Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)

Project/Site: 1144.0027 E Vancouver E-Commerc	e Center	City/Co	ounty:	Camas	, Clark	_ Samplir	ng Date: 04/0	7/2021
Applicant/Owner: Panattoni Development Compan							-	
Investigator(s): Jacob Layman			s	ection, To	ownship, Range: <u>29, 02</u>	2N, 03E,	SE	
Landform (hillslope, terrace, etc.): Terrace; Swale								_{6):} 2%
Subregion (LRR): A2	Lat: 45	- 5.6232	253	`	Long: -122.457619	989	Datum: W	/GS 84
Soil Map Unit Name: Hesson clay loam, 0 to 8 percentage								
Are climatic / hydrologic conditions on the site typical for this					f no, explain in Remarks			
Are Vegetation, Soil, or Hydrology sign	nificantly dis	turbed'	?	Are "No	ormal Circumstances" pre	esent? Ye	es 🗵 No 🗌	
Are Vegetation, Soil, or Hydrology natu				(If need	ed, explain any answers	in Remark	(s.)	
SUMMARY OF FINDINGS – Attach site map								es, etc.
Lhudanahudia Vasadatian Drassat?								
Hydrophytic Vegetation Present? Yes ☒ No ☐ Hydric Soil Present? Yes ☒ No ☐			Is the	Sampled				
Wetland Hydrology Present? Yes ☐ No ⊠		'	within	a Wetlar	nd? Yes 🗌	No 🗵		
Remarks: Not all three wetland criteria not met; only hy	rdeia anila a	nd byd	leon by	rtia vacat	ation present. Data celle	acted in ar	a unland area	on the
south-central portion of the site.	diffe soils a	na nya	порпу	uc vegen	ation present. Data cond	ecteu iii aii	i upianu area	on the
VEGETATION – Use scientific names of plan	ts.							
-	Absolute			ndicator	Dominance Test wor	ksheet:		
Tree Stratum (Plot size: 30 ft) 1	% Cover				Number of Dominant S That Are OBL, FACW,		2	_ (A)
2					Total Number of Domi	nant		
3					Species Across All Stra	ata:	2	_ (B)
4	0		tal Cav	/Or	Percent of Dominant S	pecies	4000/	(4.5)
Sapling/Shrub Stratum (Plot size: 15 ft)	<u> </u>	= 100	iai Cov	/ei	That Are OBL, FACW,	or FAC:	100%	_ (A/B)
1					Prevalence Index wo	rksheet:		
2					Total % Cover of:			
3					OBL species			
4					FACW species			
5					FAC species			
Herb Stratum (Plot size: 5 ft)	0	= Tot	tal Cov	/er	FACU species			
1. Agrostis capillaris	60	Yes	s	FAC	UPL species Column Totals:			—— (B)
2. Poa pratensis	40	Yes	<u> </u>	FAC	Column rotals.	(^)	,	(b)
3					Prevalence Index	κ = B/A =		
4					Hydrophytic Vegetati	on Indicat	tors:	
5					☐ Rapid Test for Hyd		egetation	
6					Dominance Test is			
7					☐ Prevalence Index i			
8					☐ Morphological Ada data in Remark			
9					☐ Wetland Non-Vaso		•	••)
10		·			☐ Problematic Hydro	phytic Veg	jetation¹ (Expl	ain)
11	100				¹ Indicators of hydric so	-		
Woody Vine Stratum (Plot size: 30 ft)		= I Ot	tal Cov	/er	be present, unless dist	urbed or p	roblematic.	
1					Hydrophytic			
2	^	= Tot	tal Cov	/er	Vegetation Present? Yes	es 🗷 No	. 🗆	
% Bare Ground in Herb Stratum 0								
Remarks: Hydrophytic vegetation criteria met thr	ough dom	ninanc	ce tes	 st.				
, , , , , , , , , , , , , , , , , , , ,	- 3 2011							

Depth inches) C	Matrix Color (moist)	%	_ <u>Cal</u>		ox Feature		1.002	Toytura	Domarka
	7.5 YR 3/2	60		or (moist) 5 YR 3/6	<u>%</u> 7	Type ¹ C	Loc ² M, PL	<u>Texture</u> MeLo	Remarks Medium Loam; Mixed matrix
	5Y 3/1	33		-	_ '		171, 1 =	MeLo	Medium Loam; Mixed matrix
			- —	-					
	7.5 YR 3/2	100		-			-	CILo	Clay Loam
2-18 <u>7</u>	7.5 YR 3/2	98		YR 3/4	2	<u>C</u>	<u>M</u>	CILO	Clay Loam
ydric Soil Ind] Histosol (A1	•		all LRR □	s, unless oth Sandy Redox (erwise no (S5)		ed Sand Gi	Indi	² Location: PL=Pore Lining, M=Matrix. cators for Problematic Hydric Soils ³ : 2 cm Muck (A10)
Histic Epipe				Stripped Matrix	` '	1) (aveen	4 MI DA 4\		Red Parent Material (TF2) Very Shallow Dark Surface (TF12)
Black Histic Hydrogen S				Loamy Mucky Loamy Gleyed			t WILKA I)		Other (Explain in Remarks)
	selow Dark Surfac	ce (A11)		Depleted Matri		-)		Ш	Other (Explain in Nemarko)
	Surface (A12)	, ,		Redox Dark Sι	, ,)		³ Ind	icators of hydrophytic vegetation and
	ky Mineral (S1)			Depleted Dark	•	- 7)			vetland hydrology must be present,
	yed Matrix (S4)			Redox Depress	sions (F8)			·	inless disturbed or problematic.
estrictive Lay Type: None	yer (if present):								
Depth (inche				-					
Deptil (illicite	es)			•				Hydric	Soil Present? Yes 区 No □
emarks: ydric soil cr	riteria met thro	ough in	dicator	⁻ F6.					
ydric soil cr			dicatoı	⁻ F6.					
ydric soil cr	Y	s:			oly)			S	econdary Indicators (2 or more required)
ydric soil cr	Y ology Indicators tors (minimum of	s:				ves (Β9) (є	except MLF		econdary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1 ,
ydric soil cr /DROLOG` /etland Hydro	Y ology Indicators fors (minimum of ater (A1)	s:		eck all that app			except MLF		
OROLOGY Orolog	Y clogy Indicators cors (minimum of ater (A1) Table (A2)	s:		eck all that app Water-Sta 1, 2, 4 Salt Crust	ained Leav A, and 4E (B11)	3)	except MLF	RA [Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10)
/DROLOGY /etland Hydro rimary Indicate Surface Wa High Water Saturation (yology Indicators tors (minimum of ater (A1) Table (A2) (A3) KS (B1)	s:		eck all that app Water-Sta 1, 2, 4 Salt Crust Aquatic Ir	nined Leav A, and 4E (B11) overtebrate	B) es (B13)	except MLF	RA C	Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
/DROLOGY /etland Hydro rimary Indicate Surface Wa High Water Saturation (Water Mark Sediment D	yology Indicators fors (minimum of ater (A1) Table (A2) (A3) (A3) (A5) (A5) (A5)	s:		eck all that app Water-Sta 1, 2, 4 Salt Crust Aquatic Ir Hydrogen	ained Leav A, and 4E (B11) avertebrate Sulfide O	es (B13) dor (C1)	-	RA [Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C
/DROLOGY /etland Hydro rimary Indicate Surface Wa High Water Saturation (Water Mark Sediment D Drift Deposi	yology Indicators fors (minimum of ater (A1) Table (A2) (A3) (xs (B1) Deposits (B2) sits (B3)	s:		eck all that app Water-Sta 1, 2, 4 Salt Crust Aquatic Ir Hydrogen Oxidized	nined Leaven A, and 4E (B11) avertebrate Sulfide OR Rhizosphe	es (B13) dor (C1) eres along	Living Roo	RA [Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C2) Geomorphic Position (D2)
VOROLOGY Vetland Hydro rimary Indicate Surface Wa High Water Saturation (Water Mark Sediment D Drift Deposi Algal Mat o	yology Indicators fors (minimum of ater (A1) Table (A2) (A3) (A3) (A5 (B1) Deposits (B2) (B3) or Crust (B4)	s:		eck all that app Water-Sta 1, 2, 4 Salt Crust Aquatic Ir Hydrogen Oxidized	ained Leav A, and 4E (B11) avertebrate Sulfide O Rhizosphe of Reduce	es (B13) dor (C1) eres along ed Iron (C	Living Roo 4)	RA C	Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C2) Geomorphic Position (D2) Shallow Aquitard (D3)
/DROLOGY /etland Hydrorimary Indicate Surface Wa High Water Saturation (Water Mark Sediment D Drift Deposition Deposition Deposition	yology Indicators fors (minimum of eater (A1) Table (A2) (A3) (A3) (A3) (A3) (A3) (A3) (A3) (A3	s:		eck all that app Water-Sta 1, 2, 4 Salt Crust Aquatic Ir Hydrogen Oxidized Presence Recent Iro	ained Leav A, and 4E (B11) evertebrate Sulfide O Rhizosphe of Reduce	es (B13) dor (C1) eres along ed Iron (C- ion in Tille	Living Roo 4) d Soils (C6	ts (C3) [Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Ca) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
YDROLOGY Yetland Hydro Yetland	Y clogy Indicators cors (minimum of ater (A1) r Table (A2) (A3) cs (B1) Deposits (B2) cits (B3) or Crust (B4) its (B5) cill Cracks (B6)	s: one requ	uired; che	eck all that app Water-Sta 1, 2, 4 Salt Crust Aquatic Ir Hydrogen Oxidized Presence Recent Iro Stunted o	Ained Leaver A, and 4E (B11) Invertebrate Sulfide ORhizosphe of Reduce on Reducer Stressed	es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (D	Living Roo 4)	ts (C3) [Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C2) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
TOROLOGY Tetland Hydrorimary Indicate Saturation (Water Mark Sediment D Drift Deposi Algal Mat or Iron Deposi Surface Soi Inundation	Y close Indicators cors (minimum of later (A1) cr Table (A2) (A3) cs (B1) Deposits (B2) cits (B3) or Crust (B4) its (B5) ill Cracks (B6) Visible on Aerial	s: one requ	uired; che	eck all that app Water-Sta 1, 2, 4 Salt Crust Aquatic Ir Hydrogen Oxidized Presence Recent Iro	Ained Leaver A, and 4E (B11) Invertebrate Sulfide ORhizosphe of Reduce on Reducer Stressed	es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (D	Living Roo 4) d Soils (C6	ts (C3) [Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Ca) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Verland Hydro Vetland Hydro Ve	yology Indicators fors (minimum of ater (A1) Table (A2) (A3) (A3) (A3) (A3) (A4) (A5) (A5) (A5) (A5) (A5) (A6) (A6) (A6) (A6) (A6) (A6) (A6) (A6	s: one requ	uired; che	eck all that app Water-Sta 1, 2, 4 Salt Crust Aquatic Ir Hydrogen Oxidized Presence Recent Iro Stunted o	Ained Leaver A, and 4E (B11) Invertebrate Sulfide ORhizosphe of Reduce on Reducer Stressed	es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (D	Living Roo 4) d Soils (C6	ts (C3) [Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C2) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Verland Hydro Ve	yology Indicators fors (minimum of eater (A1) Table (A2) (A3) (A3) (A3) (A3) (A3) (A3) (A3) (A3	s: one requ	uired; che	eck all that app Water-Sta 1, 2, 4 Salt Crust Aquatic Ir Hydrogen Oxidized Presence Recent Irc Stunted o	ained Leave A, and 4E (B11) avertebrate Sulfide O Rhizosphe of Reduct on Reduct r Stressed plain in Re	es (B13) dor (C1) eres along ed Iron (C- tion in Tille I Plants (Demarks)	Living Roo 4) d Soils (C6	ts (C3) [Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C2) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
VOROLOGY Vetland Hydrorimary Indicate Surface Wal High Water Saturation (Water Mark Sediment D Drift Deposi Algal Mat or Inon Deposi Surface Soi Inundation Sparsely Ve	yology Indicators tors (minimum of ater (A1) Table (A2) (A3) (S (B1) Deposits (B2) Sits (B3) OF Crust (B4) Sits (B5) Sil Cracks (B6) Visible on Aerial egetated Concavitions: Present?	one required in the second sec	uired; che (B7) te (B8) No ☑	eck all that app Water-Sta 1, 2, 4 Salt Crust Aquatic Ir Hydrogen Oxidized Presence Recent Irc Stunted o Other (Ex	Anne Leaver Anne Anne Anne Anne Anne Anne Anne An	es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (C- emarks)	Living Roo 4) d Soils (C6	ts (C3) [Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C2) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
/DROLOGY /etland Hydro rimary Indicate Surface Wa High Water Saturation (Water Mark Sediment D Drift Deposi Algal Mat or Iron Deposi Surface Soi Inundation V Sparsely Verical Sparsely Vericater Table Proposition Presencludes capilla	yology Indicators tors (minimum of ater (A1) Table (A2) (A3) KS (B1) Deposits (B2) Sits (B3) For Crust (B4) Sits (B5) Sil Cracks (B6) Visible on Aerial egetated Concavitions: Present? resent? sent? ary fringe)	Imagery ve Surface Yes Yes Yes Yes Yes Yes	uired; che (B7) ee (B8) No 🔀 No 🔀	eck all that app Water-Sta 1, 2, 4 Salt Crust Aquatic Ir Hydrogen Oxidized Presence Recent Irc Stunted o Other (Ex Depth (inche	And Leaver And	es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (C- emarks)	Living Roo 4) d Soils (C6 01) (LRR A)	ts (C3) CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C2) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
/DROLOGY /etland Hydro rimary Indicate Surface Wa High Water Saturation (Water Mark Sediment D Drift Deposi Algal Mat or Iron Deposi Surface Soi Inundation V Sparsely Verical Construction Presenciates capilla	yology Indicators tors (minimum of ater (A1) Table (A2) (A3) (S (B1) Deposits (B2) Sits (B3) Or Crust (B4) Sits (B5) Sil Cracks (B6) Visible on Aerial egetated Concavitions: Present? resent?	Imagery ve Surface Yes Yes Yes Yes Yes Yes	uired; che (B7) ee (B8) No 🔀 No 🔀	eck all that app Water-Sta 1, 2, 4 Salt Crust Aquatic Ir Hydrogen Oxidized Presence Recent Irc Stunted o Other (Ex Depth (inche	And Leaver And	es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (C- emarks)	Living Roo 4) d Soils (C6 01) (LRR A)	ts (C3) CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C2) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
/ DROLOGY / Vetland Hydro rimary Indicate Surface Wa High Water Saturation (Water Mark Sediment D Drift Deposi Algal Mat or Iron Deposi Surface Soi Inundation or Sparsely Veter Indicate Water Indicate Water Indicate Presenciate Capilla	yology Indicators tors (minimum of ater (A1) Table (A2) (A3) KS (B1) Deposits (B2) Sits (B3) For Crust (B4) Sits (B5) Sil Cracks (B6) Visible on Aerial egetated Concavitions: Present? resent? sent? ary fringe)	Imagery ve Surface Yes Yes Yes Yes Yes Yes	uired; che (B7) ee (B8) No 🔀 No 🔀	eck all that app Water-Sta 1, 2, 4 Salt Crust Aquatic Ir Hydrogen Oxidized Presence Recent Irc Stunted o Other (Ex Depth (inche	And Leaver And	es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (C- emarks)	Living Roo 4) d Soils (C6 01) (LRR A)	ts (C3) CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	Water-Stained Leaves (B9) (MLRA 1, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C2) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

Project/Site: 1144.0027 E Vancouver E-Commerc	e Center	City/Cou	_{ınty:} Camas	s, Clark	Sampling Date: 04/07/2021
Applicant/Owner: Panattoni Development Compan	y, Inc.			State: WA	Sampling Point: DP-20U
Investigator(s): Rachael Hyland, Jacob Layman			Section, To	ownship, Range: 29,02	N,03E,SE
Landform (hillslope, terrace, etc.): Rolling		Local r	elief (concave	, convex, none): none	Slope (%): 1
Subregion (LRR): A2					
Soil Map Unit Name: Hesson clay loam 0 to 8 perce					
Are climatic / hydrologic conditions on the site typical for this	s time of yea	r? Yes	× No □ (I	lf no, explain in Remarks	i.)
Are Vegetation, Soil, or Hydrology sign	nificantly dis	turbed?	Are "No	ormal Circumstances" pr	esent? Yes 🗵 No 🗌
Are Vegetation, Soil, or Hydrology natu	rally probler	natic?	(If need	ed, explain any answers	in Remarks.)
SUMMARY OF FINDINGS - Attach site map			ing point l	ocations, transect	s, important features, etc.
Hydrophytic Vegetation Present? Yes ☒ No ☐					
Hydric Soil Present? Yes ☒ No ☐			the Sampled		N. E
Wetland Hydrology Present? Yes ☐ No 🗵		W	ithin a Wetlai	nd? Yes 🗌	No 🗷
Remarks:	vocatation	and by	dria anila pros	ont Data collected in a	n unland area near the western
Not all wetland criteria met; only hydrophytic property boundary approximately 845 feet not	_	•	_	ent. Data conected in a	n upiand area near the western
VEGETATION – Use scientific names of plan	ts.				
-	Absolute	Domina	ant Indicator	Dominance Test wor	ksheet:
Tree Stratum (Plot size: 30 ft) 1			es? Status	Number of Dominant S That Are OBL, FACW,	
2					
3				Total Number of Domi Species Across All Str	_
4.				·	· · ·
	0			Percent of Dominant S That Are OBL, FACW,	Species , or FAC: <u>100%</u> (A/B)
Sapling/Shrub Stratum (Plot size: 15 ft)				Prevalence Index wo	rksheet
1 2					Multiply by:
3					x 1 =
4					x 2 =
5					x 3 =
		= Tota	l Cover		x 4 =
Herb Stratum (Plot size: 5 ft)				UPL species	x 5 =
1. Agrostis capillaris	40				(A) (B)
2. Poa pratensis	30	Yes	FAC	Due velene e la de	D/A
3. Alopercurus pratensis	20	Yes	<u>FAC</u> OBL	Hydrophytic Vegetat	x = B/A =
4. Alopecurus aequalis 5. Anthoxanthum odoratum	<u>5</u> 5	No No	FACU	Rapid Test for Hyd	
				Napid Test for Try S	. , ,
6				☐ Prevalence Index	
7					aptations ¹ (Provide supporting
8 9					ks or on a separate sheet)
10				☐ Wetland Non-Vaso	cular Plants1
11				☐ Problematic Hydro	ophytic Vegetation¹ (Explain)
	100	= Tota	l Cover	¹ Indicators of hydric so be present, unless dis	oil and wetland hydrology must turbed or problematic.
Woody Vine Stratum (Plot size: 30 ft)					
1 2				Hydrophytic	
	^	= Tota	l Cover	Vegetation Present? Yes	es⊠ No □
% Bare Ground in Herb Stratum 0		_ i ola			
Remarks: Hydrophytic vegetation criteria met thr	ough dom	inance	e test		
, a. op., yaa vogatatan antana mat tii	- 4911 4011				

Sampling Point: DP-20U

Depth	Matrix		_ 		x Feature			_		
(inches) 0-9	Color (moist) 7.5YR 3/1	<u>%</u> 75		r (moist) R 3/4	<u>%</u> 25	Type ¹	Loc ² M/PL	<u>Textur</u> SiCIL		Remarks Silty Clay Loam
								-	.0	
9-16	7.5YR 3/1	70	7.5	YR 3/4	30	<u>C</u>	<u>M</u>	CILo		Clay loam
			_			_				
	oncentration, D=De Indicators: (Appli						ed Sand G			ation: PL=Pore Lining, M=Matrix. rs for Problematic Hydric Soils ³ :
☐ Histosol				andy Redox (S		,				Muck (A10)
	oipedon (A2)			Stripped Matrix						Parent Material (TF2)
☐ Black Hi	stic (A3)			oamy Mucky N	/lineral (F	1) (excep	t MLRA 1)] Very	Shallow Dark Surface (TF12)
☐ Hydroge	en Sulfide (A4)			oamy Gleyed l		2)] Othe	r (Explain in Remarks)
•	d Below Dark Surfac	ce (A11)		epleted Matrix	` '					
	ark Surface (A12)			Redox Dark Su				3		rs of hydrophytic vegetation and
	Mucky Mineral (S1)			epleted Dark	,	- 7)				nd hydrology must be present,
	Bleyed Matrix (S4)		∐ R	Redox Depress	ions (F8)			1	unles	s disturbed or problematic.
Type: No	Layer (if present):									
	ches):							Llyrale	ia Cail	Dragget 2 Vac V Na 🗆
Remarks:								Hyar	ic Soii	Present? Yes ⊠ No □
IVDBOLO	ocv.									
	OGY drology Indicators	S:								
Wetland Hy			ired; che	eck all that app	ly)				Secon	dary Indicators (2 or more required)
Wetland Hy Primary Indi	drology Indicators					res (B9) (e	xcept MLF	RA		•
Wetland Hy Primary Indi ☐ Surface	drology Indicators			☐ Water-Stai			xcept MLF	RA		dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B)
Wetland Hy Primary Indi ☐ Surface ☐ High Wa	rdrology Indicators cators (minimum of Water (A1) ater Table (A2)		·	☐ Water-Stai	ined Leav		xcept MLF	RA A	☐ W	ater-Stained Leaves (B9) (MLRA 1,
Wetland Hy Primary Indi ☐ Surface ☐ High Wa ☐ Saturatio	rdrology Indicators cators (minimum of Water (A1) ater Table (A2)		·	☐ Water-Stai	ined Leav A, and 4E (B11)	3)	xcept MLF	RA		ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B)
Wetland Hy Primary Indi ☐ Surface ☐ High Wa ☐ Saturatio ☐ Water M	cators (minimum of Water (A1) ater Table (A2) on (A3)		·	☐ Water-Stai	ined Leav A, and 4E (B11) vertebrate	B) es (B13)	xcept MLF	RA		ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) ainage Patterns (B10)
Wetland Hy Primary Indi □ Surface □ High Wa □ Saturatio □ Water M □ Sedimer	cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1)		·	☐ Water-Stai 1, 2, 4 ☐ Salt Crust ☐ Aquatic Inv	ined Leaven A, and 4E (B11) Vertebrate Sulfide O	es (B13) dor (C1)				ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep	cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) on Deposits (B2)			☐ Water-Stai 1, 2, 4 ☐ Salt Crust ☐ Aquatic Ind ☐ Hydrogen	ined Leaven A, and 4E (B11) vertebrate Sulfide ORhizosphe	es (B13) dor (C1) eres along	Living Roo		 □ W: □ Dr □ Dr □ Sa □ Ge 	ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) atturation Visible on Aerial Imagery (C
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma	rdrology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3)			Water-Stai 1, 2, 4, Salt Crust Aquatic Inv Hydrogen Oxidized F	ined Leaven A, and 4E (B11) vertebrate Sulfide ORhizosphe of Reduce	es (B13) dor (C1) eres along ed Iron (C4	Living Roo 4)	ots (C3)	☐ W: ☐ Dr ☐ Dr ☐ Sa ☐ Ge ☐ Sr	ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) atturation Visible on Aerial Imagery (Caeomorphic Position (D2)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma	cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)			Water-Stai 1, 2, 4, Salt Crust Aquatic Inv Hydrogen Oxidized F Presence	ined Leaven A, and 4E (B11) vertebrate Sulfide ORhizosphe of Reduct	es (B13) dor (C1) eres along ed Iron (C4 ion in Tille	Living Roo 4) d Soils (C6	ots (C3)		ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) atturation Visible on Aerial Imagery (Ca) comorphic Position (D2) allow Aquitard (D3)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	rdrology Indicators cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	one requ		Water-Stai 1, 2, 4, Salt Crust Aquatic Inv Hydrogen Oxidized F Presence	ined Leaven A, and 4E (B11) evertebrate Sulfide ORhizosphe of Reductin Reduct	es (B13) dor (C1) eres along ed Iron (Cotion in Tille I Plants (D	Living Roo 4) d Soils (C6	ots (C3)	☐ Wi	ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) aturation Visible on Aerial Imagery (Ceomorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) Soil Cracks (B6)	one requ	(B7)	Water-Stai 1, 2, 4, Salt Crust Aquatic Inv Hydrogen Oxidized F Presence Recent Iro Stunted or	ined Leaven A, and 4E (B11) evertebrate Sulfide ORhizosphe of Reductin Reduct	es (B13) dor (C1) eres along ed Iron (Cotion in Tille I Plants (D	Living Roo 4) d Soils (C6	ots (C3)	☐ Wi	ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) aturation Visible on Aerial Imagery (Ceomorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely	cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) on Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) Soil Cracks (B6) on Visible on Aerial	one requ	(B7)	Water-Stai 1, 2, 4, 4 Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leaven A, and 4E (B11) vertebrate Sulfide O Rhizosphe of Reduct Stressed Dlain in Reference Stressed	es (B13) dor (C1) eres along ed Iron (C4 ion in Tille I Plants (D emarks)	Living Roo 4) d Soils (C6	ots (C3)	☐ Wi	ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) aturation Visible on Aerial Imagery (Ceomorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely	cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aerial of Vegetated Concavervations:	Imagery ve Surface	(B7)	Water-Stai 1, 2, 4, Salt Crust Aquatic Inv Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leaven A, and 4E (B11) vertebrate Sulfide O Rhizosphe of Reduct Reduct Stressed Dain in Research Stressed Spis. None	es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (D emarks)	Living Roo 4) d Soils (C6	ots (C3)	☐ Wi	ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) aturation Visible on Aerial Imagery (Ceomorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser	cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aerial of Vegetated Concaverations: ter Present?	Imagery ve Surface	(B7) e (B8)	Water-Stai 1, 2, 4, 4 Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leaven A, and 4E (B11) vertebrate Sulfide O Rhizosphe of Reduct Reduct Stressed Dain in Research Stressed Spis. None	es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (D emarks)	Living Roo 4) d Soils (C6	ots (C3)	☐ Wi	ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) aturation Visible on Aerial Imagery (Ceomorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Water Table Saturation P	cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) on Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial of Vegetated Concaverations: ter Present? Present?	Imagery ve Surface Yes Yes Yes	(B7) e (B8) No 🛭	Water-Stai 1, 2, 4, Salt Crust Aquatic Inv Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leaven A, and 4E (B11) vertebrate Sulfide O Rhizosphe of Reduct Stressed Dlain in Research Stressed Sie None	es (B13) dor (C1) eres along ed Iron (C4) ion in Tille I Plants (D4) emarks)	Living Roo 4) d Soils (C6 1) (LRR A)	ots (C3)	☐ Wi	ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) aturation Visible on Aerial Imagery (Ceomorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Algal Ma Iron Dep Iron Dep Inundatio Sparsely Field Obser Surface Water Table Saturation P (includes ca	cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) on Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) Soil Cracks (B6) on Visible on Aerial of Vegetated Concaverations: ter Present?	Imagery ve Surface Yes Yes Yes Yes Yes Yes	(B7) e (B8) No 🔀 No 🔀 No 🔀	Water-Stai 1, 2, 4, Salt Crust Aquatic Inv Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp Depth (inches	ined Leaven A, and 4E (B11) vertebrate Sulfide O Rhizosphe of Reduct Reduct Stressed Dain in Research None	es (B13) dor (C1) eres along ed Iron (C4) ion in Tille I Plants (D4) emarks)	Living Roo 4) d Soils (C6 1) (LRR A)	ots (C3)	☐ W: ☐ Dr ☐ Dr ☐ Sa ☐ Ge ☐ Sh ☐ FA	ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) atturation Visible on Aerial Imagery (Comorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ast-Heave Hummocks (D7)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Water Table Saturation P (includes ca	cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) on Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial of Vegetated Concaverations: ater Present? Present? Present?	Imagery ve Surface Yes Yes Yes Yes Yes Yes	(B7) e (B8) No 🔀 No 🔀 No 🔀	Water-Stai 1, 2, 4, Salt Crust Aquatic Inv Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp Depth (inches	ined Leaven A, and 4E (B11) vertebrate Sulfide O Rhizosphe of Reduct Reduct Stressed Dain in Research None	es (B13) dor (C1) eres along ed Iron (C4) ion in Tille I Plants (D4) emarks)	Living Roo 4) d Soils (C6 1) (LRR A)	ots (C3)	☐ W: ☐ Dr ☐ Dr ☐ Sa ☐ Ge ☐ Sh ☐ FA	ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) atturation Visible on Aerial Imagery (Comorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ast-Heave Hummocks (D7)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Water Table Saturation P (includes ca Describe Re	cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) Soil Cracks (B6) on Visible on Aerial of Vegetated Concaverations: ater Present? Present? Present? pillary fringe) acorded Data (stream	Imagery ve Surface Yes Yes Yes Yes m gauge,	(B7) e (B8) No 🗵 No 🗵 monitori	Water-Stai 1, 2, 4, Salt Crust Aquatic Inv Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp Depth (inchest Depth (inchest ng well, aerial	ined Leaven A, and 4E (B11) vertebrate Sulfide Of Reduce In Reduct Stressed Dain in Research Stressed Sie None Sie None Photos, p	es (B13) dor (C1) eres along ed Iron (C4 don in Tille I Plants (D4 emarks) e e e e e e e e e e e e e e e e e e e	Living Roo 4) d Soils (C6 1) (LRR A) Wetl spections),	ots (C3) i) and Hydirania	☐ W: ☐ Dr ☐ Dr ☐ Sa ☐ Ge ☐ St ☐ FA ☐ Ra ☐ Fr ☐ drology ble:	ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) aturation Visible on Aerial Imagery (Ceomorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ast-Heave Hummocks (D7)
Wetland Hy Primary Indi Surface High Wa Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundation Sparsely Field Obser Surface Water Table Saturation P (includes ca Describe Re	cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aerial of Vegetated Concaverations: ater Present? Present? Present? pillary fringe) ecorded Data (streat	Imagery ve Surface Yes Yes Yes The gauge,	(B7) e (B8) No 🗵 No 🗵 monitori	Water-Stai 1, 2, 4, Salt Crust Aquatic Inv Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp Depth (inchest Depth (inchest ng well, aerial	ined Leaven A, and 4E (B11) vertebrate Sulfide O Rhizosphe of Reduct n Reduct stressed blain in Research None (B): None photos, p	es (B13) dor (C1) eres along ed Iron (C4) ion in Tille I Plants (D4) emarks) end end erevious in	Living Roo 4) d Soils (C6 1) (LRR A) Wetl spections),	and Hydif availa	☐ W: ☐ Dr ☐ Dr ☐ Sa ☐ Ge ☐ St ☐ FA ☐ Ra ☐ Fre drology ble: Data	ater-Stained Leaves (B9) (MLRA 1, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) atturation Visible on Aerial Imagery (Comorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ast-Heave Hummocks (D7)

Project/Site: 1144.0027 E Vancouver E-Commerc	e Center	City/Co	ounty	Camas	s, Clark	Samp	oling Date: 04/	/07/2021
Applicant/Owner: Panattoni Development Compan	y, Inc.				State: WA	Samp	oling Point: DI	P-21U
Investigator(s): Rachael Hyland, Jacob Layman			;	Section, To	ownship, Range: 29,02	2N,03E,	,SE	
Landform (hillslope, terrace, etc.): swale		Local	relie	f (concave	, convex, none): conca	ave	Slope ((%): 2
Subregion (LRR): A2								
Soil Map Unit Name: Hesson clay loam, 0 to 8 percentage								
Are climatic / hydrologic conditions on the site typical for this	s time of yea	ar? Ye	s 🗷	No ☐ (I	f no, explain in Remarks	s.)		
Are Vegetation, Soil, or Hydrology sign	nificantly dis	turbed	?	Are "No	ormal Circumstances" pi	resent?	Yes 🗵 No [
Are Vegetation, Soil, or Hydrology natu	urally probler	matic?		(If need	ed, explain any answers	in Rema	arks.)	
SUMMARY OF FINDINGS - Attach site map				g point l	ocations, transect	s, impo	ortant featu	ıres, etc.
Hydrophytic Vegetation Present? Yes ☒ No ☐								
Hydric Soil Present? Yes No				e Sampled				
Wetland Hydrology Present? Yes ☐ No 🗷		,	withi	n a Wetlar	nd? Yes 🗌	No 🗵		
Remarks: Not all three wetland criteria met; only hydrophytic	vegetation a	nd bydr	ic eni	Inresent D	lata collected in southern	nortion of	nronerty annro	vimately
150 feet northwest of the existing residence drivewa	U	na nyai	10 801	i pieseiii. D	ata conected in southern	Jordon or	property approx	ximately
VEGETATION – Use scientific names of plan	ts.							
	Absolute	Domii	nant	Indicator	Dominance Test wo	ksheet:		
Tree Stratum (Plot size: 30 ft)	% Cover				Number of Dominant		•	
1					That Are OBL, FACW	, or FAC:	: <u>2</u>	(A)
2					Total Number of Dom		0	<i>(</i> =)
3					Species Across All St	rata:	2	(B)
4	0	= Tot	tal Co	over	Percent of Dominant S That Are OBL, FACW		100%	(A/B)
Sapling/Shrub Stratum (Plot size: 15 ft)								(A/D)
1					Prevalence Index wo			
2					Total % Cover of:			 '
3					OBL species			
4					FACW species			
5	_	= Tot			FAC species			
Herb Stratum (Plot size: 5 ft)							x 5 =	
1. Agrostis capillaris	70	Yes	<u> </u>	FAC	Column Totals:			(B)
2. Poa pratensis	20	Yes	<u> </u>	FAC				
3. Schedonorus arundinaceus	10	No		FAC	Prevalence Inde			_
4					Hydrophytic Vegetat			
5					Rapid Test for Hy		Vegetation	
6					✓ Dominance Test i✓ Prevalence Index			
7					☐ Prevalence Index☐ Morphological Ad		1 (Provide sup	norting
8							a separate she	
9					☐ Wetland Non-Vas	cular Plaı	nts ¹	
10			_		☐ Problematic Hydro	ophytic V	egetation ¹ (Ex	plain)
11	100	= Tot	tal Co		¹ Indicators of hydric s			gy must
Woody Vine Stratum (Plot size: 30 ft)		_ 10	iai Ot	7401	be present, unless dis	turbed or	r problematic.	
1					Hydrophytic			
2	^				Vegetation	_	. –	
% Bare Ground in Herb Stratum 0	0	= Tot	tal Co	over	Present? Y	'es ⊠ N	No ∐	
Domorko:				- 1				
Hydrophytic vegetation criteria met thr	ough dom	ıınand	ce te	est.				

Profile Desc	cription: (Describe	e to the d	epth ne	eded to docu	ment the	indicator	or confirn	n the abs	sence of indicators.)
Depth	Matrix				x Feature				
(inches)	Color (moist)	<u>%</u>		or (moist)	%	Type ¹	Loc ²	<u>Texture</u>	<u></u>
0-6	7.5YR 3/1	85	7.5	YR 3/3	15	С	M/PL	SiLo	Silty Loam
6-16	7.5YR 3/2	92	7.5	YR 3/3	8	С	M	SiLo	Silty loam
						-		-	
					_				
			. —						
									2.
	oncentration, D=De Indicators: (Appli						ed Sand G		² Location: PL=Pore Lining, M=Matrix. dicators for Problematic Hydric Soils ³ :
-		cable to a				.eu.)			•
☐ Histosol☐ Histic Er	(A1) pipedon (A2)			Sandy Redox (S Stripped Matrix					2 cm Muck (A10) Red Parent Material (TF2)
☐ Black Hi				Loamy Mucky N	, ,	1) (excent	MIRA1)		
	n Sulfide (A4)			Loamy Gleyed I			. III = I ()	H	Other (Explain in Remarks)
	Below Dark Surface	ce (A11)		Depleted Matrix	•	,		_	(= (=
☐ Thick Da	rk Surface (A12)	, ,		Redox Dark Su				3In	dicators of hydrophytic vegetation and
-	lucky Mineral (S1)			Depleted Dark	•	7)			wetland hydrology must be present,
	leyed Matrix (S4)			Redox Depress	ions (F8)				unless disturbed or problematic.
	Layer (if present):								
Type: No				-					
Depth (in	ches):			-				Hydrid	c Soil Present? Yes ⊠ No □
Remarks:									
Hydric soil	criteria met thro	ough ind	licator	F6. Soil wa	s highly	compa	cted.		
HYDROLO	CV								
-	drology Indicators								0 1 1 1 1 1 10
	cators (minimum of	one requi	rea; cn			45 - > 4			Secondary Indicators (2 or more required)
	Water (A1)			☐ Water-Stai			xcept MLF	RA	Water-Stained Leaves (B9) (MLRA 1, 2,
_	ter Table (A2)				A, and 4B	5)			4A, and 4B)
☐ Saturation	` ,			☐ Salt Crust	` '	- (D40)			☐ Drainage Patterns (B10)
	arks (B1)			☐ Aquatic Inv					Dry-Season Water Table (C2)
	t Deposits (B2)			☐ Hydrogen			Livina Doo	to (C2)	Saturation Visible on Aerial Imagery (C9)
	osits (B3) t or Crust (B4)			☐ Oxidized F☐ Presence		_	_	115 (C3)	☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3)
	osits (B5)			☐ Recent Iro				:\	FAC-Neutral Test (D5)
-	Soil Cracks (B6)			☐ Stunted or					Raised Ant Mounds (D6) (LRR A)
	on Visible on Aerial	Imagery (R7)	Other (Exp		•	1) (LIXIX A)	,	Frost-Heave Hummocks (D7)
	Vegetated Concav	• • •	,	- Other (Exp	nam m rec	mantoj			- Trest ricave transmooks (57)
Field Obser			(20)						
Surface Wat		Yes 🔲 🗆	No 🗷	Depth (inches	_{s)} . None)			
Water Table			No 🗵	Depth (inches					
				Depth (inches			Wot	and Hydi	rology Brosont? Vos 🗆 No 🔽
Saturation P (includes ca	resent? pillary fringe)	Yes 🗌 🗆	No 🗵	pehin (inche:	5). 11011C	·	weti	anu riyu	rology Present? Yes ☐ No ⊠
Describe Re	corded Data (stream	m gauge, i	monitor	ring well, aerial	photos, p	revious in:	spections),	if availab	ole:
Remarks:									
									a was collected early in the growing
									ndar year. Additionally, no hydrology
indicators \	vere observed ir	า the Ded	cembe	er 2020 recor	nnaissar	ice inves	stigation,	immedia	ately following a heavy rain event.

Appendix E — Wetland Rating Forms

RATING SUMMARY – Western Washington

Name of wetland (or ID #): A	Date of site visit: 04/07/21
_{Rated by} Jake Layman	_ Trained by Ecology? <u>✓</u> YesNo Date of training
HGM Class used for rating Depressional	Wetland has multiple HGM classes?Y <u>✓</u> N
NOTE: Form is not complete witho Source of base aerial photo/map	ut the figures requested (figures can be combined). ESRI ArcGIS
OVERALL WETLAND CATEGORY	[] (based on functions <u>v</u> 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	
		Circle the ap	propriate ratings	
Site Potential	М	M	L	
Landscape Potential	М	M	L	
Value	Н	M	М	TOTAL
Score Based on Ratings	7	6	4	17

Score for each function based on three ratings (order of ratings is not *important)* 9 = H,H,H8 = H,H,M7 = H,H,L7 = H,M,M6 = H,M,L6 = M,M,M5 = H,L,L 5 = M,M,L4 = M, L, L3 = L, L, L

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CAT	EGORY
Estuarine	I	II
Wetland of High Conservation Value		I
Bog		I
Mature Forest		I
Old Growth Forest		I
Coastal Lagoon	I	II
Interdunal	I II	III IV
None of the above	N/A	

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

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 (can be added to another figure)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (can be added to another figure)	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	H 2.1, H 2.2, H 2.3	
polygons for accessible habitat and undisturbed habitat		
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 (can be added to another figure)	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	S 4.1	
(can be added to figure above)		
Boundary of 150 ft buffer (can be added to another figure)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

HGM Classification of Wetlands in Western Washington

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

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

1.	Are the water levels in the entire	e unit usually controlled	by tides except during floods?
-	1.1 Is the salinity of the water dur	ing periods of annual lo	w flow below 0.5 ppt (parts per thousand)?
		d as a Freshwater Tidal n Estuarine wetland an	☐ YES - Freshwater Tidal Fringe Fringe use the forms for Riverine wetlands. If it d is not scored. This method cannot be used to
2.	The entire wetland unit is flat an and surface water runoff are NO		nly source (>90%) of water to it. Groundwater to unit.
×	NO – go to 3 If your wetland can be classified	as a Flats wetland, use t	☐ YES – The wetland class is Flats he form for Depressional wetlands.
3.	Does the entire wetland unit me ☐The vegetated part of the wet plants on the surface at any to ☐At least 30% of the open wate	cland is on the shores of ime of the year) at least	a body of permanent open water (without any 20 ac (8 ha) in size;
×	☑NO – go to 4 □	YES – The wetland class	is Lake Fringe (Lacustrine Fringe)
4.	Does the entire wetland unit me The wetland is on a slope (sl The water flows through the seeps. It may flow subsurface The water leaves the wetland	ope can be very gradual wetland in one direction e, as sheetflow, or in a s), on (unidirectional) and usually comes from wale without distinct banks,
×	☑NO – go to 5		☐ YES – The wetland class is Slope
	-		tlands except occasionally in very small and are usually <3 ft diameter and less than 1 ft
5.	Does the entire wetland unit me The unit is in a valley, or stre stream or river, The overbank flooding occur	eam channel, where it go	ets inundated by overbank flooding from that

VV 6	tland name or number <u>~</u>
X	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
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

Λ

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

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. Characteristics of surface water outflows from the wetland:		
Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). points = 3 Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. points = 2 Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points = 1 Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. points = 1	2	
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. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes): Wetland has persistent, ungrazed, plants > 95% of area Wetland has persistent, ungrazed, plants > $\frac{1}{10}$ of area Wetland has persistent, ungrazed plants > $\frac{1}{10}$ of area Wetland has persistent, ungrazed plants < $\frac{1}{10}$ of area points = 1 Wetland has persistent, ungrazed plants < $\frac{1}{10}$ of area points = 0	1	
D 1.4. Characteristics of seasonal ponding or inundation: This is the area that is ponded for at least 2 months. See description in manual. Area seasonally ponded is > ½ total area of wetland Area seasonally ponded is > ¼ total area of wetland Area seasonally ponded is < ¼ total area of wetland points = 2 Area seasonally ponded is < ¼ total area of wetland points = 0	4	
Total for D 1 Add the points in the boxes above	7	
Rating of Site Potential If score is:12-16 = H \times 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 = $1 \text{ No} = 0$	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? Source Golf course Yes = 1 No = 0	1	
Total for D 2 Add the points in the boxes above	2	
Rating of Landscape Potential If score is:3 or 4 = HX_1 or 2 = M0 = 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	2	
Total for D 3 Add the points in the boxes above	4	
Rating of Value If score is: X 2-4 = H1 = M0 = L Record the rating on the first page		

NOTES and FIELD OBSERVATIONS:

DEPRESSIONAL AND FLATS WETLANDS Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation		
D 4.0. Does the site have the potential to reduce flooding and erosion?		
D 4.1. Characteristics of surface water outflows from the wetland:		
Wetland is a depression or flat depression with no surface water leaving it (no outlet) Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outletpoints = 2 Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points = 0	2	
D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part. Marks of ponding are 3 ft or more above the surface or bottom of outlet points = 7 Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet points = 5 Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet points = 3 The wetland is a "headwater" wetland points = 3 Wetland is flat but has small depressions on the surface that trap water points = 1 Marks of ponding less than 0.5 ft (6 in) points = 0	3	
D 4.3. Contribution of the wetland to storage in the watershed: Estimate the ratio of the area of upstream basin contributing surface water to the wetland to the area of the wetland unit itself. The area of the basin is less than 10 times the area of the unit points = 5 The area of the basin is 10 to 100 times the area of the unit points = 3 The area of the basin is more than 100 times the area of the unit points = 0 Entire wetland is in the Flats class points = 5	3	
Total for D 4 Add the points in the boxes above	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 5.0. Does the landscape have the potential to support hydrologic functions of the site?		
D 5.1. Does the wetland receive stormwater discharges? Yes = 1 No = 0	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	0	
Total for D 5 Add the points in the boxes above	1	
Rating of Landscape Potential If score is: 3 = H X 1 or 2 = M 0 = L Record the rating on the first parts.		
D 6.0. Are the hydrologic functions provided by the site valuable to society?		
D 6.1. The unit is in a landscape that has flooding problems. Choose the description that best matches conditions around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met. The wetland captures surface water that would otherwise flow down-gradient into areas where flooding has damaged human or natural resources (e.g., houses or salmon redds): • Flooding occurs in a sub-basin that is immediately down-gradient of unit. • Surface flooding problems are in a sub-basin farther down-gradient. Flooding from groundwater is an issue in the sub-basin. points = 1 The existing or potential outflow from the wetland is so constrained by human or natural conditions that the water stored by the wetland cannot reach areas that flood. Explain why points = 0 There are no problems with flooding downstream of the wetland.	1	
D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? Yes = 2 No = 0	0	
Total for D 6 Add the points in the boxes above	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. Aquatic bed 4 structures or more: points = 4 3 structures: points = 2 ___Emergent 1 ___Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1 × Forested (areas where trees have > 30% cover) 1 structure: points = 0 If the unit has a Forested class, check if: × 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). Permanently flooded or inundated 4 or more types present: points = 3 × Seasonally flooded or inundated 3 types present: points = 2 Occasionally flooded or inundated 2 types present: points = 1 0 Saturated only 1 type present: points = 0 ___Permanently flowing stream or river in, or adjacent to, the wetland Seasonally flowing stream in, or adjacent to, the wetland Lake Fringe wetland 2 points 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 1 If you counted: > 19 species points = 2 5 - 19 species points = 1 points = 0 < 5 species 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 Moderate = 2 points Low = 1 point All three diagrams in this row are **HIGH** = 3points

H 1.5. Special habitat features: Check the habitat features that are present in the wetland. The number of checks is the number of points. x Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long). x Standing snags (dbh > 4 in) within the wetland 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) 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 (cut shrubs or trees that have not yet weathered where wood is exposed) At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibians) x Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata) Total for H 1 Add the points in the boxes above Bating of Site Potential If score is: 15-18 = H 7-14 = M 0-6 = L Record the rating on the first page H 2.0. Does the landscape have the potential to support the habitat functions of the site? H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit). Calculate: 0.00 windisturbed habitat + [(% moderate and low intensity land uses) 12.35 /2] = 6.175 % If total accessible habitat is: > ¹/₃ (33.3%) of 1 km Polygon points = 3 20-33% of 1 km Polygon points = 2 10-19% of 1 km Polygon points = 1
x_Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long). x_Standing snags (dbh > 4 in) within the wetland 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) 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 (cut shrubs or trees that have not yet weathered where wood is exposed) At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibians) x_Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata) Total for H 1 Add the points in the boxes above Brating of Site Potential If score is:15-18 = H7-14 = MX_0-6 = L
x_Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long). x_Standing snags (dbh > 4 in) within the wetland 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) 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 (cut shrubs or trees that have not yet weathered where wood is exposed) At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibians) x_Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata) Total for H 1 Add the points in the boxes above Brating of Site Potential If score is:15-18 = H7-14 = MX_0-6 = L
x Standing snags (dbh > 4 in) within the wetland 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) 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 (cut shrubs or trees that have not yet weathered where wood is exposed) At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibians) x Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata) Total for H 1 Add the points in the boxes above Rating of Site Potential If score is: 15-18 = H 7-14 = M × 0-6 = L Record the rating on the first page H 2.0. Does the landscape have the potential to support the habitat functions of the site? H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit). Calculate: 0.00 % undisturbed habitat + [(% moderate and low intensity land uses) 12.35 /2] = 6.175 % If total accessible habitat is: > \frac{1}{3} (33.3%) of 1 km Polygon points = 3 20-33% of 1 km Polygon points = 2
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) 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 (cut shrubs or trees that have not yet weathered where wood is exposed) At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibians) Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata) Total for H 1 Add the points in the boxes above Record the rating on the first page H 2.0. Does the landscape have the potential to support the habitat functions of the site? H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit). Calculate: 0.00 % undisturbed habitat + [(% moderate and low intensity land uses) 12.35 /2] = 6.175 % If total accessible habitat is: > \(^1/_3 (33.3%) \) of 1 km Polygon points = 3 20-33% of 1 km Polygon points = 2
over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m) 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 (cut shrubs or trees that have not yet weathered where wood is exposed) At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibians) Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata) Total for H 1 Add the points in the boxes above Rating of Site Potential If score is:15-18 = H7-14 = MX 0-6 = L
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 (cut shrubs or trees that have not yet weathered where wood is exposed) At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibians) xInvasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata) Total for H 1
slope) OR signs of recent beaver activity are present (cut shrubs or trees that have not yet weathered where wood is exposed) At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibians) xInvasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata) Total for H 1
where wood is exposed) At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibians) _xInvasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata) Total for H 1
permanently or seasonally inundated (structures for egg-laying by amphibians) x Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata) Total for H 1 Add the points in the boxes above Rating of Site Potential If score is:15-18 = H7-14 = MX_0-6 = L Record the rating on the first page H 2.0. Does the landscape have the potential to support the habitat functions of the site? H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit). Calculate:0.00% undisturbed habitat + [(% moderate and low intensity land uses)12.35 /2] =6.175% If total accessible habitat is: > \frac{1}{3} (33.3%) of 1 km Polygon points = 3 20-33% of 1 km Polygon points = 2
permanently or seasonally inundated (structures for egg-laying by amphibians) x Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata) Total for H 1 Add the points in the boxes above Rating of Site Potential If score is:15-18 = H7-14 = MX_0-6 = L Record the rating on the first page H 2.0. Does the landscape have the potential to support the habitat functions of the site? H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit). Calculate:0.00% undisturbed habitat + [(% moderate and low intensity land uses)12.35 /2] =6.175% If total accessible habitat is: > \frac{1}{3} (33.3%) of 1 km Polygon points = 3 20-33% of 1 km Polygon points = 2
Total for H 1 Add the points in the boxes above 5 Rating of Site Potential If score is:15-18 = H7-14 = MX_0-6 = L
Total for H 1 Add the points in the boxes above 5 Rating of Site Potential If score is:15-18 = H7-14 = MX0-6 = L
Rating of Site Potential If score is:15-18 = H7-14 = MX_0-6 = L
H 2.0. Does the landscape have the potential to support the habitat functions of the site? H 2.1. Accessible habitat (include <i>only habitat that directly abuts wetland unit</i>). Calculate: 0.00 % undisturbed habitat + [(% moderate and low intensity land uses) 12.35 /2] = 6.175 % If total accessible habitat is: > 1/3 (33.3%) of 1 km Polygon points = 3 20-33% of 1 km Polygon points = 2
H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit). Calculate: $\boxed{0.00}$ % undisturbed habitat + [(% moderate and low intensity land uses) $\boxed{12.35}$ /2] = $\boxed{6.175}$ % If total accessible habitat is: > 1 / ₃ (33.3%) of 1 km Polygon points = 3 20-33% of 1 km Polygon points = 2
H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit). Calculate: $\boxed{0.00}$ % undisturbed habitat + [(% moderate and low intensity land uses) $\boxed{12.35}$ /2] = $\boxed{6.175}$ % If total accessible habitat is: > 1 / ₃ (33.3%) of 1 km Polygon points = 3 20-33% of 1 km Polygon points = 2
Calculate: $\boxed{0.00}$ % undisturbed habitat + [(% moderate and low intensity land uses) $\boxed{12.35}$ /2] = $\boxed{6.175}$ % If total accessible habitat is: > $^1/_3$ (33.3%) of 1 km Polygon points = 3 20-33% of 1 km Polygon points = 2
If total accessible habitat is: > $^{1}/_{3}$ (33.3%) of 1 km Polygon points = 3 20-33% of 1 km Polygon points = 2
$>$ $^{1}/_{3}$ (33.3%) of 1 km Polygon points = 3 20-33% of 1 km Polygon points = 2
20-33% of 1 km Polygon points = 2
·
10-15% OF 1 KITI POLYGOTI POLITICS – 1
< 10% of 1 km Polygon points = 0
H 2.2. Undisturbed habitat in 1 km Polygon around the wetland. **Calculate: 9.1
Undisturbed habitat > 50% of Polygon points = 3
Undisturbed habitat 10-50% and in 1-3 patches points = 2
Undisturbed habitat 10-50% and > 3 patches points = 1
Undisturbed habitat < 10% of 1 km Polygon points = 0
H 2.3. Land use intensity in 1 km Polygon: If
> 50% of 1 km Polygon is high intensity land use points = (-2)
≤ 50% of 1 km Polygon is high intensity points = 0
Total for H 2 Add the points in the boxes above -1
Rating of Landscape Potential If score is:4-6 = H1-3 = M \times < 1 = L Record the rating on the first page
H 3.0. Is the habitat provided by the site valuable to society?
H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score</i>
that applies to the wetland being rated.
Site meets ANY of the following criteria: points = 2
 — It has 3 or more priority habitats within 100 m (see next page)
It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)
It is mapped as a location for an individual WDFW priority species
 It is a Wetland of High Conservation Value as determined by the Department of Natural Resources
— It has been categorized as an important habitat site in a local or regional comprehensive plan, in a
Shoreline Master Plan, or in a watershed plan
× Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1
Site does not meet any of the criteria above points = 0

Rating of Value If score is: 2 = H $\times 1 = M$ 0 = L

Record the rating on the first page

WDFW Priority Habitats

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

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

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

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

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.	
SC 1.0. Estuarine wetlands	
Does the wetland meet the following criteria for Estuarine wetlands?	
The dominant water regime is tidal,	
Vegetated, and	
☐ With a salinity greater than 0.5 ppt ☐ Yes –Go to SC 1.1 ☒ No= Not an estuarine wetland	
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?	
☐Yes = Category I ☐No - Go to SC 1.2	
SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?	
The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has less	
than 10% cover of non-native plant species. (If non-native species are Spartina, see page 25)	
At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-	
mowed grassland.	
☐ The wetland has at least two of the following features: tidal channels, depressions with open water, or	
contiguous freshwater wetlands. ☐Yes = Category I ☐No = Category II	
SC 2.0. Wetlands of High Conservation Value (WHCV)	
SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High	
Conservation Value?	
SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?	
☐Yes = Category I ☑No = Not a WHCV	
SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland?	
http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf □ Yes - Contact WNHP/WDNR and go to SC 2.4 ⋈ No = Not a WHCV	
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?	
SC 3.0. Bogs	
Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key</i>	
below. If you answer YES you will still need to rate the wetland based on its functions.	
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? ☐Yes – Go to SC 3.3 ☒No – Go to SC 3.2	
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? □Yes – Go to SC 3.3 ☑No = Is not a bog	
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?	
NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that criterion by measuring the pH of the water that seeps into a hole dug at least 16 in deep. If the pH is less than 5.0 and the	
plant species in Table 4 are present, the wetland is a bog.	
SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, western red cedar,	
western hemlock, lodgepole pine, quaking aspen, Engelmann spruce, or western white pine, AND any of the	
species (or combination of species) listed in Table 4 provide more than 30% of the cover under the canopy?	
☐Yes = Is a Category I bog ☐No = Is not a bog	

Wetland name or number $\underline{\mathsf{A}}$

SC 4.0. Forested Wetlands	
Does the wetland have at least 1 contiguous acre of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? If you answer YES you will still need to rate the wetland based on its functions. — Old-growth forests (west of Cascade crest): Stands of at least two tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) that are at least 200 years of age OR have a diameter at breast height (dbh) of 32 in (81 cm) or more. — Mature forests (west of the Cascade Crest): Stands where the largest trees are 80- 200 years old OR the species that make up the canopy have an average diameter (dbh) exceeding 21 in (53 cm).	
☐ Yes = Category I ☑No = Not a forested wetland for this section	
Does the wetland meet all of the following criteria of a wetland in a coastal lagoon? — The wetland lies in a depression adjacent to marine waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently, rocks — The lagoon in which the wetland is located contains ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (needs to be measured near the bottom) □ Yes − Go to SC 5.1 ☑No = Not a wetland in a coastal lagoon SC 5.1. Does the wetland meet all of the following three conditions? — The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). — At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland. — The wetland is larger than ¹/₁₀ ac (4350 ft²) □ Yes = Category I □ No = Category II	
SC 6.0. Interdunal Wetlands Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? If you answer yes you will still need to rate the wetland based on its habitat functions. In practical terms that means the following geographic areas: — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 ☐ Yes − Go to SC 6.1 ☑ No = not an interdunal wetland for rating 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)? ☐ Yes = Category I ☐ No − Go to SC 6.2 SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? ☐ Yes = Category II ☐ No − Go to SC 6.3 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?	
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? ☐ Yes = Category III ☐ No = Category IV Category of wetland based on Special Characteristics If you answered No for all types, enter "Not Applicable" on Summary Form	

Wetland name or number A

This page left blank intentionally

RATING SUMMARY – Western Washington

Name of wetland (or ID #): B	Date of site visit: 04/07/21		
Rated by Jake Layman	Trained by Ecology? <u> <</u> YesNo Date of training		
HGM Class used for rating Slope	Wetland has multiple HGM classes? Y ✓ N		
NOTE: Form is not complete without the figures requested (figures can be combined). Source of base aerial photo/map ESRI ArcGIS			
OVERALL WETLAND CATEGORY _	III (based on functions <u>v</u> 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	
		Circle the ap	propriate ratings	
Site Potential	L	L	L	
Landscape Potential	М	М	L	
Value	Н	M	Н	TOTAL
Score Based on Ratings	6	5	5	16

Score for each function based on three ratings (order of ratings is not *important)* 9 = H,H,H8 = H,H,M7 = H,H,L7 = H,M,M6 = H,M,L6 = M,M,M5 = H,L,L 5 = M,M,L4 = M, L, L3 = L, L, L

2. Category based on SPECIAL CHARACTERISTICS of wetland

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

Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

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

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 (can be added to another figure)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (can be added to another figure)	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	H 2.1, H 2.2, H 2.3	
polygons for accessible habitat and undisturbed habitat		
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 (can be added to another figure)	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	S 4.1	
(can be added to figure above)		
Boundary of 150 ft buffer (can be added to another figure)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

HGM Classification of Wetlands in Western Washington

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

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

1.	Are the water levels in the e	entire unit usually control	led by tides except during floods?	
X]NO – go to 2	☐ YES – the we	etland 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)?	
		rsified as a Freshwater Tide t is an Estuarine wetland o	☐ YES - Freshwater Tidal Fringe al Fringe use the forms for Riverine wetlands. If and is not scored. This method cannot be used to	•
	The entire wetland unit is fl and surface water runoff are		e only source (>90%) of water to it. Groundwate the unit.	ter
	NO – go to 3 If your wetland can be classi,	fied as a Flats wetland, use	YES – The wetland class is Flats e the form for Depressional wetlands.	
	•	wetland is on the shores ny time of the year) at lea	of a body of permanent open water (without anst 20 ac (8 ha) in size;	ny
X	NO – go to 4	■YES – The wetland cla	ass is Lake Fringe (Lacustrine Fringe)	
	_	e (<i>slope can be very gradu</i> n the wetland in one direc rface, as sheetflow, or in a	tion (unidirectional) and usually comes from a swale without distinct banks,	
	NO – go to 5		▼YES - The wetland class is Slope	
		1	wetlands except occasionally in very small and ons are usually <3 ft diameter and less than 1 ft	
	Does the entire wetland uni The unit is in a valley, or stream or river, The overbank flooding o	stream channel, where it	gets inundated by overbank flooding from tha	ıt
	_	_		

W	etland name or number B	
	NO – go to 6	
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? <i>This means that any outlet, if present, is higher than the int of the wetland.</i>	
	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 na outlet.	
	NO – go to 8	

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

SLOPE WETLANDS	
Water Quality Functions - Indicators that the site functions to improve water quality	
S 1.0. Does the site have the potential to improve water quality?	
S 1.1. Characteristics of the average slope of the wetland: (a 1% slope has a 1 ft vertical drop in elevation for every 100 ft of horizontal distance) Slope is 1% or less Slope is > 1%-2% Slope is > 2%-5% Slope is greater than 5% points = 1 points = 0	2
	0
S 1.3. Characteristics of the plants in the wetland that trap sediments and pollutants: Choose the points appropriate for the description that best fits the plants in the wetland. Dense means you have trouble seeing the soil surface (>75% cover), and uncut means not grazed or mowed and plants are higher than 6 in. Dense, uncut, herbaceous plants > 90% of the wetland area Dense, uncut, herbaceous plants > ½ of area Dense, woody, plants > ½ of area Dense, uncut, herbaceous plants > ¼ of area Does not meet any of the criteria above for plants Does not meet any of the criteria above for plants	0
	2

Rating of Site Potential If score is: 12 = H ____6-11 = M X 0-5 = L

Record the rating on the first page

S 2.0. Does the landscape have the potential to support the water quality function of the site?	
S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in land uses that generate pollutants? Yes = 1 No = 0	1
S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other sources Yes = 1 No = 0	1
Total for S 2 Add the points in the boxes above	2

Rating of Landscape Potential If score is: \times 1-2 = M 0 = L

Record the rating on the first page

S 3.0. Is the water quality improvement provided by the site valuable to society?	
S 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
S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue? At least one aquatic resource in the basin is on the $303(d)$ list. Yes = 1 No = 0	1
S 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? <i>Answer YES</i> if there is a TMDL for the basin in which unit is found. Yes = 2 No = 0	2
Total for S 3 Add the points in the boxes above	4

Rating of Value If score is: X 2-4 = H ___1 = M ___0 = L

Record the rating on the first page

SLOPE WETLANDS	
Hydrologic Functions - Indicators that the site functions to reduce flooding and stream erosion	
S 4.0. Does the site have the potential to reduce flooding and stream erosion?	
S 4.1. Characteristics of plants that reduce the velocity of surface flows during storms: Choose the points appropriate for the description that best fits conditions in the wetland. Stems of plants should be thick enough (usually > 1/8 in), or dense enough, to remain erect during surface flows. Dense, uncut, rigid plants cover > 90% of the area of the wetland All other conditions points = 0	0

Rating of Site Potential If score is: $1 = M \times 0 = L$

Record the rating on the first page

S 5.0. Does the landscape have the potential to support the hydrologic functions o	f the site?	
S 5.1. Is more than 25% of the area within 150 ft upslope of wetland in land uses or cover t surface runoff?	hat generate excess Yes = 1 No = 0	1
Pating of Landscape Potential If score is: X 1 - M 0 - I	Pacard the rating on	the first nage

Rating of Landscape Potential If score is: $\times 1 = M$ ___0 = L

Record the rating on the first page

S 6.0. Are the hydrologic functions provided by the site valuable to society?		
S 6.1. Distance to the nearest areas downstream that have flooding problems: The sub-basin immediately down-gradient of site has flooding problems that result in damage to human or natural resources (e.g., houses or salmon redds) Surface flooding problems are in a sub-basin farther down-gradient No flooding problems anywhere downstream points = 0		1
S 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 S 6 Add the points in	the boxes above	1

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

Record the rating on the first page

NOTES and FIELD OBSERVATIONS:

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. Aquatic bed 4 structures or more: points = 4 3 structures: points = 2 _x_Emergent 1 Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1 × Forested (areas where trees have > 30% cover) 1 structure: points = 0 If the unit has a Forested class, check if: 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). Permanently flooded or inundated 4 or more types present: points = 3 × Seasonally flooded or inundated 3 types present: points = 2 Occasionally flooded or inundated 2 types present: points = 1 1 × Saturated only 1 type present: points = 0 ___Permanently flowing stream or river in, or adjacent to, the wetland Seasonally flowing stream in, or adjacent to, the wetland Lake Fringe wetland 2 points 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 1 If you counted: > 19 species points = 2 5 - 19 species points = 1 points = 0 < 5 species 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 Moderate = 2 points Low = 1 point All three diagrams in this row are **HIGH** = 3points

	1	
H 1.5. Special habitat features:		
Check the habitat features that are present in the wetland. <i>The number of checks is the number of points.</i>		
Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).		
Standing snags (dbh > 4 in) within the wetland		
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)	1	
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 (cut shrubs or trees that have not yet weathered		
where wood is exposed)		
At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are		
permanently or seasonally inundated (structures for egg-laying by amphibians)		
 Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of 		
strata)		
Total for H 1 Add the points in the boxes above	5	
<u> </u>	_	
Rating of Site Potential If score is: 15-18 = H 7-14 = M X 0-6 = L Record the rating on	the first page	
H 2.0. Does the landscape have the potential to support the habitat functions of the site?		
H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit).		
Calculate: 0.00 % undisturbed habitat + [(% moderate and low intensity land uses) 12.35 /2] = $\frac{6.175}{}$ %		
If total accessible habitat is:		
$> \frac{1}{3}$ (33.3%) of 1 km Polygon points = 3	0	
20-33% of 1 km Polygon points = 2		
10-19% of 1 km Polygon points = 1		
< 10% of 1 km Polygon points = 0		
H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.		
Calculate: 9.17 % undisturbed habitat + [(% moderate and low intensity land uses)] 33.73 /2] = $\frac{26.034999999999}{2}$ %		
Undisturbed habitat > 50% of Polygon points = 3		
Undisturbed habitat 10-50% and in 1-3 patches points = 2	1	
Undisturbed habitat 10-50% and > 3 patches points = 1		
Undisturbed habitat < 10% of 1 km Polygon points = 0		
H 2.3. Land use intensity in 1 km Polygon: If		
	-2	
> 50% of 1 km Polygon is high intensity land use points = (-2)	-2	
≤ 50% of 1 km Polygon is high intensity points = 0		
Total for H 2 Add the points in the boxes above	-1	
Rating of Landscape Potential If score is:4-6 = H1-3 = MX < 1 = L	he first page	
H 3.0. Is the habitat provided by the site valuable to society?	, ,	
H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? Choose only the highest score		
that applies to the wetland being rated.		
Site meets ANY of the following criteria: points = 2		
x It has 3 or more priority habitats within 100 m (see next page)		
— It has 3 of more priority habitats within 100 in (see next page) — It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)		
	2	
— It is mapped as a location for an individual WDFW priority species	_	
— It is a Wetland of High Conservation Value as determined by the Department of Natural Resources		
— It has been categorized as an important habitat site in a local or regional comprehensive plan, in a		
Shoreline Master Plan, or in a watershed plan Site has 1 or 3 priority habitate (listed on port page) within 100 m		
Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1		
Site does not meet any of the criteria above points = 0		

Rating of Value If score is: $\times 2 = H$ ___1 = M ___0 = L

Record the rating on the first page

WDFW Priority Habitats

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

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

- **Aspen Stands:** Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
- **Biodiversity Areas and Corridors**: Areas of habitat that are relatively important to various species of native fish and wildlife (*full descriptions in WDFW PHS report*).
- **Herbaceous Balds:** Variable size patches of grass and forbs on shallow soils over bedrock.
- Old-growth/Mature forests: Old-growth west of Cascade crest Stands of at least 2 tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) > 32 in (81 cm) dbh or > 200 years of age. Mature forests Stands with average diameters exceeding 21 in (53 cm) dbh; crown cover may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Cascade crest.
- **Oregon White Oak:** Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (*full descriptions in WDFW PHS report p. 158 see web link above*).
- **Riparian**: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.
- **Westside Prairies:** Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (*full descriptions in WDFW PHS report p. 161 see web link above*).
- X 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
Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.	
SC 1.0. Estuarine wetlands	
Does the wetland meet the following criteria for Estuarine wetlands?	
☐ The dominant water regime is tidal,	
☐ Vegetated, and	
☐ With a salinity greater than 0.5 ppt ☐ Yes –Go to SC 1.1 ☒ No= Not an estuarine wetland	
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?	
\square Yes = Category I \square No - Go to SC 1.2	
SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?	
☐ The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has less	
than 10% cover of non-native plant species. (If non-native species are Spartina, see page 25)	
At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland.	
The wetland has at least two of the following features: tidal channels, depressions with open water, or	
contiguous freshwater wetlands. Yes = Category No = Category	
SC 2.0. Wetlands of High Conservation Value (WHCV)	
SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High	
Conservation Value?	
SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?	
☐Yes = Category I ☑No = Not a WHCV	
SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf	
Yes − Contact WNHP/WDNR and go to SC 2.4 ⊠No = Not a WHCV	
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?	
SC 3.0. Bogs	
Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key</i>	
below. If you answer YES you will still need to rate the wetland based on its functions.	
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?	
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?	
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?	
NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that criterion by measuring the pH of the water that seeps into a hole dug at least 16 in deep. If the pH is less than 5.0 and the	
plant species in Table 4 are present, the wetland is a bog.	
SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, western red cedar,	
western hemlock, lodgepole pine, quaking aspen, Engelmann spruce, or western white pine, AND any of the	
species (or combination of species) listed in Table 4 provide more than 30% of the cover under the canopy?	
☐Yes = Is a Category I bog ☐No = Is not a bog	

Wetland name or number $\underline{\mathsf{B}}$

SC 4.0. Forested Wetlands	
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>	
 Old-growth forests (west of Cascade crest): Stands of at least two tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) that are at least 200 years of age OR have a diameter at breast height (dbh) of 32 in (81 cm) or more. Mature forests (west of the Cascade Crest): Stands where the largest trees are 80- 200 years old OR the species that make up the canopy have an average diameter (dbh) exceeding 21 in (53 cm). 	
☐ Yes = Category I ☒No = Not a forested wetland for this section	
SC 5.0. Wetlands in Coastal Lagoons Does the wetland meet all of the following criteria of a wetland in a coastal lagoon? — The wetland lies in a depression adjacent to marine waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently, rocks — The lagoon in which the wetland is located contains ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (needs to be measured near the bottom) □ Yes − Go to SC 5.1 ☑No = Not a wetland in a coastal lagoon SC 5.1. Does the wetland meet all of the following three conditions? — The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). — At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland. — The wetland is larger than ¹/₁₀ ac (4350 ft²) □ Yes = Category I □ No = Category II	
SC 6.0. Interdunal Wetlands Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? If you answer yes you will still need to rate the wetland based on its habitat functions. In practical terms that means the following geographic areas: — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 — Yes − Go to SC 6.1 ⊠No = not an interdunal wetland for rating 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)? □Yes = Category I □No − Go to SC 6.2 SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? □Yes = Category II □No − Go to SC 6.3 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? □Yes = Category III □No = Category IV	
Category of wetland based on Special Characteristics If you answered No for all types, enter "Not Applicable" on Summary Form	

Wetland name or number B

This page left blank intentionally

RATING SUMMARY – Western Washington

Name of wetland (or ID #): ${\color{red} extbf{C}}$	Date of site visit:
_{Rated by} Jake Layman	Trained by Ecology? 🖍 YesNo Date of training
HGM Class used for rating Slope	Wetland has multiple HGM classes?Y <u>✓</u> N
NOTE: Form is not complete wit Source of base aerial photo/n	hout the figures requested (figures can be combined). Page ESRI ArcGIS
OVERALL WETLAND CATEGORY	IV (based on functions <u>v</u> or special characteristics)

1. Category of wetland based on FUNCTIONS

Category I – Total score = 23 - 27

Category II – Total score = 20 - 22

Category III – Total score = 16 - 19

X Category IV – Total score = 9 - 15

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
	Circle the appropriate ratings			
Site Potential	L	L	L	
Landscape Potential	М	M	L	
Value	Н	М	М	TOTAL
Score Based on Ratings	6	5	4	15

Score for each function based on three ratings (order of ratings is not *important)* 9 = H,H,H8 = H,H,M7 = H,H,L7 = H,M,M6 = H,M,L6 = M,M,M5 = H,L,L 5 = M,M,L4 = M, L, L3 = L, L, L

2. Category based on SPECIAL CHARACTERISTICS of wetland

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

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

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 (can be added to another figure)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (can be added to another figure)	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	H 2.1, H 2.2, H 2.3	
polygons for accessible habitat and undisturbed habitat		
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 (can be added to another figure)	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	S 4.1	
(can be added to figure above)		
Boundary of 150 ft buffer (can be added to another figure)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

HGM Classification of Wetlands in Western Washington

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

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

1.	Are the water levels in the entire unit	usually controlled by tides except during floods?		
Σ	⊠ NO – go to 2	YES – the wetland class is Tidal Fringe – go to 1.1		
1	1.1 Is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?			
		Freshwater Tidal Fringe use the forms for Riverine wetlands. If it warine wetland and is not scored. This method cannot be used to		
2.	The entire wetland unit is flat and preand surface water runoff are NOT sou	cipitation is the only source (>90%) of water to it. Groundwater rces of water to the unit.		
X	☑NO – go to 3 If your wetland can be classified as a F	TYES – The wetland class is Flats lats wetland, use the form for Depressional wetlands.		
3.		s on the shores of a body of permanent open water (without any the year) at least 20 ac (8 ha) in size;		
X	☑NO – go to 4 ☐YES –	The wetland class is Lake Fringe (Lacustrine Fringe)		
4.	9	in be very gradual), and in one direction (unidirectional) and usually comes from heetflow, or in a swale without distinct banks,		
	□NO – go to 5	▼ YES - The wetland class is Slope		
	-	n these type of wetlands except occasionally in very small and ocks (depressions are usually <3 ft diameter and less than 1 ft		
5.	Does the entire wetland unit meet all The unit is in a valley, or stream cl stream or river, The overbank flooding occurs at le	nannel, where it gets inundated by overbank flooding from that		

W	Vetland name or number C	
	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 r flooding	ıot
6.	Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to surface, at some time during the year? This means that any outlet, if present, is higher than the 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 overbar 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 outlet.)
	NO – go to 8	

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

SLOPE WETLANDS		
Water Quality Functions - Indicators that the site functions to improve water quality		
S 1.0. Does the site have the potential to improve water quality?		
S 1.1. Characteristics of the average slope of the wetland: (a 1% slope has a 1 ft vertical drop in elevation for every 100 ft of horizontal distance) Slope is 1% or less Slope is > 1%-2% Slope is > 2%-5% Slope is greater than 5% points = 0	1	
S 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions): Yes = 3 No = 0		
S 1.3. Characteristics of the plants in the wetland that trap sediments and pollutants: Choose the points appropriate for the description that best fits the plants in the wetland. Dense means you have trouble seeing the soil surface (>75% cover), and uncut means not grazed or mowed and plants are higher than 6 in. Dense, uncut, herbaceous plants > 90% of the wetland area Dense, uncut, herbaceous plants > ½ of area Dense, woody, plants > ½ of area Dense, uncut, herbaceous plants > ¼ of area Does not meet any of the criteria above for plants points = 0		
Total for S 1 Add the points in the boxes above	1	
Rating of Site Potential If score is: $12 = H$ 6-11 = M \times 0-5 = L Record the rating on	the first page	

S 2.0. Does the landscape have the potential to support the water quality function of the site?	
S 2.1. Is > 10% of the area within 150 ft on the uphill side of the wetland in land uses that generate pollutants? Yes = $1 \text{ No} = 0$	1
S 2.2. Are there other sources of pollutants coming into the wetland that are not listed in question S 2.1? Other sources Yes = 1 No = 0	0
Total for S 2 Add the points in the boxes above	1

Rating of Landscape Potential If score is: \times 1-2 = M 0 = L

Record the rating on the first page

S 3.0. Is the water quality improvement provided by the site valuable to society?	
S 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
S 3.2. Is the wetland in a basin or sub-basin where water quality is an issue? At least one aquatic resource in the basin is on the $303(d)$ list. Yes = 1 No = 0	1
S 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality? <i>Answer YES</i> if there is a TMDL for the basin in which unit is found. Yes = 2 No = 0	2
Total for S 3 Add the points in the boxes above	4

Rating of Value If score is: X 2-4 = H 1 = M ___0 = L

Record the rating on the first page

SLOPE WETLANDS		
Hydrologic Functions - Indicators that the site functions to reduce flooding and stream erosion		
S 4.0. Does the site have the potential to reduce flooding and stream erosion?		
S 4.1. Characteristics of plants that reduce the velocity of surface flows during storms: Choose the points appropriate for the description that best fits conditions in the wetland. Stems of plants should be thick enough (usually > 1/8 in), or dense enough, to remain erect during surface flows. Dense, uncut, rigid plants cover > 90% of the area of the wetland All other conditions Dense, uncut, rigid plants cover > 90% of the area of the wetland points = 0		
Posting of City Detential If score is: 1 - M × 0 - I		

Rating of Site Potential If score is: $1 = M \times 0 = L$

Record the rating on the first page

S 5.0. Does the landscape have the potential to support the hydrologic functions of the site?	
S 5.1. Is more than 25% of the area within 150 ft upslope of wetland in land uses or cover that generate excess	
surface runoff? Yes = 1 No = 0	'

Rating of Landscape Potential If score is: X 1 = M ___0 = L

Record the rating on the first page

S 6.0. Are the hydrologic functions provided by the site valuable to society?		
S 6.1. Distance to the nearest areas downstream that have flooding problems: The sub-basin immediately down-gradient of site has flooding problems that result in damage to human or natural resources (e.g., houses or salmon redds) Surface flooding problems are in a sub-basin farther down-gradient No flooding problems anywhere downstream points = 0		1
S 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? Yes = $2 \text{ No} = 0$		0
Total for S 6 Add the points in the	boxes above	1

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

Record the rating on the first page

NOTES and FIELD OBSERVATIONS:

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. Aquatic bed 4 structures or more: points = 4 3 structures: points = 2 _x_Emergent 0 Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1 Forested (areas where trees have > 30% cover) 1 structure: points = 0 If the unit has a Forested class, check if: 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). Permanently flooded or inundated 4 or more types present: points = 3 Seasonally flooded or inundated 3 types present: points = 2 Occasionally flooded or inundated 2 types present: points = 1 0 × Saturated only 1 type present: points = 0 ___Permanently flowing stream or river in, or adjacent to, the wetland Seasonally flowing stream in, or adjacent to, the wetland Lake Fringe wetland 2 points 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 1 If you counted: > 19 species points = 2 5 - 19 species points = 1 points = 0 < 5 species 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 Moderate = 2 points Low = 1 point All three diagrams in this row are **HIGH** = 3points

H 1.5. Special habitat features:		
Check the habitat features that are present in the wetland. The number of checks is the number of points.		
Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).		
Standing snags (dbh > 4 in) within the wetland		
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)	1	
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 (cut shrubs or trees that have not yet weathered		
where wood is exposed)		
At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are		
permanently or seasonally inundated (structures for egg-laying by amphibians)		
 Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of 		
strata)		
Total for H 1 Add the points in the boxes above	0	
· ·	2	
Rating of Site Potential If score is: 15-18 = H 7-14 = M X 0-6 = L Record the rating on	the first page	
H 2.0. Does the landscape have the potential to support the habitat functions of the site?		
H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit).		
Calculate: 0.00 % undisturbed habitat + [(% moderate and low intensity land uses) 12.35 /2] = $\frac{6.175}{}$ %		
If total accessible habitat is:		
1		
$> \frac{1}{3}$ (33.3%) of 1 km Polygon points = 3	0	
20-33% of 1 km Polygon points = 2		
10-19% of 1 km Polygon points = 1		
< 10% of 1 km Polygon points = 0		
H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.		
Calculate: 9.17 % undisturbed habitat + [(% moderate and low intensity land uses) $33.73/2$] = $\frac{26.034999999999}{2}$ %		
Undisturbed habitat > 50% of Polygon points = 3		
Undisturbed habitat 10-50% and in 1-3 patches points = 2	1	
Undisturbed habitat 10-50% and > 3 patches points = 1		
Undisturbed habitat < 10% of 1 km Polygon points = 0		
70		
H 2.3. Land use intensity in 1 km Polygon: If	2	
> 50% of 1 km Polygon is high intensity land use points = (- 2)	-2	
≤ 50% of 1 km Polygon is high intensity points = 0		
Total for H 2 Add the points in the boxes above	-1	
Rating of Landscape Potential If score is:4-6 = H1-3 = MX < 1 = L Record the rating on t	he first page	
H 3.0. Is the habitat provided by the site valuable to society?		
H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score</i>		
that applies to the wetland being rated.		
Site meets ANY of the following criteria: points = 2		
 — It has 3 or more priority habitats within 100 m (see next page) 		
 It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists) 		
 It is mapped as a location for an individual WDFW priority species 	1	
 — It is a Wetland of High Conservation Value as determined by the Department of Natural Resources 		
 It has been categorized as an important habitat site in a local or regional comprehensive plan, in a 		
Shoreline Master Plan, or in a watershed plan		
× Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1		
Site does not meet any of the criteria above points = 0		

Rating of Value If score is: 2 = H $\times 1 = M$ 0 = L

Record the rating on the first page

WDFW Priority Habitats

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

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

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

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

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.	
SC 1.0. Estuarine wetlands	
Does the wetland meet the following criteria for Estuarine wetlands?	
☐ The dominant water regime is tidal,	
☐ Vegetated, and	
☐ With a salinity greater than 0.5 ppt ☐ Yes –Go to SC 1.1 ☒ No= Not an estuarine wetland	
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?	
\square Yes = Category I \square No - Go to SC 1.2	
SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?	
☐ The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has less	
than 10% cover of non-native plant species. (If non-native species are Spartina, see page 25)	
At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland.	
The wetland has at least two of the following features: tidal channels, depressions with open water, or	
contiguous freshwater wetlands. Yes = Category No = Category	
SC 2.0. Wetlands of High Conservation Value (WHCV)	
SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High	
Conservation Value?	
SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?	
☐Yes = Category I ☑No = Not a WHCV	
SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf	
Yes — Contact WNHP/WDNR and go to SC 2.4 ⊠No = Not a WHCV	
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?	
SC 3.0. Bogs	
Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key</i>	
below. If you answer YES you will still need to rate the wetland based on its functions.	
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?	
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?	
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?	
NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that criterion by measuring the pH of the water that seeps into a hole dug at least 16 in deep. If the pH is less than 5.0 and the	
plant species in Table 4 are present, the wetland is a bog.	
SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, western red cedar,	
western hemlock, lodgepole pine, quaking aspen, Engelmann spruce, or western white pine, AND any of the	
species (or combination of species) listed in Table 4 provide more than 30% of the cover under the canopy?	
☐Yes = Is a Category I bog ☐No = Is not a bog	

Wetland name or number \underline{C}

SC 4.0. Forested Wetlands	
Does the wetland have at least 1 contiguous acre of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? If you answer YES you will still need to rate the wetland based on its functions. — Old-growth forests (west of Cascade crest): Stands of at least two tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) that are at least 200 years of age OR have a diameter at breast height (dbh) of 32 in (81 cm) or more. — Mature forests (west of the Cascade Crest): Stands where the largest trees are 80- 200 years old OR the species that make up the canopy have an average diameter (dbh) exceeding 21 in (53 cm).	
☐ Yes = Category I ☑ No = Not a forested wetland for this section	
Does the wetland meet all of the following criteria of a wetland in a coastal lagoon? — The wetland lies in a depression adjacent to marine waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently, rocks — The lagoon in which the wetland is located contains ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (needs to be measured near the bottom) ☐ Yes − Go to SC 5.1 ☑ No = Not a wetland in a coastal lagoon SC 5.1. Does the wetland meet all of the following three conditions? — The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). — At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland. — The wetland is larger than ¹/₁₀ ac (4350 ft²) ☐ Yes = Category I ☐ No = Category II	
SC 6.0. Interdunal Wetlands Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? If you answer yes you will still need to rate the wetland based on its habitat functions. In practical terms that means the following geographic areas: — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 ☐ Yes − Go to SC 6.1 ☑No = not an interdunal wetland for rating 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)? ☐ Yes = Category I ☐ No − Go to SC 6.2	
SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? \[\textstyle \text{Yes} = \text{Category II} \] \[\textstyle \text{No} - \text{Go to SC 6.3} \] 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? \[\textstyle \text{Yes} = \text{Category III} \] \[\textstyle \text{No} = \text{Category IV} \] Category of wetland based on Special Characteristics If you answered No for all types, enter "Not Applicable" on Summary Form	

Wetland name or number \underline{C}

This page left blank intentionally

RATING SUMMARY – Western Washington

Name of wetland (or ID #): D	Date of site visit: 04/07/21	
_{Rated by} Rachael Hyland, Jake Layman	Trained by Ecology? YesNo Date of training	
HGM Class used for rating Depressional	Wetland has multiple HGM classes?Y <u> <</u> N	
NOTE: Form is not complete without the figures requested (figures can be combined). Source of base aerial photo/map ESRI ArcGIS		
OVERALL WETLAND CATEGORY	(based on functions <u>v</u> 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	
		Circle the ap	propriate ratings	
Site Potential	М	M	М	
Landscape Potential	М	M	L	
Value	Н	M	Н	TOTAL
Score Based on Ratings	7	6	6	19

Score for each function based on three ratings (order of ratings is not *important)* 9 = H,H,H8 = H,H,M7 = H,H,L 7 = H,M,M6 = H,M,L6 = M,M,M5 = H,L,L 5 = M,M,L4 = M, L, L3 = L, L, L

2. Category based on SPECIAL CHARACTERISTICS of wetland

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

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

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 (can be added to another figure)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (can be added to another figure)	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	H 2.1, H 2.2, H 2.3	
polygons for accessible habitat and undisturbed habitat		
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 (can be added to another figure)	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	S 4.1	
(can be added to figure above)		
Boundary of 150 ft buffer (can be added to another figure)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	S 3.3	

HGM Classification of Wetlands in Western Washington

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

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you

probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in questions 1-7 apply, and go to Question 8.

1.	Are the water levels in the entire	e unit usually controlled	by tides except during floods?
	☑NO – go to 2	YES – the wetl	and class is Tidal Fringe – go to 1.1
-	1.1 Is the salinity of the water dur	ing periods of annual lo	w flow below 0.5 ppt (parts per thousand)?
		d as a Freshwater Tidal n Estuarine wetland an	☐ YES - Freshwater Tidal Fringe Fringe use the forms for Riverine wetlands. If it d is not scored. This method cannot be used to
2.	The entire wetland unit is flat an and surface water runoff are NO		nly source (>90%) of water to it. Groundwater to unit.
×	NO – go to 3 If your wetland can be classified	as a Flats wetland, use t	☐ YES – The wetland class is Flats he form for Depressional wetlands.
3.	Does the entire wetland unit me ☐The vegetated part of the wet plants on the surface at any to ☐At least 30% of the open wate	cland is on the shores of ime of the year) at least	a body of permanent open water (without any 20 ac (8 ha) in size;
×	☑NO – go to 4 □	YES – The wetland class	is Lake Fringe (Lacustrine Fringe)
4.	Does the entire wetland unit me The wetland is on a slope (sl The water flows through the seeps. It may flow subsurface The water leaves the wetland	ope can be very gradual wetland in one direction e, as sheetflow, or in a s), on (unidirectional) and usually comes from wale without distinct banks,
×	☑NO – go to 5		☐ YES – The wetland class is Slope
	-		tlands except occasionally in very small and are usually <3 ft diameter and less than 1 ft
5.	Does the entire wetland unit me The unit is in a valley, or stre stream or river, The overbank flooding occur	eam channel, where it go	ets inundated by overbank flooding from that

We	Wetland name or number <u>D</u>	
X	NO – go to 6 NOTE: The Riverine unit can contain depressions that are filled with water when the river is flooding	s not
6.	 Is the entire wetland unit in a topographic depression in which water ponds, or is saturated surface, at some time during the year? This means that any outlet, if present, is higher than t of the wetland. 	
	□ NO – go to 7	
7.	7. Is the entire wetland unit located in a very flat area with no obvious depression and no over flooding? The unit does not pond surface water more than a few inches. The unit seems to I maintained by high groundwater in the area. The wetland may be ditched, but has no obvio outlet.	be
	□ 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	HGM class to
being rated	use in rating
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake Fringe	Lake Fringe
Depressional + Riverine along stream	Depressional
within boundary of depression	
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other	Treat as
class of freshwater wetland	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.

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. Characteristics of surface water outflows from the wetland: Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). points = 3	
Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. points = 2 Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points = 1	3
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. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes): Wetland has persistent, ungrazed, plants > 95% of area Wetland has persistent, ungrazed, plants > ½ of area Wetland has persistent, ungrazed plants > ¹/10 of area Wetland has persistent, ungrazed plants < ¹/10 of area points = 1 Wetland has persistent, ungrazed plants < ¹/10 of area points = 0	3
D 1.4. Characteristics of seasonal ponding or inundation: This is the area that is ponded for at least 2 months. See description in manual. Area seasonally ponded is > ½ total area of wetland Area seasonally ponded is > ¼ total area of wetland Area seasonally ponded is < ¼ total area of wetland points = 2 Area seasonally ponded is < ¼ total area of wetland points = 0	4
Total for D 1 Add the points in the boxes above	10
Rating of Site Potential If score is:12-16 = H \times 6-11 = M0-5 = L Record the rating on the first potential	ige
D 2.0. Does the landscape have the potential to support the water quality function of the site?	
D 2.1. Does the wetland unit receive stormwater discharges? Yes = 1 No = 0	1
D 2.2. ls > 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? Source Yes = 1 No = 0	0
Total for D 2 Add the points in the boxes above	2
Rating of Landscape Potential If score is:3 or 4 = HX_1 or 2 = M0 = L Record the rating on the file	rst 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	2
Total for D 3 Add the points in the boxes above	4
Rating of Value If score is: X 2-4 = H 1 = M 0 = L NOTES and FIELD OBSERVATIONS: Record the rating on the first page	

DEPRESSIONAL AND FLATS WETLANDS	
Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradat	ion
D 4.0. Does the site have the potential to reduce flooding and erosion?	
D 4.1. Characteristics of surface water outflows from the wetland: Wetland is a depression or flat depression with no surface water leaving it (no outlet) Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outletpoints = 2 Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points = 0	4
D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part. Marks of ponding are 3 ft or more above the surface or bottom of outlet points = 7 Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet points = 5 Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet points = 3 The wetland is a "headwater" wetland points = 3 Wetland is flat but has small depressions on the surface that trap water points = 1 Marks of ponding less than 0.5 ft (6 in)	3
D 4.3. Contribution of the wetland to storage in the watershed: Estimate the ratio of the area of upstream basin contributing surface water to the wetland to the area of the wetland unit itself. The area of the basin is less than 10 times the area of the unit points = 5 The area of the basin is 10 to 100 times the area of the unit points = 3 The area of the basin is more than 100 times the area of the unit points = 0 Entire wetland is in the Flats class points = 5	3
Total for D 4 Add the points in the boxes above	10
Rating of Site Potential If score is: 12-16 = H × 6-11 = M 0-5 = L Record the rating on the	first page
D 5.0. Does the landscape have the potential to support hydrologic functions of the site?	
D 5.1. Does the wetland receive stormwater discharges? Yes = 1 No = 0	1
D 5.2. Is $>10\%$ of the area within 150 ft of the wetland in land uses that generate excess runoff? Yes = 1 No = 0	1
D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? Yes = 1 No = 0	0
Total for D 5 Add the points in the boxes above	2
Rating of Landscape Potential If score is: 3 = H X 1 or 2 = M 0 = L Record the rating on the	first page
D 6.0. Are the hydrologic functions provided by the site valuable to society?	-
D 6.1. The unit is in a landscape that has flooding problems. Choose the description that best matches conditions around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met. The wetland captures surface water that would otherwise flow down-gradient into areas where flooding has damaged human or natural resources (e.g., houses or salmon redds): • Flooding occurs in a sub-basin that is immediately down-gradient of unit. points = 2 • Surface flooding problems are in a sub-basin farther down-gradient. points = 1 Flooding from groundwater is an issue in the sub-basin. points = 1 The existing or potential outflow from the wetland is so constrained by human or natural conditions that the water stored by the wetland cannot reach areas that flood. Explain why points = 0 There are no problems with flooding downstream of the wetland.	1
D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? Yes = 2 No = 0	0
Total for D 6 Add the points in the boxes above	l 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. Aquatic bed 4 structures or more: points = 4 3 structures: points = 2 × Emergent 2 ★ Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1 × Forested (areas where trees have > 30% cover) 1 structure: points = 0 If the unit has a Forested class, check if: 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). Permanently flooded or inundated 4 or more types present: points = 3 × Seasonally flooded or inundated 3 types present: points = 2 Occasionally flooded or inundated 2 types present: points = 1 1 × Saturated only 1 type present: points = 0 ___Permanently flowing stream or river in, or adjacent to, the wetland Seasonally flowing stream in, or adjacent to, the wetland Lake Fringe wetland 2 points 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 1 If you counted: > 19 species points = 2 5 - 19 species points = 1 points = 0 < 5 species 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. 2 None = 0 points Moderate = 2 points Low = 1 point All three diagrams in this row are **HIGH** = 3points

	Τ	
H 1.5. Special habitat features:		
Check the habitat features that are present in the wetland. The number of checks is the number of points.		
_x_Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).		
Standing snags (dbh > 4 in) within the wetland		
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)	1	
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 (cut shrubs or trees that have not yet weathered		
where wood is exposed)		
At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are		
permanently or seasonally inundated (structures for egg-laying by amphibians)		
Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of		
Strata) Total for H 1 Add the points in the boxes above	7	
·	7	
Rating of Site Potential If score is: 15-18 = H × 7-14 = M 0-6 = L Record the rating on	the first page	
H 2.0. Does the landscape have the potential to support the habitat functions of the site?		
H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit).		
Calculate: 0.00 % undisturbed habitat + [(% moderate and low intensity land uses) 12.35 /2] = 6.175 %		
If total accessible habitat is:		
$> \frac{1}{3}$ (33.3%) of 1 km Polygon points = 3		
20-33% of 1 km Polygon points = 2	0	
10-19% of 1 km Polygon points = 1		
< 10% of 1 km Polygon points = 0		
H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.		
Calculate: 9.17 % undisturbed habitat + [(% moderate and low intensity land uses) 33.73/2] = 26.034999999999999999%		
Undisturbed habitat > 50% of Polygon points = 3	1	
Undisturbed habitat 10-50% and in 1-3 patches points = 2	'	
Undisturbed habitat 10-50% and > 3 patches points = 1		
Undisturbed habitat < 10% of 1 km Polygon points = 0		
H 2.3. Land use intensity in 1 km Polygon: If		
> 50% of 1 km Polygon is high intensity land use points = (- 2)	-2	
≤ 50% of 1 km Polygon is high intensity points = 0		
Total for H 2 Add the points in the boxes above	-1	
Rating of Landscape Potential If score is:4-6 = H1-3 = MX < 1 = L	he first page	
H 3.0. Is the habitat provided by the site valuable to society?		
H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? <i>Choose only the highest score</i>		
that applies to the wetland being rated.		
Site meets ANY of the following criteria: points = 2		
It has 3 or more priority habitats within 100 m (see next page)		
 It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists) 		
 — It is mapped as a location for an individual WDFW priority species 	2	
 It is a Wetland of High Conservation Value as determined by the Department of Natural Resources 		
 It has been categorized as an important habitat site in a local or regional comprehensive plan, in a 		
Shoreline Master Plan, or in a watershed plan		
Site has 1 or 2 priority habitats (listed on next page) within 100 m points = 1		
Site does not meet any of the criteria above points = 0		
Rating of Value If score is: \times 2 = H 1 = M 0 = L Record the rating on	the first nage	

Wetland Rating System for Western WA: 2014 Update Rating Form – Effective January 1, 2015

WDFW Priority Habitats

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

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

- **Aspen Stands:** Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
- **Biodiversity Areas and Corridors**: Areas of habitat that are relatively important to various species of native fish and wildlife (*full descriptions in WDFW PHS report*).
- **Herbaceous Balds:** Variable size patches of grass and forbs on shallow soils over bedrock.
- Old-growth/Mature forests: Old-growth west of Cascade crest Stands of at least 2 tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) > 32 in (81 cm) dbh or > 200 years of age. Mature forests Stands with average diameters exceeding 21 in (53 cm) dbh; crown cover may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Cascade crest.
- **Oregon White Oak:** Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (*full descriptions in WDFW PHS report p. 158 see web link above*).
- **Riparian**: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.
- **Westside Prairies:** Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (*full descriptions in WDFW PHS report p. 161 see web link above*).
- X 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

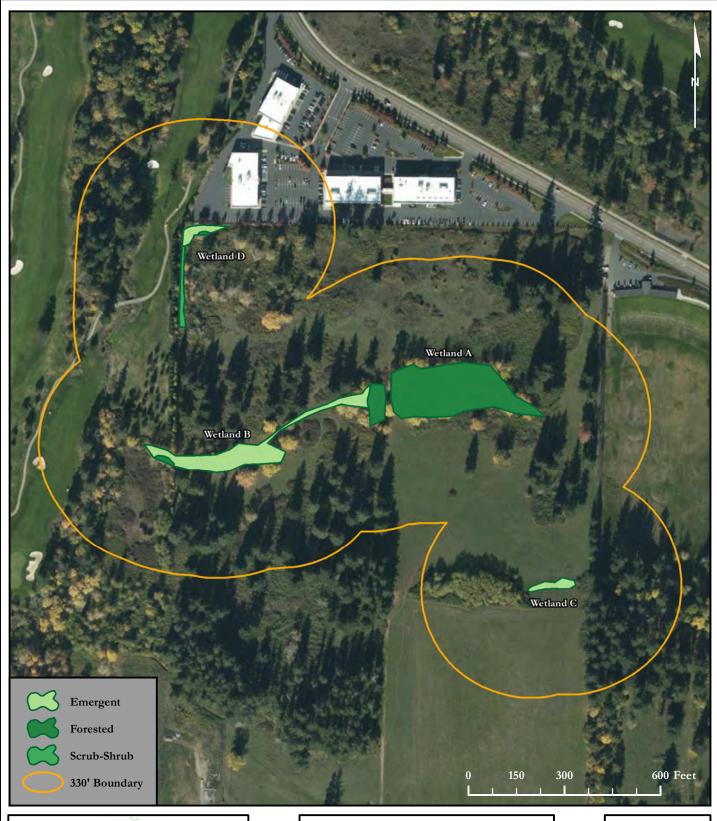
SC 1.0. Estuarine wetlands Does the wetland meet the following criteria for Estuarine wetlands? The dominant water regime is tidal, Vegetated, and With a salinity greater than 0.5 ppt Pes –Go to SC 1.1 No = Not an estuarine wetland
Does the wetland meet the following criteria for Estuarine wetlands?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

SC 4.0. Forested Wetlands	
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>	
 Old-growth forests (west of Cascade crest): Stands of at least two tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) that are at least 200 years of age OR have a diameter at breast height (dbh) of 32 in (81 cm) or more. Mature forests (west of the Cascade Crest): Stands where the largest trees are 80- 200 years old OR the species that make up the canopy have an average diameter (dbh) exceeding 21 in (53 cm). 	
☐ Yes = Category I ☑ No = Not a forested wetland for this section	
Does the wetland meet all of the following criteria of a wetland in a coastal lagoon? — The wetland lies in a depression adjacent to marine waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently, rocks — The lagoon in which the wetland is located contains ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (needs to be measured near the bottom) □ Yes − Go to SC 5.1 ☑No = Not a wetland in a coastal lagoon SC 5.1. Does the wetland meet all of the following three conditions? — The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). — At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland. — The wetland is larger than ¹/₁₀ ac (4350 ft²) □ Yes = Category I □ No = Category II	
SC 6.0. Interdunal Wetlands Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? If you answer yes you will still need to rate the wetland based on its habitat functions. In practical terms that means the following geographic areas: — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 ☐ Yes − Go to SC 6.1 ☑ No = not an interdunal wetland for rating	
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)? SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? SC 6.3. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? SC 6.4. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? SC 6.5. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger?	
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?	
Category of wetland based on Special Characteristics If you answered No for all types, enter "Not Applicable" on Summary Form	

This page left blank intentionally

Appendix F — Wetland Rating Maps

CAMAS BUSINESS CENTER - COWARDIN MAP





2907 Harborview Dr., Suite D, Gig Harbor, WA 98335 Phone: (253) 514-8952 Fax: (253) 514-8954 www.soundviewconsultants.com

CAMAS BUSINESS CENTER

4707 & 4723 NW LAKE ROAD CAMAS, WA 98607

CLARK COUNTY PARCEL NUMBERS: 176155000 and 176170000

DATE:	8/16/2021	
-------	-----------	--

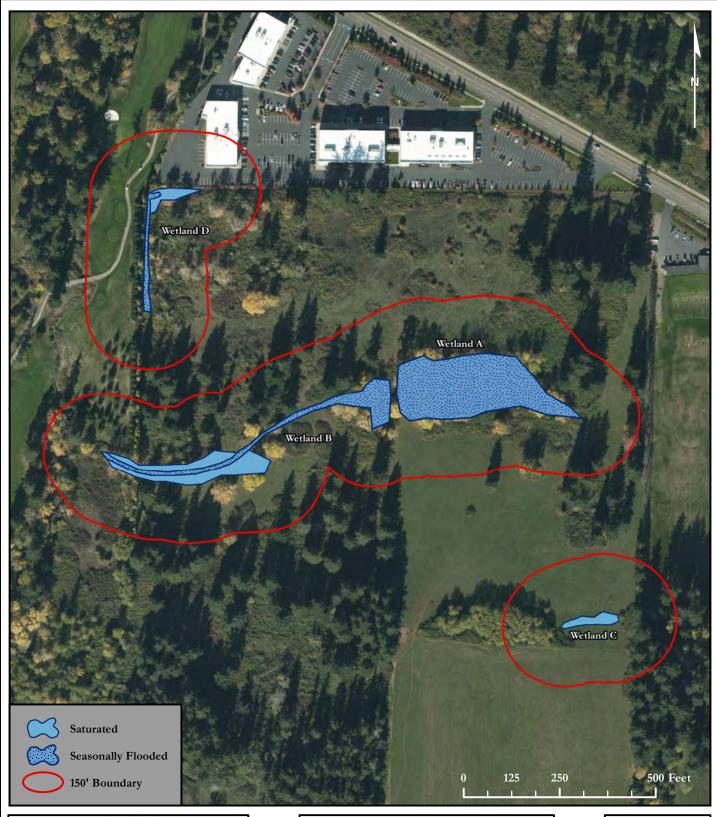
JOB: 1144.0027

BY: DDS

SCALE: 1 " = 300 '

FIGURE NO. 1 of 5

CAMAS BUSINESS CENTER - HYDROPERIOD MAP





2907 Harborview Dr., Suite D, Gig Harbor, WA 98335 Phone: (253) 514-8952 Fax: (253) 514-8954 www.soundviewconsultants.com

CAMAS BUSINESS CENTER

4707 & 4723 NW LAKE ROAD CAMAS, WA 98607

CLARK COUNTY PARCEL NUMBERS: 176155000 and 176170000

DATE: 8/16/2021

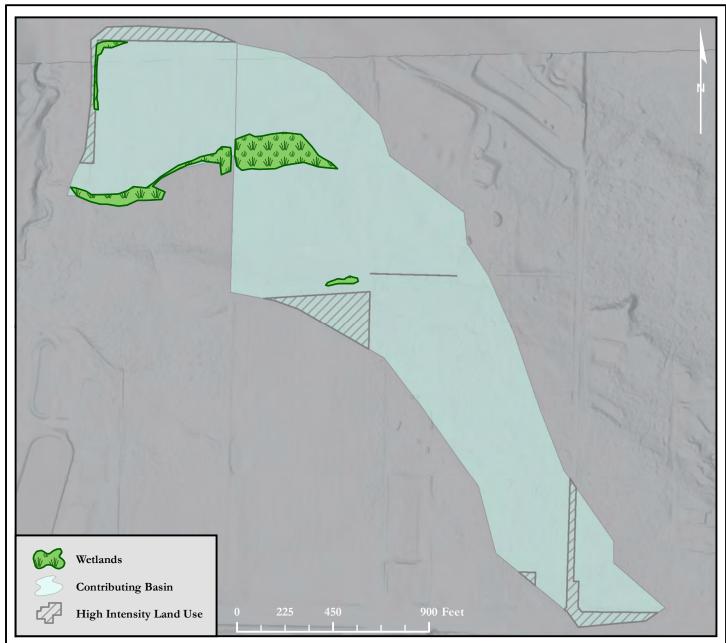
JOB: 1144.0027

BY: DDS

SCALE: 1 " = 250 '

FIGURE NO. 2 of 5

CAMAS BUSINESS CENTER - CONTRIBUTING BASIN MAP



D.4.0		
D.4.3		
	Area of Contributing Basin (SF)	1,852,722
	Area of Wetland A (SF)	57,197
	Percent of Wetland A within Contributing Basin	3.087%
D.5.0		
D.5.3		
	Area of Contributing Basin	1,852,722
	Area of Intensive Human Land Uses	104,292
	Percent of Intensive Human Land Use	
	within Contributing Basin	6%

D.4.0		
D.4.3		
	Area of Contributing Basin (SF)	488,807
	Area of Wetland D (SF)	7,089
	Percent of Wetland D within Contributing Basin	1.450%
D.5.0		
D.5.3		
	Area of Contributing Basin	488,807
	Area of Intensive Human Land Uses	53,728
	Percent of Intensive Human Land Use	
	within Contributing Basin	11%



www.soundview consultants.com

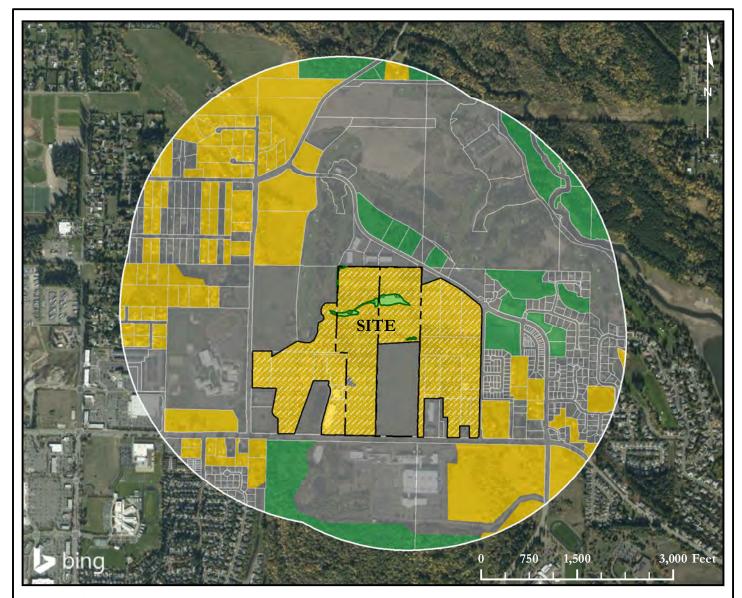
CAMAS BUSINESS CENTER

4707 & 4723 NW LAKE ROAD CAMAS, WA 98607

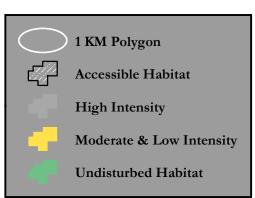
CLARK COUNTY PARCEL NUMBERS: 176155000 and 176170000

DATE: 8/16/2021
JOB: 1144.0027
BY: DDS
SCALE: 1 " = 450 '
FIGURE NO. 3 of 5

CAMAS BUSINESS CENTER - HABITAT MAP



H.2.0 Wetland A		
H.2.1		
	Abutting Undisturbed Habitat	0.00%
	Abutting Moderate & Low Intensity Land Uses	12.35%
	Accessible Habitat	6.18%
H.2.2		
	Undisturbed Habitat	9.17%
	Moderate & Low Intensity Land Uses	33.73%
	Undisturbed Habitat in 1 KM Polygon	26.03%
H.2.3		
	High Intensity Land Use in 1 KM Polygon	57.10%





2907 Harborview Dr., Suite D, Gig Harbor, WA 98335 Phone: (253) 514-8952 Fax: (253) 514-8954 www.soundviewconsultants.com

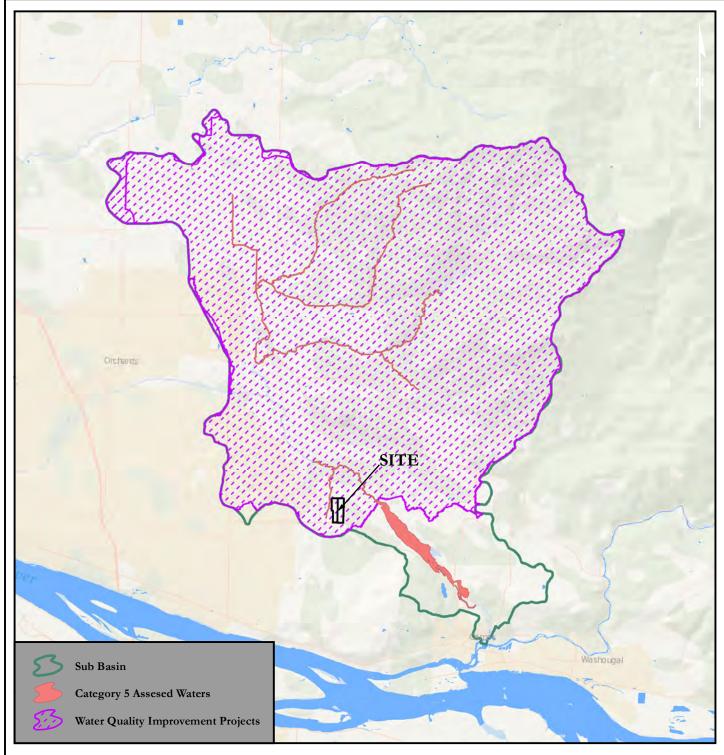
CAMAS BUSINESS CENTER

4707 & 4723 NW LAKE ROAD CAMAS, WA 98607

CLARK COUNTY PARCEL NUMBERS: 176155000 and 176170000

DATE: 8/16/2021
ЈОВ: 1144.0027
BY: DDS
SCALE: 1 " = 1,500 '
FIGURE NO. 4 of 5

CAMAS BUSINESS CENTER CENTER - 303D MAP



Name	Pollutants	TMDL ID	WRIA	Year Approved
Salmon Creek Bacteria and Turbidity TMDL	Bacteria, Turbidity	33	28	2001
Salmon Creek Watershed Temperature TMDL	Temperature	123	28	2011



www.soundview consultants.com

CAMAS BUSINESS CENTER

4707 & 4723 NW LAKE ROAD CAMAS, WA 98607

CLARK COUNTY PARCEL NUMBERS: 176155000 and 176170000

DATE: 8/16/2021
ЈОВ: 1144.0027
BY: DDS
SCALE: 1 " = 2 mi
FIGURE NO. 5 of 5

Appendix G – Qualifications

All field inspections, wetland determinations, habitat assessments, and supporting documentation, including this <u>Wetland and Fish and Wildlife Habitat Assessment Report</u> prepared for the <u>Camas Commerce Center</u> property were prepared by, or under the direction of, Matt DeCaro of SVC. In addition, the site investigations were performed by Rachael Hyland and Jake Layman, and report preparation was completed by Casey Lanier and Kelly Kramer

Matt DeCaro

Associate Principal

Professional Experience: 13 years

Matt DeCaro is an Associate Principal and Senior Scientist with a diverse background in environmental planning, wetland science, stream ecology, water quality, site remediation, NEPA compliance, and project management. He manages a wide range of industrial, commercial, and multifamily residential projects throughout Western Washington, providing environmental permitting and regulatory compliance assistance for land use projects from their planning stages through entitlement and construction. His local expertise, diverse professional background, and positive relationships with regulatory personnel are integral components of his successful project outcomes.

Matt earned a Bachelor of Science degree with a focus in Environmental Science from the Evergreen State College in Olympia, Washington, with additional graduate-level coursework and research in aquatic restoration and salmonid ecology. Matt has received 40-hour wetland delineation training (Western Mountains, Valleys, & Coast and Arid West Regional Supplements) and regularly performs wetland, stream, and shoreline delineations. Matt has been formally trained in the use of the 2014 Washington State Wetland Rating System and Determination of Ordinary High Water Mark by WSDOE, and he is a Pierce County Qualified Wetland Specialist and Wildlife Biologist. He has attended USFWS survey workshops for multiple threatened and endangered species, and he is a Senior Author of WSDOT Biological Assessments. Matt holds 40-hour HAZWOPER training and has managed Phase I Environmental Site Assessments, subsurface investigations, and contaminant remediation projects throughout the Pacific Northwest. His diverse experience also includes NEPA compliance for federal permitting projects; noxious weed abatement; army ant research in the Costa Rican tropical rainforest; spotted owl surveys on federal and private lands; and salmonid spawning and migration surveys.

Jake Layman

Environmental Scientist

Professional Experience: 12+ years

Jake Layman is an Environmental Scientist with a varied background in fisheries, wildlife, and aquatic invertebrate biology and stream and lake ecology. Jakes's expertise includes endangered species monitoring, lake limnology assessments, water chemistry profiles, off-channel habitat characterization, laboratory management, and terrestrial and aquatic amphibian identification with associated habitat assessments. Jake also has experience in fish population assessments, stream typing, spawning escapement, environmental disaster recovery, and amphibian toxicology research. Jake has over 10 years of experience at the federal and state levels conducting ecological monitoring surveys throughout Eastern and Western Washington. He worked with the National Park Service to conduct environmental compliance monitoring on park construction projects, infrastructure maintenance

projects, and federal highways projects. This position also included environmental spill response, fish exclusion surveys in support of construction, and effectiveness monitoring on Engineered Log Jam (ELJ) projects. Jake has worked with the Washington Department of Fish and Wildlife (WDFW) to assess and inventory fish passage barriers and monitor culvert removal projects throughout Western Washington. While working for WDFW, Jake managed the daily operation for the intensive habitat study, on off-channel wetlands, for the Chehalis Aquatic Resources Protection Plan (ASRP).

Jake earned bachelor's degrees in both Biology, with an Ecology specialization, and Geography, with a Natural Resource Management specialization, from Central Washington University. In addition, Jake has a Minor in Environmental Studies and a Certificate in Geographic Information Systems (GIS) and Cartography form Central Washington University. Jake has received a 40-hour wetland delineation training (Western Mtns, Valleys, & Coast and Arid West Regional Supplement) and training from the Washington State Department of Ecology in Environmental Negotiations; Navigating SEPA; Conducting Forage Fish Surveys; Puget Sound Coastal Processes, Shoreline Modifications, and Beach Restoration; Using the Marine Shoreline Design Guidelines for Marine Shoreline Stabilization; How to Determine the Ordinary High Water Mark; and Using the Revised Washington State Wetland Rating System (2014) in Western Washington.

Rachael Hyland

Environmental Scientist & Certified Ecologist

Professional Experience: 7 years

Rachael Hyland is a Wetland Professional in Training (WPIT) through the Society of Wetland Scientists and a Certified Ecologist through the Ecological Society of America. Rachael has a background in wetland and ecological habitat assessments in various states, most notably Washington, Connecticut, Massachusetts, Rhode Island, and Ohio. She has experience in assessing tidal, stream, and wetland systems, reporting on biological evaluations, permitting, and site assessments. She also has extensive knowledge of bats and white nose syndrome (*Pseudogymnoascus destructans*), a fungal disease affecting bats which was recently documented in Washington.

Rachael earned a Bachelor of Science degree in Ecology and Evolutionary Biology from the University of Connecticut, with additional ecology studies at the graduate level. Rachael has completed 40-hour wetland delineation training for Western Mountains, Valleys, & Coast and Arid West Regional Supplement, in addition to formal training for the Northcentral and Northeast supplement, and experience with the Eastern Mountains and Piedmont and Atlantic and Gulf Coast supplements. She has also received formal training from the Washington State Department of Ecology in the Using the Revised 2014 Wetland Rating System for Western Washington, How to Determine the Ordinary High Water Mark, Navigating SEPA, and Selecting Wetland Mitigation Sites Using a Watershed Approach. Rachael has also received training from the Washington State Department of Transportation in Biological Assessment Preparation for Transportation Projects and is listed by WSDOT as a junior author for preparing Biological Assessments.