Wetland Delineation for Rivianna Beach Development in West Linn, Clackamas County, Oregon

Township	Range	Section	Tax Lots (Portions)	
		2	100, 401, 3 rd Avenue Right-of-Way (ROW), Volpp Street ROW	
3 South	1 East	2AA	200, 100, 800, 4 th Street ROW, 5 th Avenue ROW, 4 th Avenue ROW, 5 th Avenue ROW, 7 th Street ROW	
		1BB	100, 4 th Street ROW, 5 th Avenue ROW	
2 South	1 East	36CC	900, 1201, 4 th Street ROW	

Prepared for

Forward Vision Development

c/o Aaron Murphy, PE, Senior Project Manager 3J Consulting 9600 SW Nimbus Ave #100 Beaverton, OR 97008

Prepared by

Alex Sherman and Carlee Michelson, PWS John van Staveren, SPWS **Pacific Habitat Services, Inc.** 9450 SW Commerce Circle, Suite 180 Wilsonville, Oregon 97070

PHS Project Number: 7298

April 10, 2024



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I. INTRODUCTION

Township	Range	Section	Tax Lots (Portions)	
		2	100, 401, 3 rd Avenue Right-of-Way (ROW), Volpp Street ROW	
3 South	1 East	2AA	100, 200, 800, 4 th Street ROW, 5 th Avenue ROW, 4 th Avenue ROW, 5 th Avenue ROW, 7 th Street ROW	
		1BB	100, 4 th Street ROW, 4 th Avenue ROW	
2 South	1 East	36CC	900, 1201, 4 th Street ROW	

Pacific Habitat Services, Inc. (PHS) conducted a wetland delineation on the following tax lots:

The study area is located adjacent to the north bank of the Willamette River in West Linn, Clackamas County, Oregon. Figures, including a map depicting the location of the wetlands and other waters are in Appendix A. Data sheets documenting onsite conditions are provided in Appendix B. Photos of the onsite existing conditions are included in Appendix C.

II. RESULTS AND DISCUSSION

A. Landscape Setting and Land Use

The study area is surrounded by medium to dense residential development and public streets. Directly east of the site is undeveloped forested area with a Blue Heron Mill Settling Pond #1. The site is bordered to the north by 5th Avenue, to the west by 7th Street, to the south by Volpp Street and partially by the Willamette River, and to the east by open space. Fourth (4th) Street crosses through the central east side of the study area. The small portion of Willamette River within the study area resides within River Mile 28.00. There are undeveloped ROWs for 4th Avenue and 5th Street within the study area.

The study area includes a clay-lined excavated settling pond called the Blue Heron Mill Settling Pond #2, which occupies most of the study area's southern portion. North of the settling pond, and approximately 8-10 feet lower in elevation, resides a wetland complex impounded by beaver activity. Active beaver were seen during the delineation field work within the wetland complex, and several nutria were present within the upslope settling pond. Due to beaver dam impoundment causing fluctuations in water levels, there are several different hydroperiods present on site. East of the beaver dam, flow exhibits an Ordinary High Water (OHW), which continues through a culvert below 4th Street and continues east beyond the study area.

To the north, steep slopes contain wetlands where groundwater emerges toward the toe of slope. This is evident through several seeps south of 5^{th} Avenue.

The study area east of 4th Street has an herbaceous layer consisting of reed canarygrass (*Phalaris arundinacea*, FACW) which inhabits most of the streambanks and wetlands on either side with occasional patches of soft rush (*Juncus effusus*, FAC). The understory and canopy on the north side of the stream is inhabited mostly by native willow (*Salix sp.*, FACW) intermixed with Oregon ash (*Fraxinus latifolia*, FACW), and to the south is dense Himalayan blackberry (*Rubus armeniacus*, FAC) with Oregon ash. The northeast corner of the site contains an open field of tall

fescue (*Schedonorus arundinaceus*, FAC) with dozens of emergent black cottonwood (*Populus balsamifera*, FAC) saplings with a dense patch of slough sedge (*Carex obnupta*, FACW) swamp rose (*Rosa pisocarpa*, FAC), English hawthorn (*Crataegus monogyna*, FAC), and Oregon ash.

The berm surrounding the Blue Heron Mill Settling Pond #2 is covered with a mix of grasses, moss, Himalayan blackberry, and ponderosa pine (*Pinus ponderosa*, FACU). North of the beaver pond within the impounded wetland complex is a multistory canopy of red alder (*Alnus rubra*, FAC) with an understory of English ivy (*Hedera helix*, FACU), sword fern (*Polystichum munitum*, FACU), Himalayan blackberry, beaked hazelnut (*Corylus cornuta*, FACU), English holly (*Ilex aquifolium*, FACU), and trailing blackberry (*Rubus ursinus*, FACU).

The study area is situated in the Tanner Creek-Willamette River watershed (6th level 12-digit HUC: 170900070405). Most of the study area is within the 100-year floodplain of the Willamette River except for upslope areas south of 5th Avenue.

Natural Resources Conservation Service (NRCS) mapped soils in the study area includes Woodburn silt loam, 8 to 15 percent slopes, Wapato silty clay loam, and Newberg fine sandy loam. The Wapato soils is considered hydric.

B. Site Alterations

From 1952 to 1970, onsite conditions were a mix of agricultural fields and forested slopes on the north end of the site. Fifth Avenue (5th) Avenue and 4th Street have been present since at least 1952, but not necessarily as asphalt roads. Between 1956 and 1960, 7th street was constructed, along with an existing residence on the west side of the site. An old remnant outbuilding structure exists west of 4th Street, near the intersection with 5th Avenue. Volpp Street became a more established road between 1960 and 1970. Between 1970 and 1981, the southern portion of the site had been developed into a lined settling pond for water treatment associated with the Blue Heron Mill. A drainageway can be seen at the location north of the existing pond since 1952, where Wetland A and Stream 1 are currently mapped (www.historicaerials.com). Imagery from 2005 shows the pond being dry and revealing the pond's bed liner. This could indicate that the pond experienced lesser flooding in the past and that the extent of ponding has grown over time.

Several snags are present along the periphery of Wetland A, indicating more intense flooding and a fluctuating water table, likely caused through impoundment. Construction of the northern berm and the steep topography of north of the settling pond has created conditions for upslope runoff from 5th Avenue to become impounded. Ponding is further intensified by onsite beaver activity. Current onsite conditions include a beaver dam west and near 4th Street. Peak flooding engulfs the settling pond's west, north and east sides at the bottom of the outer side of the berms.

No recent alterations or disturbances were observed onsite at the time of the site visit in January 2024, but as stated above, the presence of beaver was observed including a dam west of 4th Street. Water seasonally flows over 4th Street during the wet season, which was observed during the delineation.

C. Precipitation Data and Analysis

PHS conducted the wetland delineation fieldwork on January 26 and 29 0f 2024 For climate analysis, PHS used the Direct Antecedent Rainfall Analysis Method (DAREM). DAREM categorizes observed precipitation for the three months preceding the site visit into three categories: drier than normal, normal, or wetter than normal, and weights the monthly categories relative to the date of the field work. The weighted average is then applied for the wetland hydrology assessment. Precipitation data for the prior three (3) months as well as the WETS table was obtained from OREGON CITY, OR station, approximately one kilometer south of the study area. As shown in Table 1, the weighted average precipitation for the three months preceding the late January 2024 fieldwork was normal.

Station	to the WE	TS Tables	s, prior to th	e January 202	24 wetland de	lineation fi	ield work.
Prior Month	WETS1Rainfall Percentile (inches)Measured Rainfall2			Condition*:	Condition Value	Month	Multiply
Name			Dry, Wet,	(1=dry,	Weight ³	Previous two	
	30 th	70 th	(inches)	Normal	2=normal, or 3=wet)		columns ⁴
October	2.47	4.83	3.40	Normal	2	1	2
November	4.22	6.95	4.07	Dry	1	2	2
December	4.95	8.11	8.26	Wet	3	3	9

13

Sum

Comparison of recorded monthly precipitation at the OREGON CITY, OR Weather Table 1:

¹ WETS Table for the OREGON CITY, OR Weather Station; Source: (https://agacis.rcc-acis.org/?fips=41005)

² Observed precipitation is the precipitation recorded at the OREGON CITY, OR, OR Weather Station. Source: (https://agacis.rcc-acis.org/?fips=41005)

Month Weight: most recent month = 3, 2nd most recent month = 2, third most recent month = 1

Sum Total: sum of eighth column: drier (sum 6-9), normal (sum 10-14), wetter (sum 15-18)

Recorded precipitation for the 14 days preceding the January 29 fieldwork was 5.34 inches, which is 188 percent of normal (2.84 inches). Precipitation on the day of January 26, 2024, was recorded at 0.48 inches. No precipitation was recorded on the day of the January 29, 2024, fieldwork. Precipitation accumulation for the water year to date was 19.79 inches (92% of normal).

D. Methods

Wetland Methodology

PHS identified jurisdictional wetlands in the study area based on the presence of wetland hydrology, hydric soils, and hydrophytic vegetation, in accordance with the Routine On-site Determination, as described in the Corps of Engineers Wetland Delineation Manual, Wetlands Research Program Technical Report Y 87 1 ("The 1987 Manual") and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region. The conclusions drawn by PHS were based on the methods outlined in the regional supplement, which requires a predominance of hydrophytic plant species, one indicator of hydric soil, and either one primary or two secondary indicators of hydrology to designate a sample point as a wetland. The delineation field work took place on January 26 and 29, 2024.

Wetland boundaries in the study area were closely associated with a break in topography and an obvious contrast in vegetation. Wetland A's southern boundary is closely correlated with the flood limit of the beaver pond against the settling pond's berm. The northern boundary is not defined by the surface water elevation of Wetland A, but rather seeps that emerge at the base of slope south of 5th Avenue. Soil indicators used to identify the boundary included redox dark surface and depleted below dark surface accompanied by hydrology indicators of a high water table, and/or other primary hydrology indicators like saturation, surface water, and inundation visible in aerial imagery.

Wetland B had a gradual slope, which limited the use of topography as an aid for delineating the wetland. Numerous excavations were required to determine the presence of hydric soils and hydrology since the area had a wide swath of Oregon ash saplings emerging in the field. Vegetation transitions from a scrub-shrub community to an herbaceous upland community with patchy Himalayan blackberry.

Other Waters Methodology

OHW of the Willamette River was determined using elevation contours derived from the Public Lands Maps (DSL, 1975). The OHW elevation of the Willamette River was determined to be 62.6 feet NAVD88. OHW elevation corresponding to the site's river mile (28) was converted to NAVD88 datum from NGVD29, which roughly corresponded to sample point location 11 at 62.6 feet, which was taken above the field-indicators of OHW.

E. Description of all Wetlands and Other Waters

PHS identified the jurisdictional limits of two wetlands and two other waters within the study area. Descriptions of the delineated resources are provided below.

Wetland A

Wetland A (9.03 acres) has multiple Cowardin classes due to different hydroperiods and dominant vegetation. Wetland A is compartmentalized into the following Cowardin and HGM classes:

Cowardin (Class and Subclass)	Water Regime Modifiers	Special Modifiers	Hydrogeomorphic (HGM) Class
Palustrine, unconsolidated bottom, mud, (PUB3)	intermittently exposed (G)	Beaver (b)	Riverine
Palustrine, aquatic bed rooted vascular (PAB3F)	semipermanently flooded (F)	Beaver (b)	Riverine
Palustrine, forested broad-leaved deciduous (PFO1)	seasonally flooded (C)	N/A	Slope

Areas of the wetland adjacent to the bottom of the slope that runs along 5th Avenue are dominated by dense Himalayan blackberry. The blackberry thicket is mostly the vegetation on the upland side of the wetland boundary. The vegetation community between the blackberry and flooded areas corresponds to the PFO Cowardin class with an overstory of red alder and Oregon ash; a shrub understory of English holly, English hawthorn, beaked hazelnut, sword fern, and Douglas spirea (*Spiraea douglasii*, FACW); and a ground cover of English ivy, trailing blackberry, a species of Geranium, and cleavers (*Galium aparine*, FACU). The vegetation community in the PAB Cowardin class is predominantly reed canarygrass. Wetland A continues west beyond the study area.

Wetland B

Wetland B (0.88 acres) is located east of Wetland A and is hydrologically connected to Stream 1 (discussed below). The wetland is composed of two Cowardin classes as listed below both with HGM classifications of Riverine and Slope.

Cowardin (Class and Subclass)	Water Regime Modifiers	Special Modifiers	Hydrogeomorphic (HGM) Class
Palustrine, scrub shrub persistent (PSS1)	seasonally flooded (C)	N/A	Riverine
palustrine emergent persistent (PEM1)	seasonally flooded/saturated (E)	N/A	Riverine/Slope

The emergent vegetation community consists mainly of slough sedge, tall fescue, and reed canarygrass. The scrub-shrub vegetation community is composed of native willow species with an understory closer to the stream of soft rush and reed canarygrass. Upslope of the stream, vegetation consists of Himalayan blackberry, English ivy, and bracken fern (*Pteridium aquilinum*, FACU). Wetland B continues east beyond the study area.

<u>Stream 1</u>

The onsite stream (363 linear feet; 57-feet width is hydrologically connected to Wetlands A and B. Stream flow starts on the west side of 4th Street, and flows through Wetland A. The stream is culverted below 4th Street, and flows through Wetland B, it continues eastward off-site, eventually flowing into the Willamette River. The Cowardin classification for Stream 1 is riverine, aquatic bed rooted vascular (R2AB3) with a HGM of Riverine.

Willamette River

The Willamette River overlaps slightly with the study area at the southeast end; 307 linear feet of the river is present within the study area. The width of the river is approximately 1,012 feet. The river has a Cowardin classification of riverine lower perennial unconsolidated bottom (R2UB3) with an HGM classification of Riverine.

Blue Heron Lagoon/ Blue Heron Mill Settling Pond #2

The Blue Heron Lagoon (15.11 acres) was constructed sometime in the 1970's as part of the Blue Heron Mills wastewater treatment system and was constructed in hydric soil (Wapato). The mill is no longer in operation. The pond was constructed using an engineered berm atop an alluvial terrace of the Willamette River and has a clay liner. The lagoon was supplied with water from the Blue Heron mill via a 3-mile pipeline that ran along the bottom of the Willamette River from the mill to the lagoon. Water was subsequently drained from the lagoon to the Willamette River via NPDES permit. The constructed berm caused impoundment of surface water and created a wetland upslope (west) of the lagoon. The lagoon's Cowardin Class is PUB3 and the HGM class is Depressional.

F. Deviation from Local and/or National Wetland Inventories

The Local Wetland Inventory (LWI) for the City of West Linn (approved in 2005), identified wetland in general agreement with the boundaries delineated by PHS in January 2024.

G. Mapping Method

PHS flagged the limits of wetlands and other waters within the study area with blue pin flags; neon pink tape was used for sample point locations. The wetland boundaries, the OHW of Stream 1, and sample points were pinpointed using a sub-meter accuracy Trimble GPS unit. The OHW of the Willamette River was based on the Public Lands map under Jurisdiction of the Oregon State Land Board (1975). Other features on the map are professionally surveyed with sub-centimeter accuracy by 3J Consulting.

H. Additional Information

As stated above, the Blue Heron Lagoon/ Blue Heron Mill Settling Pond #2 was constructed within hydric soil; however, per an email on March 5, 2024, from Chris Stevenson, Department of State Lands, the pond will not be jurisdictional at the state level as it is assumed it was legally constructed and has a liner.

I. Results and Conclusions

PHS delineated two wetlands and two other waters within the study area, as summarized in Tables 2A and 2B.

Wetland Name	Area (acres)	Cowardin Class	HGM Class
Wetland A	9.03	PUB3, PAB3, PFO1	Slope, Riverine
Wetland B	0.88	PSS1, PEM1	Slope, Riverine
Wetland Total	9.91		

 Table 2A:
 Summary of Wetlands within the Study Area

 Table 2B:
 Summary of Other Waters within the Study Area

Water Name	Linear Feet	Width	Cowardin Class	HGM Class
Stream 1	363	57feet	R2AB	Riverine
Willamette River	307	1,010 feet	R2UB	Riverine
Waters Total	670			

J. Required Disclaimer

This report documents the investigation, best professional judgment, and conclusions of the investigators. It is correct and complete to the best of our knowledge. It should be considered a Preliminary Jurisdictional Determination of wetlands and other waters and used at your own risk unless it has been reviewed and approved in writing by the Oregon Department of State Lands in accordance with OAR 141-090-0005 through 141-090-0055.

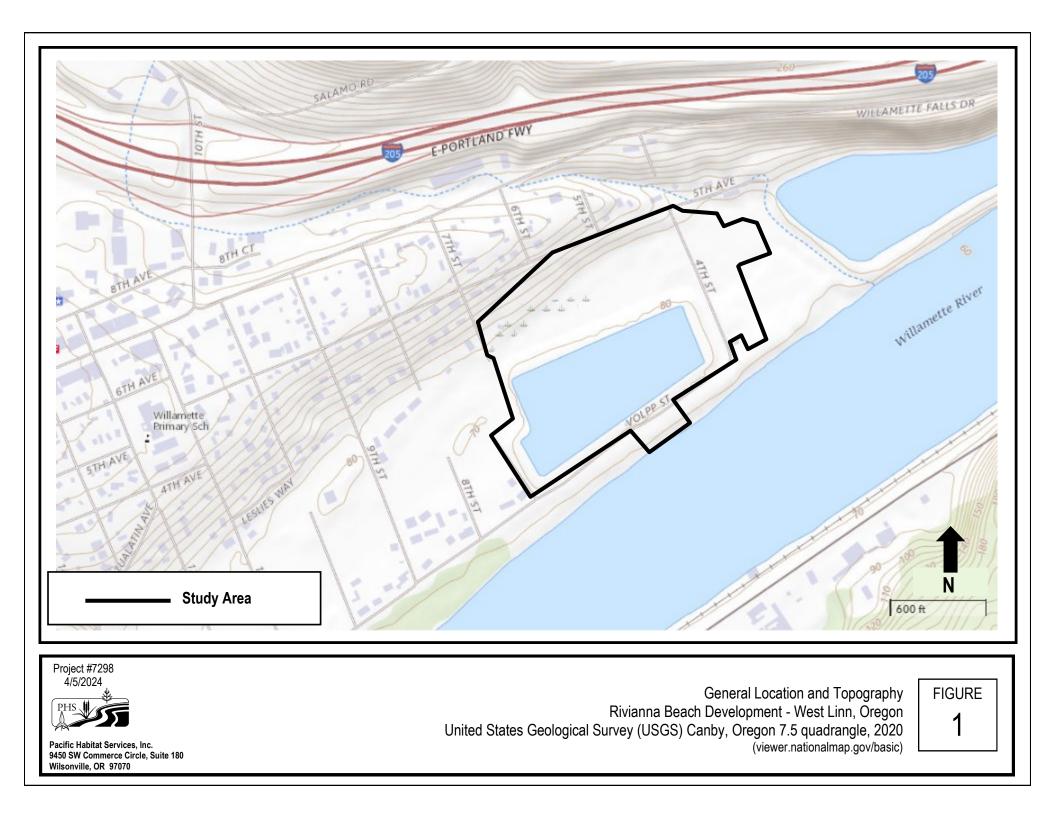
III. REFERENCES

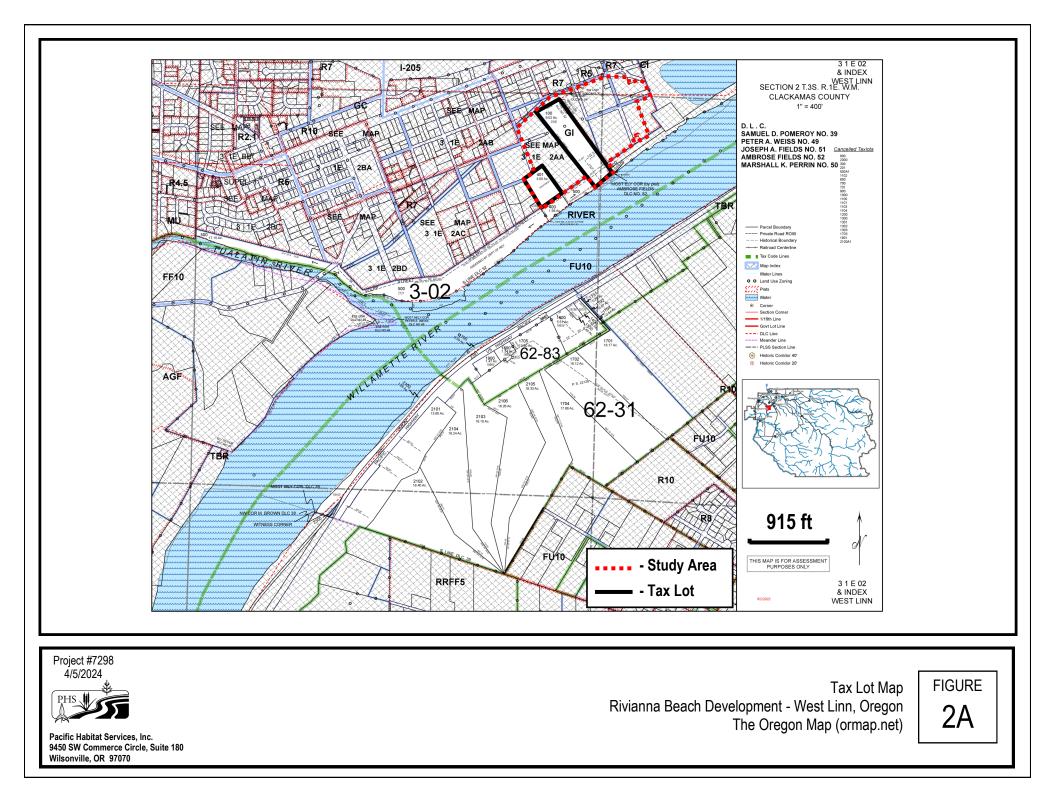
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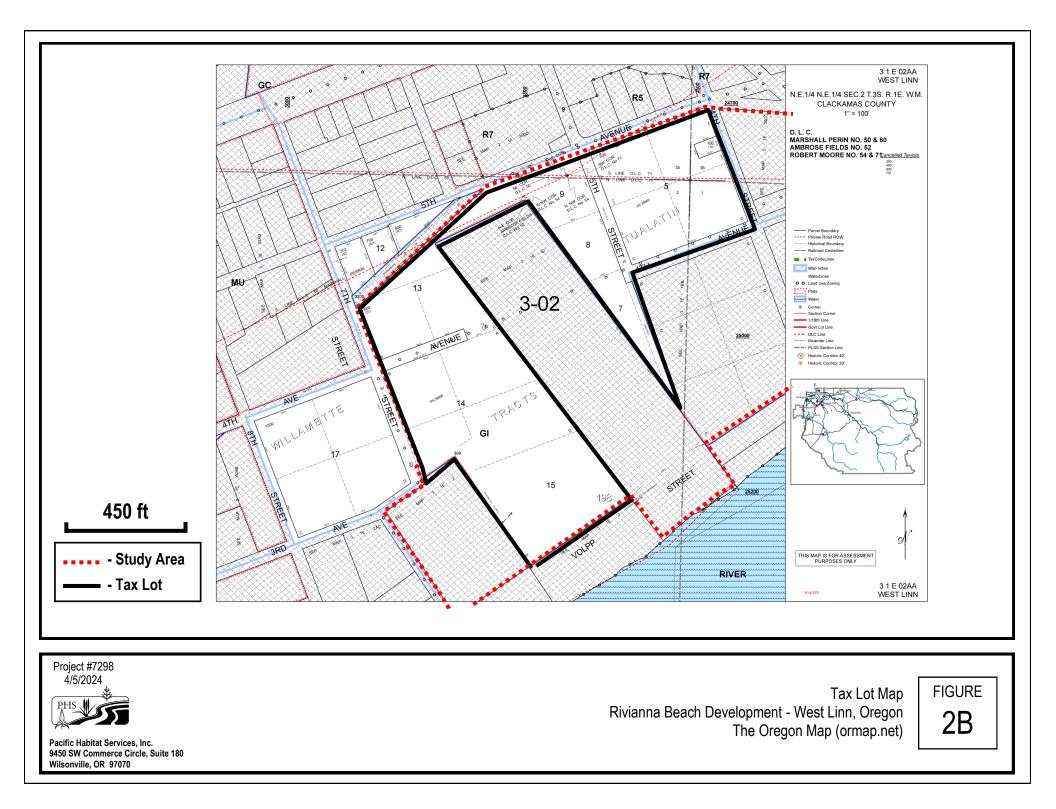
Appendix A

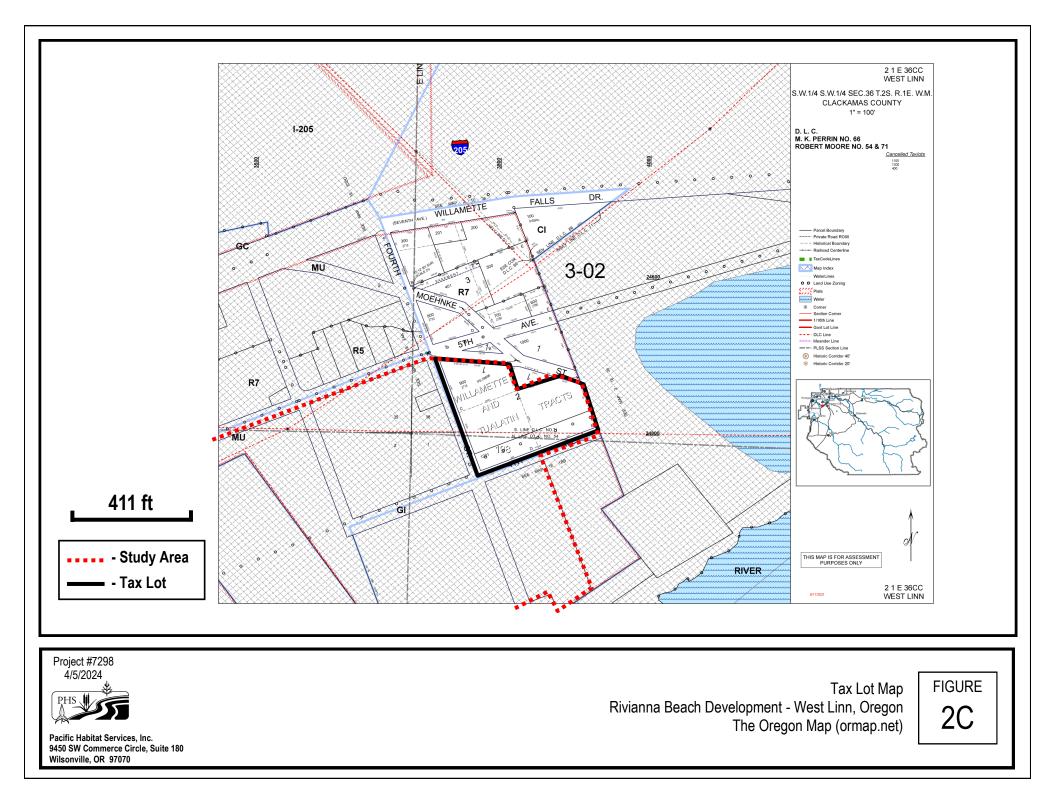
Figures

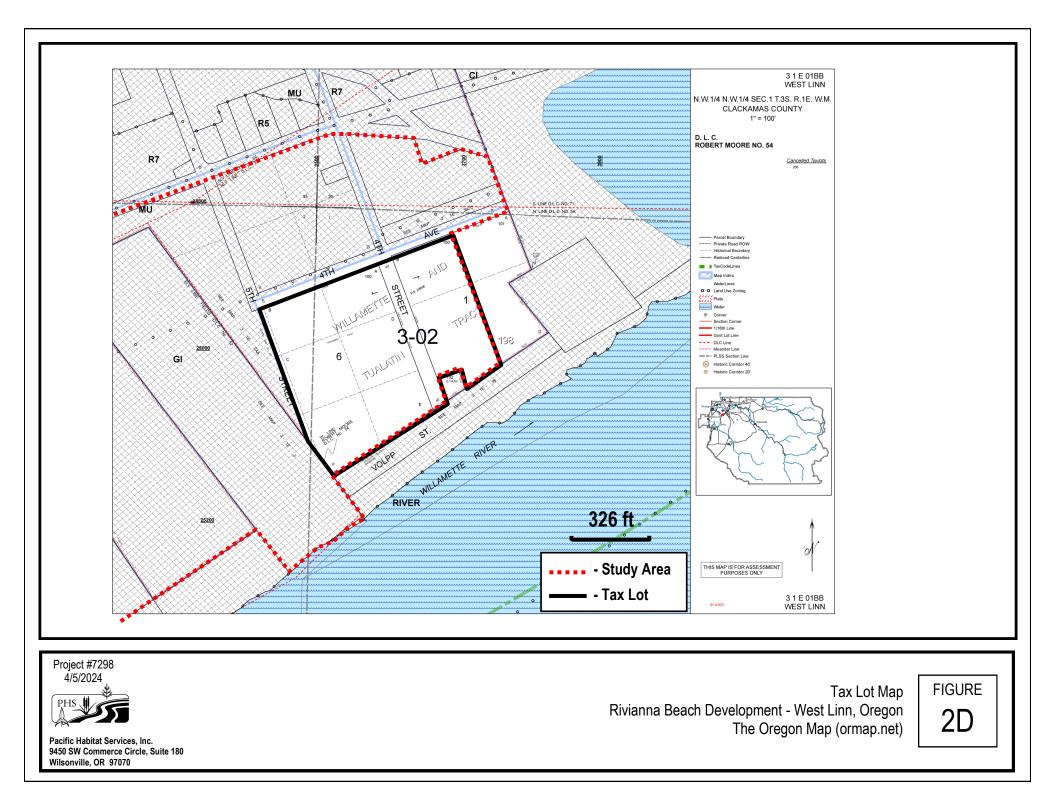


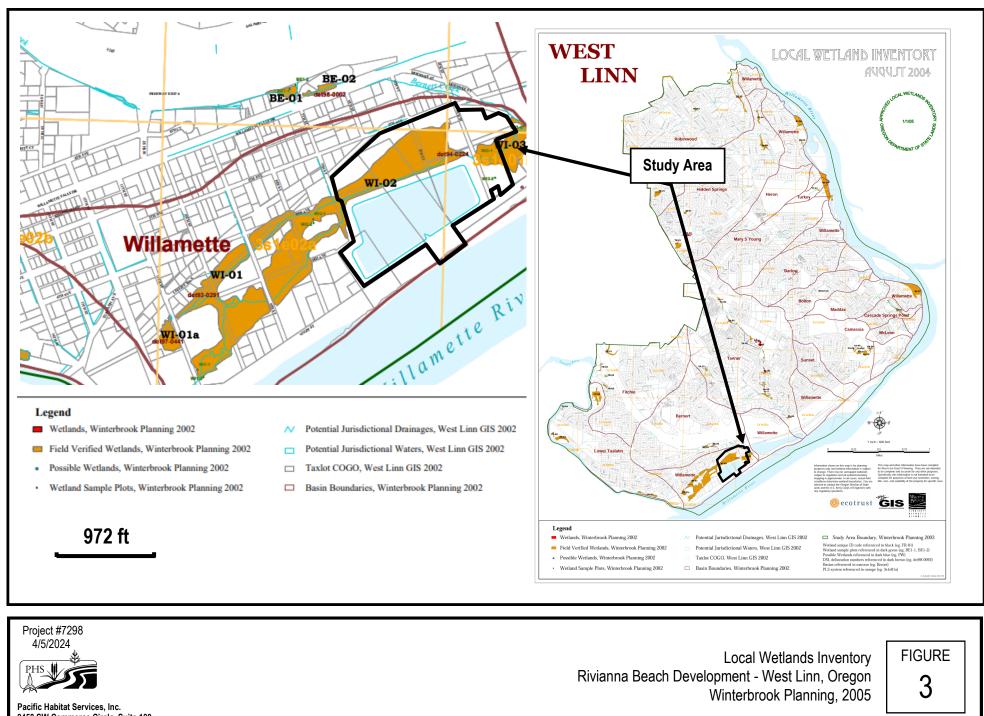




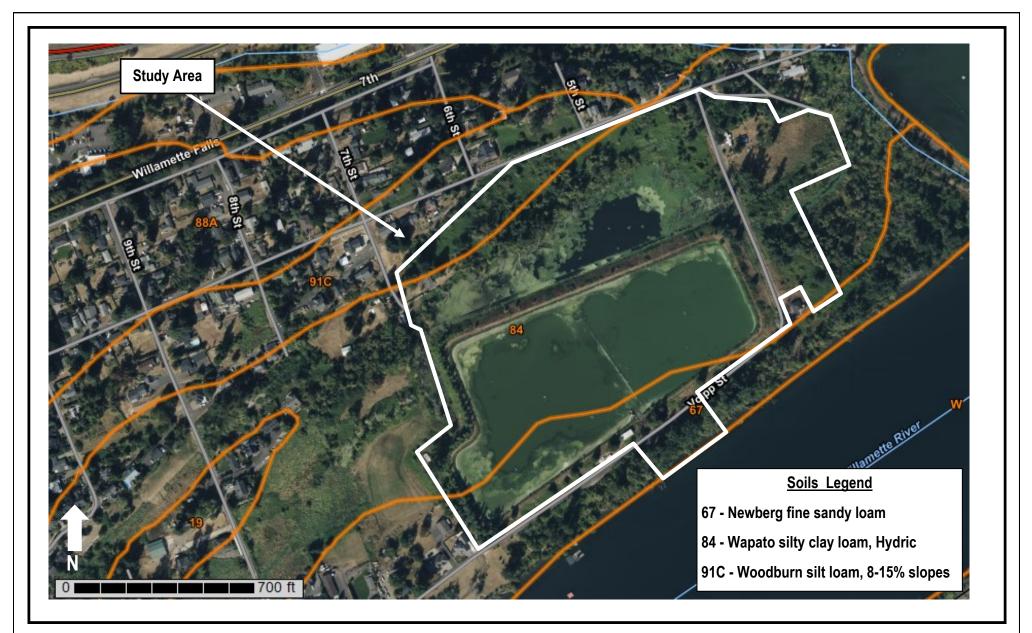








9450 SW Commerce Circle, Suite 180 Wilsonville, OR 97070



Project #7298 4/5/2024



Pacific Habitat Services, Inc. 9450 SW Commerce Circle, Suite 180 Wilsonville, OR 97070 Soils Rivianna Beach Development - West Linn, Oregon Natural Resources Conservation Services, Web Soil Survey, 2023 (websoilsurvey.sc.egov.usda.gov) FIGURE

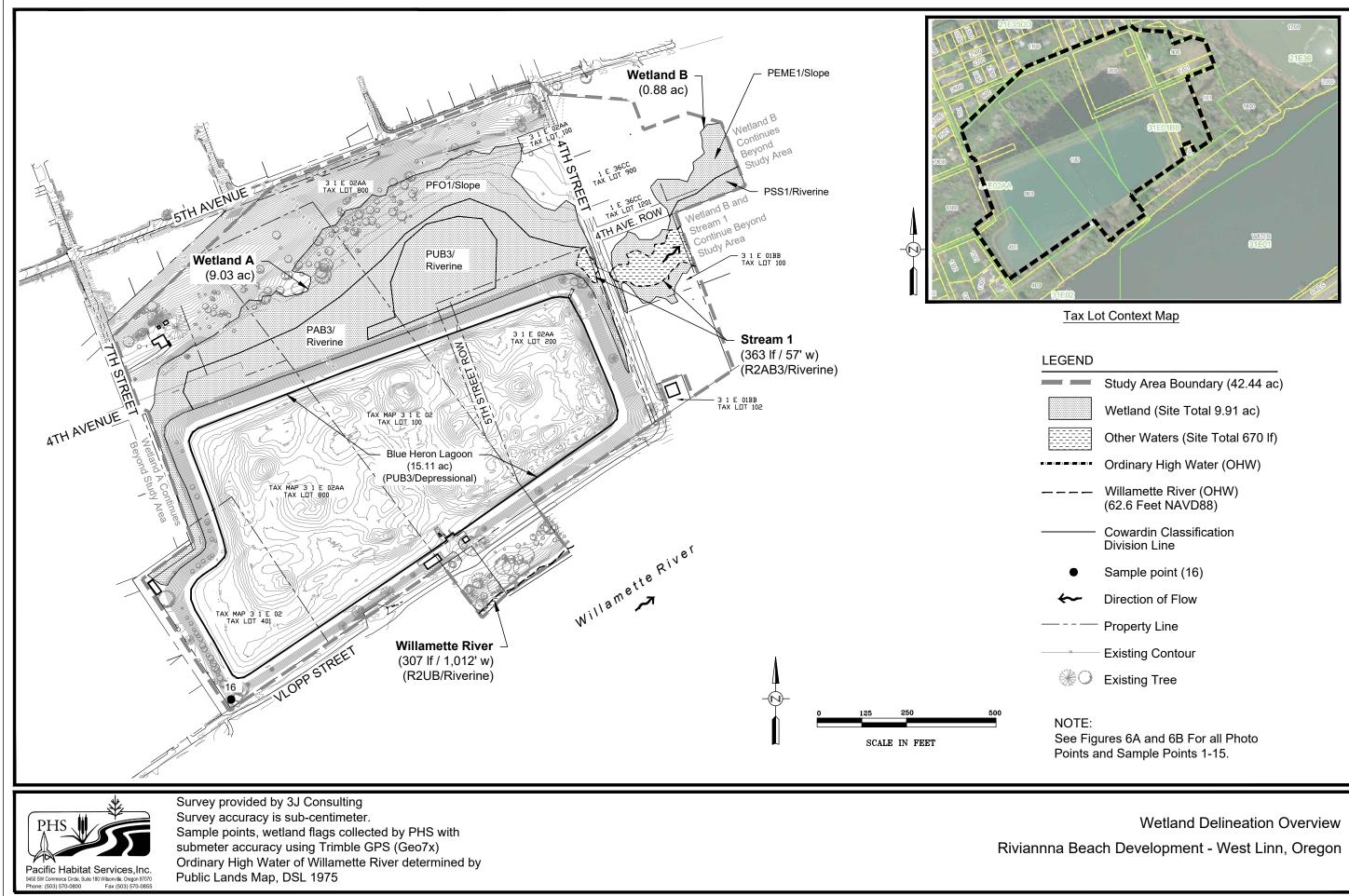
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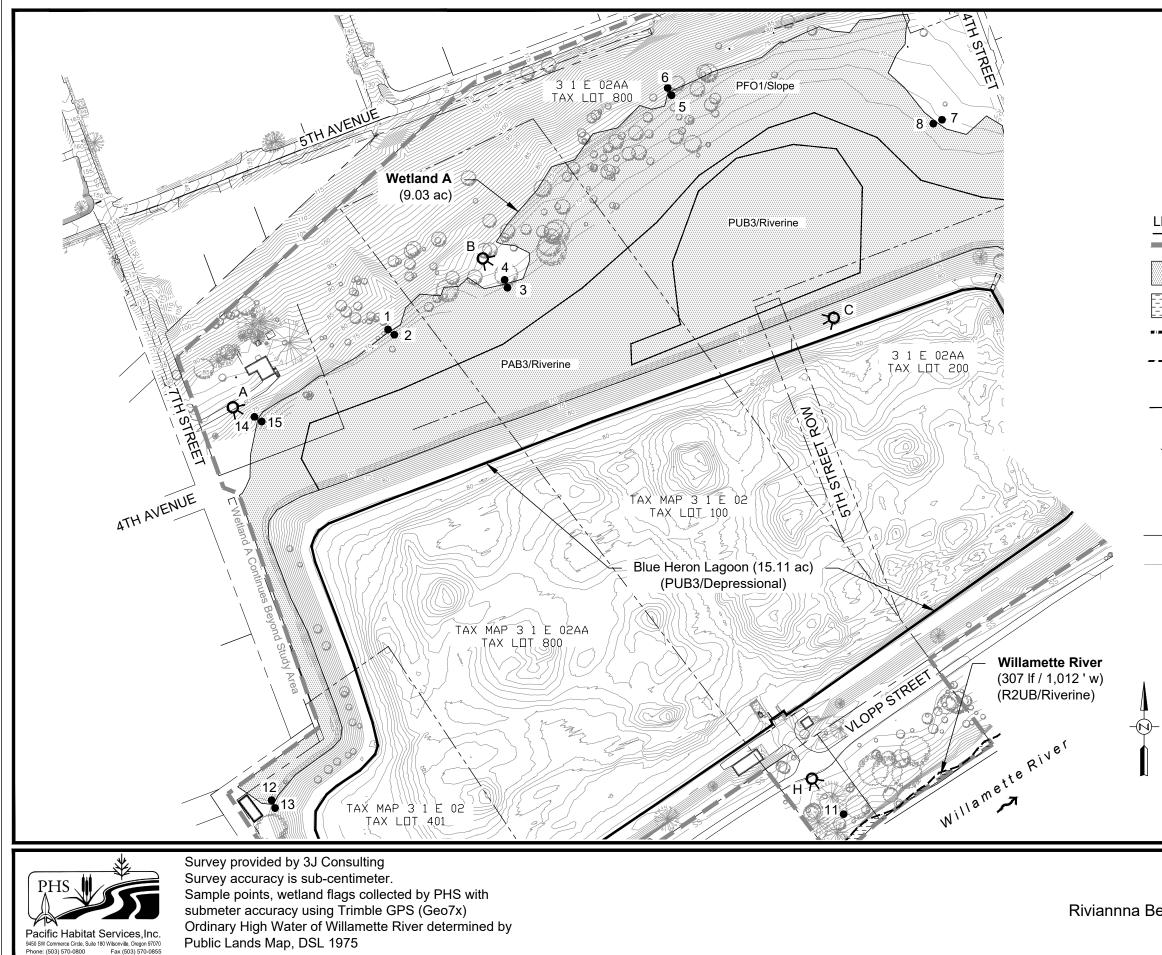
Pacific Habitat Services, Inc. 9450 SW Commerce Circle, Suite 180 Wilsonville, OR 97070 Aerial Photo (February, 2024) Rivianna Beach Development - West Linn, Oregon GoogleEarth, 2024 FIGURE



	Study Area Boundary (42.44 ac)
	Wetland (Site Total 9.91 ac)
	Other Waters (Site Total 670 lf)
	Ordinary High Water (OHW)
	Willamette River (OHW) (62.6 Feet NAVD88)
	Cowardin Classification Division Line
D	Sample point (16)
-	Direction of Flow
	Property Line
	Existing Contour
	Existing Tree
-	ures 6A and 6B For all Photo nd Sample Points 1-15.



4-10-2024



LEGEND

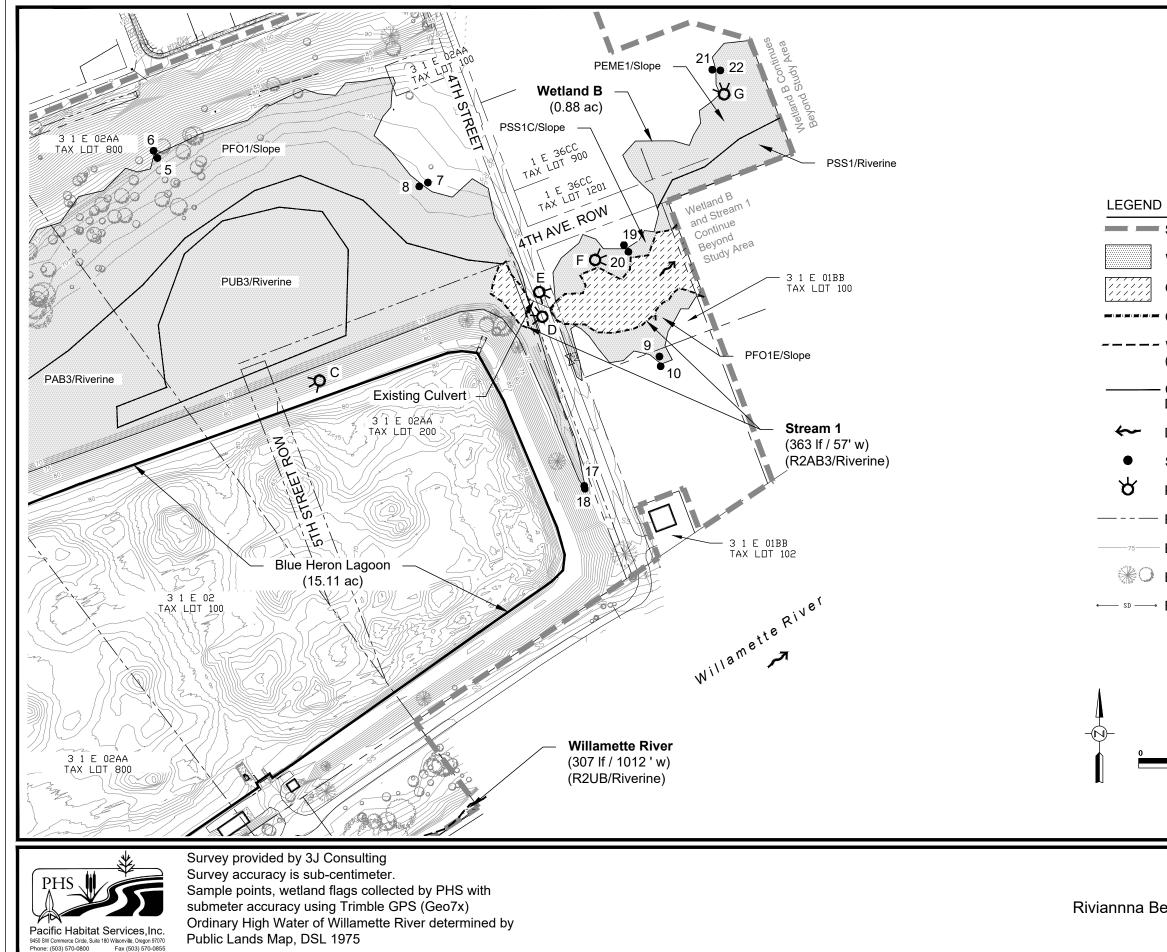
	Study Area Boundary (42.44 ac)
	Wetland (Site Total 9.91 ac)
	Other Waters (Site Total 670 lf)
. 300 (300 (300 (300) 301) 301	Ordinary High Water (OHW)
	Willamette River (OHWL) (62.6 Feet NAVD88)
	Cowardin Classification Division Line
~	Direction of Flow
•	Sample Point (1-8, 11-15)
ላ	Photo Point (A-C and H)
	Property Line
	Existing Contour
*0	Existing Tree

0 75 150 300 SCALE IN FEET

Wetland Delineation Riviannna Beach Development - West Linn, Oregon



4-10-2024



Study Area Boundary (42.44 ac)
Wetland (Site Total 9.91 ac)
Other Waters (Site Total 670 lf)
Ordinary High Water (OHW)
Willamette River (OHWL) (62.6 Feet NAVD88)
Cowardin Classification Division Line
Direction of Flow
Sample Point (5-10, 17-22)
Photo Point (C-G)
Property Line
Existing Contour
Existing Tree
Existing Culvert
75 150 300
SCALE IN FEET
Wetland Delineation
each Development - West Linn, Oregor



4-10-2024

Appendix B

Wetland Determination Data Sheets



	WEILAND	DELE		IDAIAFO	kivi - Weste	rn Mountains, Vall	eys, and Co	bast Region	
oject/Site:	Rivianna Bea	ch Develo	opment	City/County:	West I	_inn/Clackamas	Sampling Da	ate: 1/2	26/2024
oplicant/Owner:	Forward V	lision Dev	velopment			State:	OR	Sampling Point	:: 1
vestigator(s):		AS/CM		Section, To	wnship, Range:		S 2, T 3S,	R 1E	
andform (hillslop	e, terrace, etc.:)		Hillslope		Local relief (cor	ncave, convex, none):	None	Slope (%)	: 10
ubregion (LRR):		LRRA	۱ <u>ــــــــــــــــــــــــــــــــــــ</u>	Lat:	45.34	51 Long:	-122.6437	7 Datum	: WGS84
oil Map Unit Nar	ne:		Wapato si	ilty clay loam		NWI Clas	ssification:	PFO1A	
re climatic/hydro	logic conditions of	on the site ty	pical for this time	e of year?	Yes	X No	(if no,	explain in Remarks)	
re vegetation	Soil	or Hy	drology	significantly dist	turbed?	Are "Normal Circumstance	es" present? (Y/I	N) Y	_
re vegetation	Soil	or Hy	drology	naturally proble	matic? If needed	, explain any answers in Rer	narks.)		
		- Attac	h cito man (showing car	nnling noint	locations, transects	important f	aaturas ata	
		Yes	X No	snowing sai			, important i	eatures, etc.	
ydrophytic Vege ydric Soil Presei		Yes		X	Is Sampled Ar			No. Y	
		Yes	No No		a Wetlar	nd? Yes		No <u>X</u>	-
etland Hydrolog	jy Present?	Tes	No	<u> </u>					
emarks:									
EGETATIO	N - Use scier	ntific nar	nes of plant	S.					
			absolute	Dominant	Indicator	Dominance Test work	(sheet:		
an Otratur (nlat air		% cover	Species?	Status				
r <u>ee Stratum</u> (·)				Number of Dominant Spec		4	(A)
						That are OBL, FACW, or F	-AC:	1	_(A)
						Total Number of Dominant	·		
, ,						Species Across All Strata:		1	(B)
			0	= Total Cover				•	_(2)
apling/Shrub Str	otum (alataia	. 45	<u> </u>			Demonstrat Demoissant Ones	1		
1 Rubus arm	(e: 15	_) 98	x	FAC	Percent of Dominant Spec That are OBL, FACW, or		100%	(A/B)
	emacus						AC.	100 /8	_(,,,,,)
 3						Prevalence Index Wo	rksheet:		
1						Total % Cover of	Multip	ly by:	
5						OBL Species	x	1 = 0	
			98	= Total Cover		FACW species	x	2 = 0	_
		_				FAC Species		3 = 0	_
	plot size:	5)	•		FLOW	FACU Species		4 = 0	_
Phalaris ar	undinacea		2		FACW	UPL Species		5 = 0	(D)
						Column Totals	0 (A)	0	(B)
3 4						Prevalence Index =B	3/A =	#DIV/0!	
; ;									_
;						Hydrophytic Vegetation	on Indicators:		
,								Hydrophytic Vegetati	on
3							- Dominance Tes		
			2	= Total Cover			-Prevalence Inde		
								daptations ¹ (provide	
	um (plot size:		_)					or on a separate she	et)
							- Wetland Non-V		Evoloir)
						I'	- oblematic Hydro	ophytic Vegetation ¹ (• •
1				- Total Course		¹ Indicators of hydric coll and	d watland budral	oav must be present	unless
Voody Vine Strat 1 2			0	= Total Cover		¹ Indicators of hydric soil ar disturbed or problematic.	d wetland hydrol	ogy must be present	, unless
1			0	= Total Cover		-	nd wetland hydrol	ogy must be present	, unless

SOIL			PHS #	7298			Sampling Po	pint:	1
		the depth	needed to docume	nt the indicator or co	nfirm the absen	ce of indicators.)			
Depth (Inchos)	Matrix	%	Color (moint)	Redox Features % Type ¹	Loc ²	Texture	D	emarks	
(Inches) 0-9	Color (moist) 10YR 3/2	100	Color (moist)			Silt Loam			
9-12	10YR 3/2	80		·	·	Silt Loam			
9-12	10YR 3/1	20		· · · · · · · · · · · · · · · · · · ·	·	Silt Loam			
12-18	10YR 3/1	100		·	·	Silt Loam			
12-10	1011 3/1	100		·	·	Silt Loan			
				·	·				
				·	·				
				·	·				
		on PM-Pr	duced Matrix, CS-	Covered or Coated Sar			² Location: PL=Pore Lini	ng M-Matrix	
	· · ·			s otherwise noted.		Indic	ators for Problematic		s ³ :
-	Histosol (A1)			Sandy Redo			2 cm Muc	•	
	Histic Epipedon (A2)			Stripped Ma				nt Material (TF2	2)
	Black Histic (A3)				ky Mineral (F1) (except MLRA 1)		low Dark Surfac	
	Hydrogen Sulfide (A4	L)			ved Matrix (F2)	,		plain in Remark	
	Depleted Below Dark		(11)	Depleted M	· · /		0		
	Thick Dark Surface (-	,		Surface (F6)				
	Sandy Mucky Minera	-			ark Surface (F7)		³ Indicators of hydrophyt	•	
	Sandy Gleyed Matrix				ressions (F8)		hydrology must be pres	sent, unless dis ematic.	lurbed or
Postrictivo	Layer (if present)				()	Γ	F		
	Layer (ii present)	•							
Type:						Ubudaia Cail Daa	anto Vac	Na	v
Depth (inches Remarks:	5).					Hydric Soil Pres		No	<u> </u>
HYDROLC	OGY drology Indicator	·c ·							
-			فأنعما ومامعا والم				Coordon don dia ata		
	cators (minimum o	or one req	uired; check all ti	11.37	ed Leaves (B9) (Secondary Indicato		
	Surface Water (A1) High Water Table (A	2)		1, 2, 4A, an		Except MEINA		ined Leaves (B 2, 4A, and 4B)	-
	Saturation (A3)	-)		Salt Crust (I	B11)		Drainage	Patterns (B10)	
	Water Marks (B1)				ertebrates (B13)			on Water Table	(C2)
	Sediment Deposits (I	32)			ulfide Odor (C1)			Visible on Aer	. ,
	Drift Deposits (B3)			Oxidized Rh	nizospheres alon	g Living Roots (C3)	Geomorpl	nic Position (D2	:)
	Algal Mat or Crust (B	4)		Presence of	f Reduced Iron (0	C4)	Shallow A	quitard (D3)	
	Iron Deposits (B5)			Recent Iron	Reduction in Plo	owed Soils (C6)	Fac-Neutr	al Test (D5)	
	Surface Soil Cracks	(B6)		Stunted or S	Stressed Plants ((D1) (LRR A)	Raised Ar	nt Mounds (D6)	(LRR A)
	Inundation Visible on	Aerial Ima	gery (B7)	Other (Expl	ain in Remarks)		Frost-Hea	ve Hummocks	(D7)
	Sparsely Vegetated	Concave Si	urface (B8)						
Field Obser	vations:								
Surface Water	r Present? Yes		No <u>X</u>	Depth (inches):					
Water Table F	Present? Yes		No <u>X</u>	Depth (inches):	>18	Wetland Hyd	rology Present?		
Saturation Pre (includes capilla			No X	Depth (inches):	>18		Yes	No	X
		aude moni	toring well aerial ph	notos, previous inspecti	ons) if available				
Describe reco		auge, mom	toring weil, denar pr						
Remarks:									

				rn Mountains, Vall	•	-	
Project/Site: Rivianna Beach De		City/County:	west l	_inn/Clackamas	Sampling I		1/26/2024
vestigator(s): AS/C		0	umehir D	State:		Sampling P	Point: 2
· · · ·		•	wnship, Range:		S 2, T 38 None		(%): 10
ndform (hillslope, terrace, etc.:)	Hillslope RRA			ncave, convex, none):			
5 ()		Lat:	45.34		-122.64		
oil Map Unit Name:		ilty clay loam	Yes		ssification:	p, explain in Rema	
re climatic/hydrologic conditions on the s re vegetation Soil o		significantly dist		X No Are "Normal Circumstance	`	· •	,
·	· · · ·	• -		, explain any answers in Rer		(/IN) I	
re vegetation Soil o					naiks.)		
UMMARY OF FINDINGS - At	tach site map s	showing sar	npling point	locations, transects	, important	features, etc	
ydrophytic Vegetation Present? Yes	X No		Is Sampled Ar	oo within			
ydric Soil Present? Yes	X No		a Wetlar		X	No	
/etland Hydrology Present? Yes	X No						
emarks:							
EGETATION - Use scientific			Indiactor	Deminence Test worl	(abaat)		
	absolute % cover	Dominant Species?	Indicator Status	Dominance Test work	Sileet:		
ree Stratum(plot size:)	<u> </u>		Number of Dominant Spec	ies		
l				That are OBL, FACW, or F	AC:	3	(A)
3				Total Number of Dominant	I		
L				Species Across All Strata:		3	(B)
	0	= Total Cover					
(1	<u>5</u>)			Percent of Dominant Spec			<i></i>
Rubus armeniacus	<u> </u>	<u> </u>	FAC	That are OBL, FACW, or	FAC:	100%	(A/B)
2 <u>Salix sp</u>	10		(FAC)	Prevalence Index Wo	rkshoot:		
, 1				Total % Cover of		iply by:	
5				OBL Species		x 1 = 0	
	40	= Total Cover		FACW species		x 2 = 0	
				FAC Species		x 3 = 0	
erb Stratum (plot size: 5	_)	v		FACU Species		x 4 = 0	
1 Phalaris arundinacea	70	<u> </u>	FACW	UPL Species		x 5 = 0	(D)
3				Column Totals	0 (A)		(B)
4				Prevalence Index =B	/A =	#DIV/0!	
3				Hydrophytic Vegetati	on Indicators	s:	
7						r Hydrophytic Vege	etation
3				X 2	- Dominance T	est is >50%	
	70	= Total Cover			-Prevalence In		
laadu Vina Stratum (nlat siza:)					Adaptations ¹ (pro-	
oody Vine Stratum (plot size:)					s or on a separate -Vascular Plants ¹	sneet)
2						rophytic Vegetatic	on ¹ (Explain)
	0	= Total Cover		¹ Indicators of hydric soil ar			,
	-			disturbed or problematic.			
6 Bare Ground in Herb Stratum	30			Hydrophytic Vegetation	Yes	x	No

SOIL			PHS #	729	98			Sampling Point: 2
Profile Descrip Depth	otion: (Describe to Matrix	the depth	needed to docume		ator or co Features	nfirm the abser	nce of indicators.)	
(Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-3	10YR 3/1	100					Silt Loam	
2-11	10YR 3/1	95	10YR 3/6	5	С	M	Sandy Clay Loam	Fine
11-16	10YR 4/1	90	10YR 3/6	10	C		Sandy Clay Loam	
			10110.0					
						·		
	entration, D=Depleti							² Location: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators: (Appl	icable to	all LRRs, unles	s otherwi	se noted.)	Indica	tors for Problematic Hydric Soils ³ :
۲ ــــــــــــــــــــــــــــــــــــ	listosol (A1)				Sandy Redo	ox (S5)		2 cm Muck (A10)
ŀ	Histic Epipedon (A2)				Stripped Ma	atrix (S6)		Red Parent Material (TF2)
E	Black Histic (A3)			L	_oamy Muc	ky Mineral (F1) ((except MLRA 1)	Very Shallow Dark Surface (TF12)
	Hydrogen Sulfide (A4	4)		L	_oamy Gley	ed Matrix (F2)		Other (explain in Remarks)
(Depleted Below Dark	Surface (/	A11)		Depleted M			
	· Thick Dark Surface (-	,		-	Surface (F6)		
	Sandy Mucky Minera	-				ark Surface (F7)		³ Indicators of hydrophytic vegetation and wetland
	Sandy Gleyed Matrix					ressions (F8)		hydrology must be present, unless disturbed or problematic.
				'				problematic.
Restrictive L	ayer (if present).	:						
Туре:					-			
Depth (inches):				_		Hydric Soil Pres	ent? Yes <u>X</u> No
Remarks:								
HYDROLO	GY							
Wetland Hyd	Irology Indicator	's:						
Primary Indic	ators (minimum c	of one rea	uired: check all ti	hat annlv)				Secondary Indicators (2 or more required)
-			ulled, check all ti		Nater stain	ed Leaves (B9)	(Except MI BA	Water stained Leaves (B9)
	Surface Water (A1)	2)			I, 2, 4A, an			(MLRA1, 2, 4A, and 4B)
· · · · · · · · · · · · · · · · · · ·	High Water Table (A)	2)						
	Saturation (A3)				Salt Crust (I	-		Drainage Patterns (B10)
	Vater Marks (B1)					ertebrates (B13)		Dry-Season Water Table (C2)
	Sediment Deposits (I	32)				ulfide Odor (C1)		Saturation Visible on Aerial Imagery (C9)
[[[]	Drift Deposits (B3)			(Oxidized Rh	nizospheres alor	ng Living Roots (C3)	Geomorphic Position (D2)
^µ	Algal Mat or Crust (B	4)		F	Presence of	f Reduced Iron (C4)	Shallow Aquitard (D3)
l	ron Deposits (B5)			F	Recent Iron	Reduction in Pl	owed Soils (C6)	Fac-Neutral Test (D5)
	Surface Soil Cracks	(B6)		<u> </u>	Stunted or S	Stressed Plants	(D1) (LRR A)	Raised Ant Mounds (D6) (LRR A)
l	nundation Visible on	Aerial Ima	gery (B7)	0	Other (Expl	ain in Remarks)		Frost-Heave Hummocks (D7)
8	Sparsely Vegetated (Concave S	urface (B8)					
Field Observ	vations:							
Surface Water			No X	Denth (inches):			
Water Table Pr		X	No		inches):	10	Wetland Hydr	ology Present?
						8	Wettand Hydr	
Saturation Pres (includes capillary		<u> </u>	No	Depth (inches):	0		Yes X No
	rded Data (stream g	auge moni	toring well aerial of	notos previo	ous inspecti	ons), if available		
	dou Data (on our g	aage, men	toring tron, dorial pr	iotoo, prome	ao mopoon	ono), n aranabie		
Pomerica								
Remarks:								

,	WETLAND) DETER	RMINATIO	N DATA FOI	RM - Weste	rn Mountains, Vall	evs. and Coas	PHS # st Region	7298
	Rivianna Bea			City/County:		Linn/Clackamas	Sampling Date:	-	/2024
Applicant/Owner:	Forward V	/ision De	velopment			State:	OR	Sampling Point:	3
Investigator(s):		AS		Section, To	wnship, Range:		S 2, T 3S, R 1	E	
Landform (hillslope,	, terrace, etc.:)	н	illslope/Strea	- mbank	Local relief (co	ncave, convex, none):	None	Slope (%):	5
Subregion (LRR):		LRRA	1	Lat:	45.34	53 Long:	-122.6430	Datum:	WGS84
Soil Map Unit Name	e:		Wapato s	- silty clay loam		NWI Clas	ssification:	PFO1A	
Are climatic/hydrolo	gic conditions c	on the site t	-		Yes	X No	(if no, exp	lain in Remarks)	
Are vegetation	Soil	or Hy	/drology	significantly dist	urbed?	Are "Normal Circumstance	es" present? (Y/N)	Y	
Are vegetation	Soil	or Hy	/drology	naturally probler	matic? If needed	, explain any answers in Rer	marks.)		
		_							
SUMMARY OF	FINDINGS	– Attac	ch site map	showing san	npling point	locations, transects	, important feat	tures, etc.	
Hydrophytic Vegeta	tion Present?	Yes	X No		Is Sampled Ar	ea within			
Hydric Soil Present	?	Yes	X No		a Wetlar		X	No	
Wetland Hydrology	Present?	Yes	X No						
Remarks:									
		4: 6 :		4-					
VEGETATION	- Use scier	itific nar	absolute	ts. Dominant	Indicator	Dominance Test worl	vshoot:		
			% cover	Species?	Status	Dominance rest work	Sheet.		
Tree Stratum (ple	ot size:	30)				Number of Dominant Spec	cies		
1 Alnus rubra			70	X	FAC	That are OBL, FACW, or F	AC:	2	(A)
2									
3						Total Number of Dominant			
4						Species Across All Strata:		3	(B)
			70	= Total Cover					
Sapling/Shrub Strat		e: 15	_)			Percent of Dominant Spec			
1 Rubus arme	niacus		80	<u> </u>	FAC	That are OBL, FACW, or	FAC:	67%	(A/B)
2 3						Prevalence Index Wo	rkahaati		
3 <u> </u>						Total % Cover of	Multiply by	<i></i>	
5						OBL Species	x 1 =	<u>,.</u> 0	
			80	= Total Cover		FACW species	x 2 =	0	
						FAC Species	x 3 =	0	
lerb Stratum (pl	ot size:)				FACU Species	x 4 =	0	
1						UPL Species	x 5 =		
2						Column Totals	0 (A)	0	(B)
3 4						Prevalence Index =B	2/4 -	#DIV/0!	
							- <u>-</u>		
6						Hydrophytic Vegetation	on Indicators:		
7							- Rapid Test for Hyd	rophytic Vegetatior	ı
8						X 2	2- Dominance Test is	>50%	
			0	= Total Cover			-Prevalence Index is		
							-Morphological Adap		
Voody Vine Stratur		15	_)	v	F A O U		lata in Remarks or or	•	
1 Hedera helix	1		15	<u> </u>	FACU		5- Wetland Non-Vasc Problematic Hydrophy		(plain)
2			15	- Total Cauar		¹ Indicators of hydric soil ar			
			19	= Total Cover		disturbed or problematic.	a welland hydrology	musi de preseril, l	
						Hydrophytic			
% Bare Ground in H	Herb Stratum	1	100			Vegetation Procent2	Yes <u>X</u>	No	
Remarks:						Present?			

SOIL			PHS #	729	8			Sampling Point: 3
-	ption: (Describe to	the depth	needed to docume			nfirm the absen	ce of indicators.)	
Depth	Matrix				Features	Loc ²		- .
(Inches)	Color (moist)	%	Color (moist)	%	Type ¹	LOC	Texture	Remarks
0-4	10YR 3/1	100				·	Silt Loam	
4-10	10YR 3/1	95	7.5YR 3/4	5	C	M	Silt Loam	Fine
						·		
						·		
						·		
				·				
¹ Type: C=Conc	entration, D=Depleti	on, RM=R	educed Matrix, CS=	Covered or C	Coated Sar	nd Grains.		² Location: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators: (Appl	icable to	all LRRs, unles	s otherwis	e noted.)	Indic	ators for Problematic Hydric Soils ³ :
ł	Histosol (A1)			S	andy Redo	ox (S5)		2 cm Muck (A10)
H	Histic Epipedon (A2)			S	tripped Ma	ıtrix (S6)		Red Parent Material (TF2)
E	Black Histic (A3)			L	oamy Mucł	ky Mineral (F1) (e	except MLRA 1)	Very Shallow Dark Surface (TF12)
H	Hydrogen Sulfide (A4	4)		L	oamy Gley	ed Matrix (F2)		Other (explain in Remarks)
[Depleted Below Dark	surface (A11)	D	epleted Ma	atrix (F3)		
1	Thick Dark Surface (A12)		XR	edox Dark	Surface (F6)		
	Sandy Mucky Minera	l (S1)		D	epleted Da	ark Surface (F7)		³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or
5	Sandy Gleyed Matrix	(S4)		R	edox Depr	essions (F8)		problematic.
Restrictive L	_ayer (if present)	:						
Type:		R	oots					
Depth (inches):		10				Hydric Soil Pres	sent? Yes X No
Remarks:							-	
HYDROLO Wetland Hyd	GY drology Indicator	rs:						
_	ators (minimum c		wirod: chock all t	hat apply)				Secondary Indicators (2 or more required)
	Surface Water (A1)	one rec	ulled, check all ti	11.27	/ater stain	ed Leaves (B9) (I	Except MI RA	Water stained Leaves (B9)
	High Water Table (A)	2)			, 2, 4A, and	. , .		(MLRA1, 2, 4A, and 4B)
	Saturation (A3)	Z)		S	alt Crust (E	R11)		Drainage Patterns (B10)
	Water Marks (B1)				-	ertebrates (B13)		Dry-Season Water Table (C2)
	Sediment Deposits (I	B2)			•	ulfide Odor (C1)		Saturation Visible on Aerial Imagery (C9)
	Drift Deposits (B3)	/					g Living Roots (C3)	Geomorphic Position (D2)
	Algal Mat or Crust (B	4)				Reduced Iron (C		Shallow Aquitard (D3)
	ron Deposits (B5)	,				Reduction in Plo	,	Fac-Neutral Test (D5)
	Surface Soil Cracks	(B6)		s	tunted or S	Stressed Plants (I	D1) (LRR A)	Raised Ant Mounds (D6) (LRR A)
	nundation Visible on	Aerial Ima	igery (B7)	c	ther (Expla	ain in Remarks)		Frost-Heave Hummocks (D7)
	Sparsely Vegetated (Concave S	urface (B8)					
Field Observ	vations:							
Surface Water	Present? Yes		No <u>X</u>	Depth (i	nches):			
Water Table Pr	resent? Yes	X	No	Depth (i	nches):	4	Wetland Hyd	Irology Present?
Saturation Pres (includes capillar		X	No	Depth (i	nches):	0		Yes X No
	rded Data (stream ga		itoring woll, porial ph	actos provio	us insporti	one) if available		
Describe Reco	ided Data (Stream g	auge, mon	noning well, aerial pr	iolos, previo	us inspecti	ons), il avaliable.	•	
Remarks:								

WETLA			RM - Weste	rn Mountains, Vall	eys, and Coa	PHS # st Region	7298
Project/Site: Rivianna E	each Development	City/County:	West I	_inn/Clackamas	Sampling Date:	1/26	/2024
Applicant/Owner: Forwar	d Vision Development			State:	OR	Sampling Point:	4
nvestigator(s):	AS	Section, To	wnship, Range:		S 2, T 3S, R	1E	
andform (hillslope, terrace, etc.	.:) Hillslop	be	Local relief (cor	ncave, convex, none):	None	Slope (%):	5
Subregion (LRR):	LRRA	Lat:	45.34	53 Long:	-122.6430	Datum:	WGS84
Soil Map Unit Name:	Wapato	silty clay loam		NWI Clas	ssification:	PF01A	
re climatic/hydrologic condition	ns on the site typical for this ti	me of year?	Yes	X No	(if no, exp	olain in Remarks)	
re vegetation Soil	or Hydrology	significantly dist	urbed?	Are "Normal Circumstance	es" present? (Y/N)	Y	
re vegetation Soil	or Hydrology	naturally probler	matic? If needed	, explain any answers in Rer	marks.)		
					•		
			npling point	locations, transects	, important fea	tures, etc.	
lydrophytic Vegetation Present			Is Sampled Ar	ea within			
lydric Soil Present?	Yes N		a Wetlar	nd? Yes_		No X	
Vetland Hydrology Present?	Yes X N	0					
lemarks:							
/EGETATION - Use sc	ontific names of plar	te					
EGETATION - USE SC	absolute	Dominant	Indicator	Dominance Test worl	ksheet:		
	% cover	Species?	Status				
ree Stratum (plot size:	30)			Number of Dominant Spec	cies		
Alnus rubra	40	Х	FAC	That are OBL, FACW, or F	AC:	3	(A)
Fraxinus latifolia	30	X	FACW				
3				Total Number of Dominant	t		
1				Species Across All Strata:		5	(B)
	70	= Total Cover					
apling/Shrub Stratum (plot	size: 15)			Percent of Dominant Spec	ies		
Rubus armeniacus	30	<u> </u>	FAC	That are OBL, FACW, or	FAC:	60%	(A/B)
2 Ilex aquifolium	20	<u> </u>	FACU	Durana la dan Ma	ula la a stu		
3 Polystichum munitum 4	5		FACU	Prevalence Index Wo Total % Cover of		N.C.	
5				OBL Species	Multiply b x 1 =	<u> </u>	
	55	= Total Cover		FACW species	x 2 =		
				FAC Species	x 3 =		
erb Stratum (plot size:)			FACU Species	x 4 =	0	
1				UPL Species	x 5 =	0	
2				Column Totals	0 (A)	0	(B)
3							
+ 				Prevalence Index =B	B/A =	#DIV/0!	
5					on Indicatoro:		
6 7				Hydrophytic Vegetatio	on Indicators: - Rapid Test for Hyd	Ironhytic Vagatatia	
, 8					2- Dominance Test is		•
-	0	= Total Cover			-Prevalence Index is		
					I-Morphological Ada		upporting
/oody Vine Stratum (plot siz	e: <u>15</u>)			c	lata in Remarks or o	n a separate sheet)
Hedera helix	35	X	FACU		5- Wetland Non-Vaso		
2					Problematic Hydroph		• •
	35	= Total Cover		¹ Indicators of hydric soil an	nd wetland hydrology	must be present, u	Inless
				disturbed or problematic. Hydrophytic			
6 Bare Ground in Herb Stratum	100			Vegetation	Yes X	No	

SOIL			PHS #	7298	-		Sampling Point:	4
		-	needed to docume	ent the indicator or co	onfirm the absen	ce of indicators.)		
Depth	Matrix			Redox Features	Loc ²	- .	D	
(Inches)	Color (moist)	%	Color (moist)	% Type ¹	LOC	Texture	Remarks	
0-7	10YR 3/1	100		·				
7-10	10YR 4/1	100						
		·						
		·						
		·						
				Covered or Coated Sa			² Location: PL=Pore Lining, M=Ma	
-		licable to	all LRRs, unles	s otherwise noted		Indic	ators for Problematic Hydric	Solls":
	Histosol (A1)			Sandy Red			2 cm Muck (A10)	
	Histic Epipedon (A2	2)		Stripped Ma	()		Red Parent Materia	
	Black Histic (A3)				ky Mineral (F1) (e	except MLRA 1)	Very Shallow Dark S	. ,
	Hydrogen Sulfide (A				yed Matrix (F2)		Other (explain in Re	marks)
	Depleted Below Da		A11)	Depleted M				
	Thick Dark Surface				c Surface (F6)		³ Indicators of hydrophytic vegetati	on and wetland
	Sandy Mucky Miner				ark Surface (F7)		hydrology must be present, unles	
	Sandy Gleyed Matri	x (S4)		Redox Dep	ressions (F8)		problematic.	
Restrictive	Layer (if present	t):						
Туре:								
Depth (inches	s):					Hydric Soil Pres	sent? Yes N	o <u>X</u>
Remarks:						-		
HYDROLO	GY							
	drology Indicato	ors:						
_							Casardan (ladiastana (2 an a	
	cators (minimum		uired, check all t		ed Leaves (B9) (I		Secondary Indicators (2 or n Water stained Leav	
	Surface Water (A1) High Water Table (/			1, 2, 4A, ar		Except MERA	(MLRA1, 2, 4A, an	()
	Saturation (A3)	~~)		Salt Crust (B11)		Drainage Patterns (B10)
	Water Marks (B1)				ertebrates (B13)		Dry-Season Water	
	Sediment Deposits	(B2)			Sulfide Odor (C1)		·	n Aerial Imagery (C9)
	Drift Deposits (B3)	(22)		, ,	. ,	g Living Roots (C3)	Geomorphic Positio	
	Algal Mat or Crust (B4)			f Reduced Iron (C		Shallow Aquitard (D	
	Iron Deposits (B5)	,			Reduction in Plo		Fac-Neutral Test (D	
	Surface Soil Cracks	s (B6)		Stunted or	Stressed Plants (I	D1) (LRR A)	Raised Ant Mounds	(D6) (LRR A)
	Inundation Visible o	n Aerial Ima	gery (B7)	Other (Expl	ain in Remarks)		Frost-Heave Humm	ocks (D7)
	Sparsely Vegetated	Concave S	urface (B8)					
Field Obser	vations:							
Surface Water			No X	Depth (inches):				
Water Table P		x	No	Depth (inches):	6	Wetland Hyd	rology Present?	
Saturation Pre	sent? Yes	x	No	Depth (inches):	4	-		0
(includes capillar	ry fringe)							
Describe Reco	orded Data (stream	gauge, moni	toring well, aerial pł	notos, previous inspect	ions), if available:	1		
Remarks:								
L								

rojoct/Sito	Divianna Dec		nmant	0.1	Count "	Moot I	inn/Clasker	mae	C	ling Doto:	4/00	2024
	Rivianna Bea		-	-	/County:	West	_inn/Clackar			ling Date:		5/2024
oplicant/Owner:	Forward V		velopmen					State:			Sampling Point:	5
vestigator(s):		AS			Section, To	wnship, Range:				T 3S, R 1E		
andform (hillslope,	, terrace, etc.:)		Hills	оре	<u> </u>	Local relief (cor		· -		one	Slope (%):	
ubregion (LRR):		LRRA			Lat:	45.346	p1		-122		Datum:	WGS84
oil Map Unit Name	-			to silty cl					sification:		PAB/UBH	
re climatic/hydrolo		-	•	-		Yes	<u> </u>	No_			in in Remarks)	
re vegetation		_ `		signif	-			Circumstance		t? (Y/N)	<u> </u>	
e vegetation	Soil	or Hy	drology	natura	ally proble	matic? If needed	, explain any a	nswers in Rer	narks.)			
UMMARY OF	FINDINGS	– Attac	h site m	ap show	ing sar	npling point	locations,	transects	import	ant featu	res, etc.	
ydrophytic Vegeta	tion Present?	Yes	х	No								
ydric Soil Present	?	Yes	х	No		ls Sampled Ar a Wetlar		Yes	Х	Ν	lo	
etland Hydrology	Present?	Yes	х	No				_				
emarks:												
EGETATION	- Use scier	ntific nan	nes of pl	ants.								
			absolut % cove		ninant ecies?	Indicator Status	Dominanc	e Test work	sheet:			
ree Stratum (pl	ot size:)	70 COVE		50165 !	Status	Number of D	ominant Spec	ies			
		/						_, FACW, or F			1	(A)
							-	, - ,				()
							Total Numbe	r of Dominant				
Ļ							Species Acro	oss All Strata:	_		1	(B)
			0	= Tot	al Cover							
apling/Shrub Strat	tum (plot size	e: 15)				Percent of D	ominant Spec	ies			
Rubus arme	niacus		100		x	FAC	That are OBI	_, FACW, or I	FAC:	1	00%	(A/B)
				_								
3							Prevalence	e Index Wo	rksheet:			
۱ <u> </u>							Total % Cove	er of		Multiply by:	_	
							OBL S	_		x 1 =	0	
			100	= Tot	al Cover		FACW s	· _		x 2 =	0	
erb Stratum (pl	ot size:)					FAC S	-		x 3 = x 4 =	0	
		/					UPL S	-		x 5 =	0	
							Column	-	0	(A)	0	(B)
3								_		. ,		. ,
Ļ				_			Prevale	ence Index =B	/A =	#0	DIV/0!	
<u></u>							Hydrophyt	ic Vegetatio	on Indica	ators:		
									-	-	phytic Vegetatio	n
										ice Test is >		
			0	= Tot	al Cover					ce Index is ≤ gical Adapta	3.0 ¹ itions ¹ (provide s	supporting
oody Vine Stratur	m (plot size:)				-				a separate sheet	
										Non-Vascul	•	7
2							-				c Vegetation ¹ (E	xplain)
			0	= Tota	al Cover		¹ Indicators of				ust be present,	
			-				disturbed or	problematic.			. ,	
							Hydrophyt					
Bare Ground in F	Jorb Strat	4	00				Vegetation	•	Yes	Х	No	

SOIL			PHS #	7298				Sampling Point:	5
Profile Descr	iption: (Describe to	the depth	needed to docume	ent the indicato	r or conf	irm the abser	nce of indicators.)		
Depth	Matrix			Redox Fea	4	2			
(Inches)	Color (moist)	%	Color (moist)	%	Гуре'	Loc ²	Texture	Remarks	
0-6	10YR 4/2	100					Silt Loam		
6-8	10YR 4/1	100					Sandy Clay Loam		
8-16	10YR 4/1	90	10YR 4/6	10	С	М	Sandy Clay Loam		
				<u> </u>					
				<u> </u>					
				<u> </u>					
	centration, D=Deplet					l Grains.		² Location: PL=Pore Lining, M=Ma	
Hydric Soil	Indicators: (Appl	icable to	all LRRs, unles				Indica	ators for Problematic Hydric	Soils [°] :
	Histosol (A1)				dy Redox			2 cm Muck (A10)	
	Histic Epipedon (A2)	1			ped Matr			Red Parent Material	
	Black Histic (A3)						(except MLRA 1)	Very Shallow Dark S	urface (TF12)
	Hydrogen Sulfide (A	4)		Loar	ny Gleye	d Matrix (F2)		Other (explain in Rei	narks)
X	Depleted Below Dark	k Surface (A11)	·	leted Mat	. ,			
	Thick Dark Surface (Surface (F6)		³ Indicators of hydrophytic vegetation	on and wetland
	Sandy Mucky Minera	al (S1)				k Surface (F7)		hydrology must be present, unles	
	Sandy Gleyed Matrix	: (S4)		Red	ox Depre	ssions (F8)		problematic.	
Restrictive	Layer (if present)):							
Туре:									
Depth (inche	s):						Hydric Soil Pres	ent? Yes <u>X</u> No	<u></u>
Remarks:							•		
HYDROLC									
	drology Indicato	re.							
_									
Primary Indi	cators (minimum o	of one rec	luired; check all ti	113/	or otoino.		(Except MLRA	Secondary Indicators (2 or m	· /
X	Surface Water (A1)	2)			4A, and	. ,	Except MERA	Water stained Leave (MLRA1, 2, 4A, and	()
<u> </u>	High Water Table (A Saturation (A3)	2)			Crust (B			Drainage Patterns (E	
	Water Marks (B1)					tebrates (B13)		Dry-Season Water T	
	Sediment Deposits (B2)				fide Odor (C1)			Aerial Imagery (C9)
	Drift Deposits (B3)	82)					, ng Living Roots (C3)	Geomorphic Position	
	Algal Mat or Crust (E	34)				Reduced Iron (• • • • •	Shallow Aquitard (D3	. ,
	Iron Deposits (B5)	,					owed Soils (C6)	Fac-Neutral Test (D	
	Surface Soil Cracks	(B6)		Stur	nted or St	ressed Plants	(D1) (LRR A)	Raised Ant Mounds	-
	Inundation Visible or	Aerial Ima	agery (B7)	Othe	er (Explai	n in Remarks)		Frost-Heave Hummo	ocks (D7)
	Sparsely Vegetated	Concave S	urface (B8)						
Field Obser	rvations:								
Surface Water	r Present? Yes		No X	Depth (inch	nes):				
Water Table F	Present? Yes	x	No	Depth (inch	nes):	8	Wetland Hydr	rology Present?	
Saturation Pre	esent? Yes	x	No	Depth (inch	nes):	6		Yes X No	5
(includes capilla	ry fringe)								
Describe Reco	orded Data (stream g	auge, mon	itoring well, aerial pł	notos, previous	inspectio	ns), if available	9:		
Remarks:									

roject/Site:	Rivianna Bea	ch Develo	opment	City/County:	West I	.inn/Clackamas	Sampli	ng Date:	1/26/	2024
pplicant/Owner:			/elopment	, ,		State:	'		mpling Point:	6
vestigator(s):		AS		Section, To	wnship, Range:		S 2, T	3S, R 1E		
	e, terrace, etc.:)		Hillslope	-		ncave, convex, none):		one	Slope (%):	25
ubregion (LRR):		LRRA		Lat:	45.346	2 Long:	-122	.6421	Datum:	WGS84
oil Map Unit Nan	ne:		Wapato s	- ilty clay loam	1		ssification:		PAB/UBH	
	logic conditions o	on the site ty	-		Yes	X No		if no, explain i	in Remarks)	
re vegetation				significantly dist	urbed?	Are "Normal Circumstanc	es" present	? (Y/N)	Y	
e vegetation	Soil	or Hyd	drology	naturally proble	matic? If needed	, explain any answers in Rei	marks.)			
_		_		_						
UMMARY O	F FINDINGS	– Attac	h site map	showing sar	npling point	locations, transects	, importa	ant feature	es, etc.	
ydrophytic Vege	tation Present?	Yes	X No		Is Sampled Ar	ea within				
ydric Soil Preser		Yes	No		a Wetlar		X	No		
etland Hydrolog	y Present?	Yes	X No							
emarks:					•					
		tific non	and of plant							
	N - Use scien	inine fiafi	absolute	Dominant	Indicator	Dominance Test wor	ksheet:			
			% cover	Species?	Status					
ee Stratum (p	olot size:)				Number of Dominant Spec	cies			
						That are OBL, FACW, or I	FAC:	1	(A)
						T () () () ()				
3						Total Number of Dominan		1	(B)
·			0	= Total Cover		Species Across All Strata:	-	1	(D)
	-									
apling/Shrub Str. Rubus arm		e: 15	_) 100	v	FAC	Percent of Dominant Spec		100	NO/ /	∧ /D)
	emacus		100	<u> </u>		That are OBL, FACW, or	FAC:	100	(A/B)
						Prevalence Index Wo	orksheet:			
ļ						Total % Cover of		Multiply by:		
;						OBL Species	-	x 1 =	0	
			100	= Total Cover		FACW species		x 2 =	0	
						FAC Species		x 3 =	0	
	olot size:)				FACU Species		x 4 =	0	
						UPL Species Column Totals	0	x 5 = (A)	<u> </u>	B)
							<u> </u>	<u>, , , , , , , , , , , , , , , , , , , </u>	<u> </u>	5)
 1						Prevalence Index =E	3/A =	#DI\	//0!	
;							-			
;						Hydrophytic Vegetati	on Indica	tors:		
,						· · · · · · · · · · · · · · · · · · ·	1- Rapid Tes	st for Hydroph	ytic Vegetation	
								ce Test is >50		
			0	= Total Cover				e Index is ≤ 3.		nnortine
oody Vine Strat	um (plot size:)			·			ns ¹ (provide su eparate sheet)	ipporting
	(pier 6/20.		/					Non-Vascular	-	
2						·			/egetation ¹ (Ex	plain)
			0	= Total Cover		¹ Indicators of hydric soil ar				
						disturbed or problematic.				
						Hydrophytic			N -	
Bare Ground in	Harh Stratum	4	00			Vegetation	Yes	Х	No	

Drofilo Decerintio			PHS #	7298	_		Sampling Point:	6
-		e depth n	eeded to docum	ent the indicator or o		nce of indicators.)		
Depth	Matrix	%	Color (maint)	Redox Features % Type ¹	Loc ²	Texture	Demerke	
(Inches)	Color (moist)		Color (moist)	% Type'		Texture	Remarks	
0-16	10YR 4/2	100				Silt Loam		
				·				
				· ·				
	<u> </u>							
				·				
				· ·				
				Covered or Coated S			² Location: PL=Pore Lining, M=Matrix.	-
Hydric Soil Ind	icators: (Application)	able to a	all LRRs, unles	s otherwise note	d.)	Indic	ators for Problematic Hydric Soils ³	3
Histo	osol (A1)			Sandy Re	dox (S5)		2 cm Muck (A10)	
Histi	ic Epipedon (A2)			Stripped	Matrix (S6)		Red Parent Material (TF2)	
Blac	ck Histic (A3)			Loamy M	ucky Mineral (F1) (except MLRA 1)	Very Shallow Dark Surface	(TF12)
Hyd	rogen Sulfide (A4)			Loamy G	eyed Matrix (F2)		Other (explain in Remarks)	
Dep	leted Below Dark S	Surface (A	11)	Depleted	Matrix (F3)			
Thic	k Dark Surface (A1	12)		Redox Da	ark Surface (F6)			
San	dy Mucky Mineral (S1)		Depleted	Dark Surface (F7)		³ Indicators of hydrophytic vegetation and	
San	dy Gleyed Matrix (S	64)		Redox De	pressions (F8)		hydrology must be present, unless distu problematic.	rbed or
Restrictive Lay	ver (if present):							
-								
Type:								v
Depth (inches):						Hydric Soil Pres	sent? Yes <u>No</u>	<u>X</u>
HYDROLOGY								
Wetland Hydro	logy Indicators:		· · · · · ·					
Wetland Hydro	logy Indicators:		ired; check all t				Secondary Indicators (2 or more re	
Wetland Hydro Primary Indicato Surf	logy Indicators: ors (minimum of o face Water (A1)		ired; check all 1	Water sta	ined Leaves (B9) ((Except MLRA	Water stained Leaves (B9)	
Wetland Hydro Primary Indicato Surf X High	logy Indicators: ors (minimum of o face Water (A1) h Water Table (A2)		ired; check all t	Water sta 1, 2, 4A, a	and 4B)	(Except MLRA	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)	
Wetland Hydro Primary Indicato Surf X High X Satu	logy Indicators: ors (minimum of d face Water (A1) h Water Table (A2) uration (A3)		ired; check all t	Water sta 1, 2, 4A , s Salt Crus	and 4B) t (B11)		Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10)	
Wetland Hydro Primary Indicato Surf X High X Satu Wat	logy Indicators: ors (minimum of of face Water (A1) h Water Table (A2) uration (A3) ter Marks (B1)	one requ	ired; check all 1	Water sta 1, 2, 4A , 5 Salt Crus Aquatic Ir	and 4B) t (B11) avertebrates (B13)		Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (0	C2)
Wetland Hydro Primary Indicato Surf X High X Satu Wat Sedi	logy Indicators: ors (minimum of of face Water (A1) h Water Table (A2) uration (A3) ter Marks (B1) liment Deposits (B2)	one requ	ired; check all t	Water sta 1, 2, 4A, 5 Salt Crus Aquatic Ir Hydroger	and 4B) t (B11) avertebrates (B13) Sulfide Odor (C1))	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C Saturation Visible on Aerial	C2)
Wetland Hydro Primary Indicato Surf X High X Satu Wat Sedi Drift	logy Indicators: ors (minimum of of face Water (A1) h Water Table (A2) uration (A3) ter Marks (B1) liment Deposits (B2) t Deposits (B3)	one requ	ired; check all t	Water sta 1, 2, 4A, a Salt Crus Aquatic Ir Hydrogen Oxidized	and 4B) t (B11) ivertebrates (B13) Sulfide Odor (C1) Rhizospheres alon) ng Living Roots (C3)	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C Saturation Visible on Aerial Geomorphic Position (D2)	C2)
Wetland Hydro Primary Indicato Surf X High X Satu Wat Sedi Drift Alga	logy Indicators: ors (minimum of of face Water (A1) h Water Table (A2) uration (A3) ter Marks (B1) liment Deposits (B2) t Deposits (B3) al Mat or Crust (B4)	one requ	ired; check all f	Water sta 1, 2, 4A, 5 Salt Crus Aquatic Ir Hydrogen Oxidized Presence	and 4B) t (B11) nvertebrates (B13) Sulfide Odor (C1) Rhizospheres alon of Reduced Iron () ng Living Roots (C3) C4)	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C Saturation Visible on Aerial Geomorphic Position (D2) Shallow Aquitard (D3)	C2)
Wetland Hydro Primary Indicato Surf X High X Satu Wat Sedi Drift Alga Iron	logy Indicators: ors (minimum of of face Water (A1) h Water Table (A2) uration (A3) ter Marks (B1) liment Deposits (B2) t Deposits (B3) al Mat or Crust (B4) Deposits (B5)	one requ	ired; check all t	Water sta 1, 2, 4A, 5 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir	and 4B) t (B11) svertebrates (B13) Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (on Reduction in Pla) ng Living Roots (C3) C4) owed Soils (C6)	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C Saturation Visible on Aerial Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5)	C2) I Imagery (C
Wetland Hydro Primary Indicato Surf X High X Satu Wat Sedi Drift Alga Iron Surf	logy Indicators: ors (minimum of of face Water (A1) h Water Table (A2) uration (A3) ter Marks (B1) liment Deposits (B2) t Deposits (B3) al Mat or Crust (B4) Deposits (B5) face Soil Cracks (B6)	one requ) 6)		Water sta 1, 2, 4A, 5 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Irr Stunted c	and 4B) t (B11) suffide Odor (C1) Rhizospheres alon of Reduced Iron (on Reduction in Pla r Stressed Plants) ng Living Roots (C3) C4) owed Soils (C6)	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C Saturation Visible on Aerial Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (L	C2) I Imagery (C .RR A)
Wetland Hydro Primary Indicato X High X Satu Vat Sedi Drift Alga Iron Surf	logy Indicators: ors (minimum of of face Water (A1) h Water Table (A2) uration (A3) ter Marks (B1) liment Deposits (B2) t Deposits (B3) al Mat or Crust (B4) Deposits (B5) face Soil Cracks (B6) ndation Visible on A	one requ) 6) erial Imag	ery (B7)	Water sta 1, 2, 4A, 5 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Irr Stunted c	and 4B) t (B11) svertebrates (B13) Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (on Reduction in Pla) ng Living Roots (C3) C4) owed Soils (C6)	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C Saturation Visible on Aerial Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5)	C2) I Imagery (C .RR A)
Wetland Hydro Primary Indicato Surf X High X Satu Vat Sedi Drift Alga Iron Surf Surf Span	Iogy Indicators: ors (minimum of of face Water (A1) h Water Table (A2) uration (A3) ter Marks (B1) liment Deposits (B2) t Deposits (B3) al Mat or Crust (B4) Deposits (B5) face Soil Cracks (B6 ndation Visible on Au ursely Vegetated Co	one requ) 6) erial Imag	ery (B7)	Water sta 1, 2, 4A, 5 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Irr Stunted c	and 4B) t (B11) suffide Odor (C1) Rhizospheres alon of Reduced Iron (on Reduction in Pla r Stressed Plants) ng Living Roots (C3) C4) owed Soils (C6)	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C Saturation Visible on Aerial Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (L	C2) I Imagery (C .RR A)
Wetland Hydro Primary Indicato X High X Satu Vat Sedi Drift Alga Iron Surf Field Observati	Iogy Indicators: ors (minimum of of face Water (A1) h Water Table (A2) uration (A3) ter Marks (B1) liment Deposits (B2) t Deposits (B3) al Mat or Crust (B4) Deposits (B5) face Soil Cracks (B6) ndation Visible on Av arsely Vegetated Con ions:	one requ) 6) erial Imag	ery (B7) face (B8)	Water sta 1, 2, 4A, a Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted c Other (Ex	and 4B) t (B11) suffide Odor (C1) Rhizospheres alon of Reduced Iron (on Reduction in Pla r Stressed Plants) ng Living Roots (C3) C4) owed Soils (C6)	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C Saturation Visible on Aerial Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (L	C2) I Imagery (C .RR A)
Wetland Hydro Primary Indicato Surf X High X Satu Wat Sedi Drift Alga Iron Surf Inun Spai Field Observati Surface Water Pre	Iogy Indicators: ors (minimum of of face Water (A1) h Water Table (A2) uration (A3) ter Marks (B1) liment Deposits (B2) t Deposits (B3) al Mat or Crust (B4) Deposits (B5) face Soil Cracks (B6 ndation Visible on Au arsely Vegetated Con- ions: esent? Yes	one requ) 6) erial Imag incave Sur	ery (B7) face (B8) No <u>X</u>	Water sta 1, 2, 4A, 5 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent In Stunted c Other (Ex Depth (inches):	and 4B) t (B11) suffide Odor (C1) Rhizospheres alon of Reduced Iron (on Reduction in Pla r Stressed Plants (plain in Remarks)) ng Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A)	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C Saturation Visible on Aerial Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (L Frost-Heave Hummocks (D	C2) I Imagery (C .RR A)
Wetland Hydro Primary Indicato X High X Satu Vat Sedi Drift Alga Iron Surf Field Observati	Iogy Indicators: ors (minimum of of face Water (A1) h Water Table (A2) uration (A3) ter Marks (B1) liment Deposits (B2) t Deposits (B3) al Mat or Crust (B4) Deposits (B5) face Soil Cracks (B6 ndation Visible on Au arsely Vegetated Con- ions: esent? Yes	one requ) 6) erial Imag incave Sur X	ery (B7) face (B8)	Water sta 1, 2, 4A, a Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted c Other (Ex	and 4B) t (B11) surtebrates (B13) Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (for on Reduction in Plo r Stressed Plants plain in Remarks) 2) ng Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A)	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C Saturation Visible on Aerial Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (L Frost-Heave Hummocks (D	C2) I Imagery (C .RR A)
Wetland Hydro Primary Indicato Surf X High X Satu Wat Sedi Drift Alga Iron Surf Inun Spai Field Observati Surface Water Pre	Ilogy Indicators: prs (minimum of of face Water (A1) h Water Table (A2) uration (A3) ter Marks (B1) liment Deposits (B2) at Mat or Crust (B4) Deposits (B5) face Soil Cracks (B6) indation Visible on Au arsely Vegetated Co ions: pesent? Yes ent? Yes t? Yes	one requ) 6) erial Imag incave Sur	ery (B7) face (B8) No <u>X</u>	Water sta 1, 2, 4A, 5 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent In Stunted c Other (Ex Depth (inches):	and 4B) t (B11) suffide Odor (C1) Rhizospheres alon of Reduced Iron (on Reduction in Pla r Stressed Plants (plain in Remarks)) ng Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A)	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C Saturation Visible on Aerial Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (L Frost-Heave Hummocks (D	C2) I Imagery (C .RR A)
Wetland Hydro Primary Indicato Surf X High X Satu Vat Sedi Drift Alga Iron Surf Inun Spai Field Observati Surface Water Prese Saturation Present (includes capillary frir	Iogy Indicators: ors (minimum of of face Water (A1) h Water Table (A2) uration (A3) ter Marks (B1) liment Deposits (B2) t Deposits (B3) al Mat or Crust (B4) Deposits (B5) face Soil Cracks (B6) face Soil Cracks (B6) indation Visible on Av ursely Vegetated Con- ions: esent? Yes t? Yes nge)	6) erial Imag ncave Sur	ery (B7) face (B8) No <u>X</u> No <u>No</u>	Water sta 1, 2, 4A, 3 Salt Crus Aquatic Ir Hydrogen Oxidized Presence Recent Ir Stunted co Other (Ex Depth (inches): Depth (inches):	and 4B) t (B11) avertebrates (B13) Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (for on Reduction in Plants of plain in Remarks) 2 0) ng Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A) Wetland Hyd	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C Saturation Visible on Aerial Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (L Frost-Heave Hummocks (D	C2) I Imagery (C . RR A)
Wetland Hydro Primary Indicato Surf X High X Satu Vat Sedi Drift Alga Iron Surf Inun Spai Field Observati Surface Water Presen Saturation Present (includes capillary frir	Iogy Indicators: ors (minimum of of face Water (A1) h Water Table (A2) uration (A3) ter Marks (B1) liment Deposits (B2) t Deposits (B3) al Mat or Crust (B4) Deposits (B5) face Soil Cracks (B6) face Soil Cracks (B6) indation Visible on Av ursely Vegetated Con- ions: esent? Yes t? Yes nge)	6) erial Imag ncave Sur	ery (B7) face (B8) No <u>X</u> No <u>No</u>	Water sta 1, 2, 4A, a Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted c Other (Ex Depth (inches): Depth (inches):	and 4B) t (B11) avertebrates (B13) Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (for on Reduction in Plants of plain in Remarks) 2 0) ng Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A) Wetland Hyd	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C Saturation Visible on Aerial Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (L Frost-Heave Hummocks (D	C2) I Imagery (C . RR A)
Wetland Hydro Primary Indicato Surf X High X Satu Vat Sedi Drift Alga Iron Surf Field Observati Surface Water Pre Water Table Preset Saturation Present (includes capillary frir Describe Recorded	Iogy Indicators: ors (minimum of of face Water (A1) h Water Table (A2) uration (A3) ter Marks (B1) liment Deposits (B2) t Deposits (B3) al Mat or Crust (B4) Deposits (B5) face Soil Cracks (B6) face Soil Cracks (B6) indation Visible on Av ursely Vegetated Con- ions: esent? Yes t? Yes nge)	6) erial Imag ncave Sur	ery (B7) face (B8) No <u>X</u> No <u>No</u>	Water sta 1, 2, 4A, a Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted c Other (Ex Depth (inches): Depth (inches):	and 4B) t (B11) avertebrates (B13) Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (for on Reduction in Plants of plain in Remarks) 2 0) ng Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A) Wetland Hyd	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C Saturation Visible on Aerial Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (L Frost-Heave Hummocks (D	C2) I Imagery (C .RR A)
Wetland Hydro Primary Indicato Surf X High X Satu Vat Sedi Drift Alga Iron Surf Inun Spai Field Observati Surface Water Prese Saturation Present (includes capillary frir	Iogy Indicators: ors (minimum of of face Water (A1) h Water Table (A2) uration (A3) ter Marks (B1) liment Deposits (B2) t Deposits (B3) al Mat or Crust (B4) Deposits (B5) face Soil Cracks (B6) face Soil Cracks (B6) indation Visible on Av ursely Vegetated Con- ions: esent? Yes t? Yes nge)	6) erial Imag ncave Sur	ery (B7) face (B8) No <u>X</u> No <u>No</u>	Water sta 1, 2, 4A, a Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted c Other (Ex Depth (inches): Depth (inches):	and 4B) t (B11) avertebrates (B13) Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (for on Reduction in Plants of plain in Remarks) 2 0) ng Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A) Wetland Hyd	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C Saturation Visible on Aerial Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (L Frost-Heave Hummocks (D	C2) I Imagery (C . RR A)
Wetland Hydro Primary Indicato Surf X High X Satu Vat Sedi Drift Alga Iron Surf Inun Spai Field Observati Surface Water Pre Water Table Preset Saturation Present (includes capillary frir Describe Recorded	Iogy Indicators: ors (minimum of of face Water (A1) h Water Table (A2) uration (A3) ter Marks (B1) liment Deposits (B2) t Deposits (B3) al Mat or Crust (B4) Deposits (B5) face Soil Cracks (B6) face Soil Cracks (B6) indation Visible on Av ursely Vegetated Con- ions: esent? Yes t? Yes nge)	6) erial Imag ncave Sur	ery (B7) face (B8) No <u>X</u> No <u>No</u>	Water sta 1, 2, 4A, a Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted c Other (Ex Depth (inches): Depth (inches):	and 4B) t (B11) avertebrates (B13) Sulfide Odor (C1) Rhizospheres alon of Reduced Iron (for on Reduction in Plants of plain in Remarks) 2 0) ng Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A) Wetland Hyd	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C Saturation Visible on Aerial Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (L Frost-Heave Hummocks (D	C2) I Imagery (C . RR A)

	WEILANL	DEIER	KIMINATIOP	N DATA FO	RM - Weste	rn Mountains, Val	leys, and Co	ast Region	
Project/Site:	Rivianna Beach Development			City/County:	West Linn/Clackamas		Sampling Dat	ate: 1/26/2024	
pplicant/Owner:	Forward \	/ision Dev	velopment			State:	OR	Sampling Point:	7
vestigator(s):		CM/AS		Section, To	wnship, Range:		S 2, T 3S, F	R 1E	
andform (hillslop	e, terrace, etc.:)		Slope		Local relief (cor	ncave, convex, none):	None	Slope (%):	3
ubregion (LRR):		LRRA		Lat:	45.346	51 Long:	-122.6404	Datum:	WGS84
oil Map Unit Nam	ne:		Wapato s	ilty clay loam		NWI Cla	ssification:	N/A	
re climatic/hydrol	logic conditions of	on the site ty	pical for this tim	e of year?	Yes	X No	(if no, e	xplain in Remarks)	
re vegetation	Soil	or Hy	drology	significantly dist	urbed?	Are "Normal Circumstand	es" present? (Y/N) <u>Y</u>	
re vegetation	Soil	or Hy	drology	naturally proble	matic? If needed	, explain any answers in Re	marks.)		
						I		-4	
				snowing sar	npling point	locations, transects	, important fe	atures, etc.	
			X No		Is Sampled Ar	ea within		No X	
Hydric Soil Present? Yes			No X		a Wetland? Yes				
Vetland Hydrolog	y Present?	Yes	X No						
lemarks:									
EGETATION	l - I leo scior	tific nan	nes of nlant	<u> </u>					
		null	absolute	Dominant	Indicator	Dominance Test wor	ksheet:		
			% cover	Species?	Status				
r <u>ee Stratum</u> (p		30)				Number of Dominant Spec			
Crataegus I	monogyna		10	<u> </u>	FAC	That are OBL, FACW, or I	FAC:	2	(A)
3						Total Number of Dominan		2	
+			10	= Total Cover		Species Across All Strata:		3	(B)
apling/Shrub Stratum (plot size: <u>15</u>)			v	FAC	Percent of Dominant Spec		670/		
Rubus arm Corylus col			<u>100</u> 20	<u> </u>	FAC FACU	That are OBL, FACW, or	FAC:	67%	(A/B)
Corylus col	nula		20		FACU	Prevalence Index Wo	orkshoot:		
4						Total % Cover of	Multiply	by:	
5						OBL Species	<u>x 1</u>		
			120	= Total Cover		FACW species	x 2		
						FAC Species	x 3	= 0	
erb Stratum (p	olot size:)				FACU Species	x 4	= 0	
1						UPL Species	x 5		
<u> </u>						Column Totals	0 (A)	0	(B)
3 4						Drouolong - Index	2/4 -	#DIV//01	
+ 5						Prevalence Index =E		#DIV/0!	
5 5						Hydrophytic Vegetati	on Indicators		
7								ydrophytic Vegetatio	n
3							2- Dominance Test		
			0	= Total Cover			3-Prevalence Index	is ≤ 3.0 ¹	
								aptations ¹ (provide s	
oody Vine Stratu		30	_)					on a separate sheet)
Hedera heli	x		20	<u> </u>	FACU		5- Wetland Non-Va		
2								ohytic Vegetation ¹ (E	
			20	= Total Cover		¹ Indicators of hydric soil and disturbed or problematic.	nd wetland hydrolog	gy must be present,	uniess
						Hydrophytic			

SOIL			PHS #	72	98	_		Sampling Point: 7	
	ption: (Describe to	the depth	needed to docume			onfirm the absen	ce of indicators.)		
Depth (Inches)	Matrix Color (moist)	%	Color (moist)	Redox %	Features Type ¹	Loc ²	Texture	Remarks	
0-10	10YR 3/3	100		70	1300	200	Silty Clay Loam	Remarks	
10-14	10YR 3/2	98	2.5Y 5/1	2	D		Silty Clay Loam	Fine	
14-17	10YR 3/2	95	2.5Y 5/1	5	D	 M	Silty Clay Loam	Fine	
14-17	1011 3/2	30	2.51 5/1				Sitty Clay Loan		
	centration, D=Depleti							² Location: PL=Pore Lining, M=Matrix.	
-	Indicators: (Appl	icable to	all LRRs, unles				Indica	ators for Problematic Hydric Soils ³ :	
	Histosol (A1)				Sandy Red		2 cm Muck (A10)		
	Histic Epipedon (A2)				Stripped Matrix (S6)			Red Parent Material (TF2)	
	Black Histic (A3)					cky Mineral (F1) (except MLRA 1)	Very Shallow Dark Surface (TF12)	
	Hydrogen Sulfide (A4	4)		I	Loamy Gle	yed Matrix (F2)		Other (explain in Remarks)	
	Depleted Below Dark	s Surface (A11)	I	Depleted N	latrix (F3)			
	Thick Dark Surface (A12)		I	Redox Dar	k Surface (F6)		³ Indicators of hydrophytic vegetation and wetland	
	Sandy Mucky Minera	ll (S1)			-	ark Surface (F7)		hydrology must be present, unless disturbed or	
	Sandy Gleyed Matrix	(S4)		I	Redox Dep	pressions (F8)		problematic.	
Restrictive	Layer (if present)	:							
Type:					_				
Depth (inches	s):				_		Hydric Soil Present? Yes No X		
Remarks:									
HYDROLO Wetland Hy	GY drology Indicator	rs.							
-									
-	cators (minimum o	of one rec	luired; check all t			(50)		Secondary Indicators (2 or more required)	
	Surface Water (A1)	-)			Water stair 1, 2, 4A, aı	ned Leaves (B9) (nd 4B)	Except MLRA	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)	
	High Water Table (A	2)							
	Saturation (A3)				Salt Crust (Drainage Patterns (B10)	
Water Marks (B1)					Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)			Dry-Season Water Table (C2)	
Sediment Deposits (B2)								Saturation Visible on Aerial Imagery (C9)	
Drift Deposits (B3)						of Reduced Iron (g Living Roots (C3)	Geomorphic Position (D2) Shallow Aquitard (D3)	
	Algal Mat or Crust (B4)					n Reduction in Pla		Fac-Neutral Test (D5)	
	Iron Deposits (B5) Surface Soil Cracks (B6)					Stressed Plants (Raised Ant Mounds (D6) (LRR A)	
Inundation Visible on Aerial Imagery (B7)						lain in Remarks)		Frost-Heave Hummocks (D7)	
	Sparsely Vegetated (oo. (±p	iani in riornanio)			
Field Obser	vations:						1		
Surface Water			No X	Depth ((inches):				
Water Table Present? Yes X No					(inches):	15	Wetland Hydrology Present?		
Saturation Present? Yes X No					(inches):	0-2; 12	Yes X No		
(includes capilla				Doput	(1101100).				
Describe Reco	orded Data (stream g	auge, mon	itoring well, aerial pl	notos, previo	ous inspec	tions), if available	:		
Remarks:									

roject/Site: Rivianna Beach Deve	elopment	City/County:	West	Linn/Clackamas	Sampling D)ate:	1/26/2024
plicant/Owner: Forward Vision D		, <u>,</u> .		State:	OR	Sampling Po	
estigator(s): CM/AS		Section, To	wnship, Range:		S 2, T 3S		
ndform (hillslope, terrace, etc.:)	Slope			ncave, convex, none):	None	, Slope ((%): 2
ibregion (LRR):		Lat:	45.34	-	-122.640		um: WGS84
bil Map Unit Name:	Wapato s	- ilty clay loam			ssification:		\
re climatic/hydrologic conditions on the site			Yes	X No		, explain in Remar	ks)
		significantly dist	urbed?	Are "Normal Circumstance	es" present? (Y	/N) Y	,
e vegetation Soil or H				l, explain any answers in Rer	narks.)		
		_					
UMMARY OF FINDINGS – Atta	ich site map	showing san	npling point	locations, transects	, important	features, etc.	
vdrophytic Vegetation Present? Yes	X No		Is Sampled A	rea within			
ydric Soil Present? Yes	X No		a Wetla		X	No	
etland Hydrology Present? Yes	X No						
emarks:							
EGETATION - Use scientific na	ames of plant absolute	s. Dominant	Indicator	Dominance Test work	csheet:		
	% cover	Species?	Status	Sommance lest work	Sheet.		
ee Stratum (plot size: 30)			Number of Dominant Spec			
Fraxinus latifolia	5	X	FACW	That are OBL, FACW, or F	AC:	2	(A)
	·			Total Number of Dominant		•	
·	- <u>-</u>	- Tatal Oaver		Species Across All Strata:		2	(B)
	5	= Total Cover					
apling/Shrub Stratum (plot size: 15	/			Percent of Dominant Spec			
Rubus armeniacus	<u> </u>	<u> </u>	FAC FACW	That are OBL, FACW, or	FAC:	100%	(A/B)
Spiraea douglasii			FACW	Prevalence Index Wo	rkshoot.		
·				Total % Cover of		ply by:	
				OBL Species		<1= 0	
	105	= Total Cover		FACW species)	< 2 = 0	
				FAC Species)		
erb Stratum (plot size:)			FACU Species		< 4 = 0	
	. <u> </u>			UPL Species		<5= 0	
	·			Column Totals	0 (A)	0	(B)
} 	·			Prevalence Index =B	8/A =	#DIV/0!	
	·	·		Hydrophytic Vegetation	on Indicators	:	
						Hydrophytic Vege	tation
				X 2	2- Dominance Te	est is >50%	
	0	= Total Cover			B-Prevalence Ind		
)					Adaptations ¹ (prov	
oody Vine Stratum (plot size:)					or on a separate s Vascular Plants ¹	ineet)
						vascular Plants rophytic Vegetation	1 ¹ (Explain)
·	0	= Total Cover		¹ Indicators of hydric soil ar			
	<u> </u>			disturbed or problematic.		3,	
				Hydrophytic			
Bare Ground in Herb Stratum	100			Vegetation	Yes	х	No

SOIL			PHS #	729	8	_		Sampling Point: 8
Profile Descri	ption: (Describe to Matrix	the depth	needed to docume		ator or c Features	onfirm the abser	nce of indicators.)	
(Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-6	10YR3/2	93	2.5Y 5/1	5	D	M	Silty Clay Loam	Medium
	101110/2		10YR 3/4	2	<u>с</u>	 M	Silty Clay Loam	Medium
6 15	10VB 2/2							
6-15	10YR 3/2	88	2.5Y 5/1	10	D	<u>M</u>	Silty Clay Loam	Medium
			10YR 3/4	2	С	M		Medium
				·				
	centration, D=Depleti	ion PM-P	oducod Matrix, CS-		Contod S	and Grains		
	Indicators: (Appl						Indica	ators for Problematic Hydric Soils ³ :
-	Histosol (A1)				andy Red		indice	2 cm Muck (A10)
					-			
	Histic Epipedon (A2)					latrix (S6)		Red Parent Material (TF2)
	Black Histic (A3)	•			-	cky Mineral (F1) (except WLRA 1)	Very Shallow Dark Surface (TF12)
	Hydrogen Sulfide (A4				-	eyed Matrix (F2)		Other (explain in Remarks)
	Depleted Below Dark	c Surface (A11)	<u> </u>	epleted N	/atrix (F3)		
	Thick Dark Surface (A12)		R	ledox Da	k Surface (F6)		³ Indicators of hydrophytic vegetation and wetland
	Sandy Mucky Minera	ll (S1)		D	epleted [Dark Surface (F7)		hydrology must be present, unless disturbed or
	Sandy Gleyed Matrix	(S4)		R	edox De	pressions (F8)		problematic.
Restrictive	Layer (if present)	:						
Туре:								
Depth (inches	s):						Hydric Soil Pres	ent? Yes X No
Remarks:							-	
HYDROLO Wetland Hy	GY drology Indicator	rs:						
Primary Indi	cators (minimum o	of one rea	quired; check all t	hat apply)				Secondary Indicators (2 or more required)
	Surface Water (A1)				Vater stai	ned Leaves (B9)	(Except MLRA	Water stained Leaves (B9)
Х	High Water Table (A	2)		1,	, 2, 4A, a	nd 4B)		(MLRA1, 2, 4A, and 4B)
Х	Saturation (A3)			S	alt Crust	(B11)		Drainage Patterns (B10)
	Water Marks (B1)			A	quatic In	vertebrates (B13)		Dry-Season Water Table (C2)
	Sediment Deposits (I	B2)		н	lydrogen	Sulfide Odor (C1)		Saturation Visible on Aerial Imagery (C
	Drift Deposits (B3)	,					g Living Roots (C3)	Geomorphic Position (D2)
	Algal Mat or Crust (B	34)				of Reduced Iron (Shallow Aquitard (D3)
	Iron Deposits (B5)					n Reduction in Pl		X Fac-Neutral Test (D5)
	Surface Soil Cracks	(B6)				Stressed Plants		Raised Ant Mounds (D6) (LRR A)
	Inundation Visible on		agery (B7)			lain in Remarks)		Frost-Heave Hummocks (D7)
	Sparsely Vegetated					,		
Field Obser	vations:							
Surface Water	Present? Yes		No X	Depth (ii	nches):			
Water Table P		Х	No	Depth (ii		12	Wetland Hvd	rology Present?
Saturation Pre		X	No	Depth (ii		Surface		Yes X No
(includes capilla	ry fringe)				-			
Describe Reco	orded Data (stream g	auge, mon	itoring well, aerial pl	hotos, previo	us inspec	tions), if available	e:	
Remarks:								

roject/Site: Rivia	nna Reach F	Development	City/County:	Weet	Linn/Clackamas	Samplin	ng Date:	1/20	2024
		n Development	City/County:	west	State:	'	-		<u>2024</u> 9
	Ciward Visio		Section To	wnship, Range:			3S, R 1E	ampling Point:	5
vestigator(s):		Slope				<u> </u>		$\Omega_{\rm lane}$ (0/):	2
andform (hillslope, terra	· · ·	_RRA			ncave, convex, none):			Slope (%):	
ubregion (LRR):	L		Lat:	45.34		-122.		Datum:	WG304
bil Map Unit Name:			ilty clay loam			ssification:		N/A	
re climatic/hydrologic co				Yes			•	in Remarks)	
re vegetation			significantly dist		Are "Normal Circumstanc		′ (Y/N)	<u> </u>	
e vegetation	Soil	or Hydrology	_ naturally proble	natic? If needed	l, explain any answers in Rer	marks.)			
UMMARY OF FIN	NDINGS - A	Attach site map	showing san	npling point	locations, transects	, importa	nt featur	es, etc.	
drophytic Vegetation F	Present? Ye	s X No							
ydric Soil Present?	Ye	s X No		Is Sampled An a Wetlar		х	No		
etland Hydrology Pres	ent? Ye	s X No			-				
emarks:									
EGETATION - Us	se scientific	c names of plant	s.						
		absolute % cover	Dominant Species?	Indicator Status	Dominance Test worl	ksheet:			
ee Stratum (plot siz	e: 30) <u>% cover</u>	Species?	Status	Number of Dominant Spec	ries			
Fraxinus latifolia		′ 40	х	FACW	That are OBL, FACW, or F			4	(A)
								<u> </u>	
					Total Number of Dominant	t			
Ļ					Species Across All Strata:			5	(B)
		40	= Total Cover			_			
pling/Shrub Stratum	(plot size:	15)			Percent of Dominant Spec	ies			
Rubus armeniac		100	x	FAC	That are OBL, FACW, or		80)%	(A/B)
					- , - ,	_			
3					Prevalence Index Wo	rksheet:			
					Total % Cover of	N	fultiply by:	_	
5					OBL Species		x 1 =	0	
		100	= Total Cover		FACW species		x 2 =	0	
l Ol I (platain	- F	`			FAC Species		x 3 =	0	
erb Stratum (plot siz		,	v	FACW	FACU Species		x 4 =	0	
Phalaris arundin Galium aparine	acea	5	<u> </u>	FACW	UPL Species Column Totals	0 (/	x 5 =	0	B)
Geranium sp		5	<u> </u>	(FAC)		(/	4)	(D)
+				(1710)	Prevalence Index =B	3/A =	#DI	V/0!	
;						_			
;					Hydrophytic Vegetati	on Indicat	ors:		
								hytic Vegetatior	
					X 2	2- Dominanc	e Test is >50	0%	
		20	= Total Cover			3-Prevalence			
		,						ons ¹ (provide s	
· · ·	plot size:)						separate sheet)	
						5- Wetland N			inlain)
			- Total O					Vegetation ¹ (Ex	• •
		0	= Total Cover		¹ Indicators of hydric soil ar disturbed or problematic.		yarology mu	si pe present, u	111622
					Hydrophytic				

SOIL			PHS #	729	8	-		Sampling Point: 9
Profile Descri	ption: (Describe to	the depth	needed to docume	ent the indica	ator or co	onfirm the absen	ce of indicators.)	
Depth	Matrix				Features	. 2		
(Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-8	10YR 3/2	100					Silty Clay Loam	
8-17	10YR 3/1	90	10YR 5/6	10	С	M	Silty Clay Loam	Coarse
	centration, D=Deplet							² Location: PL=Pore Lining, M=Matrix.
-	Indicators: (Appl	licable to	all LRRs, unles				Indica	ators for Problematic Hydric Soils ³ :
H	Histosol (A1)			S;	andy Redo	ox (S5)		2 cm Muck (A10)
ŀ	Histic Epipedon (A2))		S1	tripped Ma	atrix (S6)		Red Parent Material (TF2)
F	Black Histic (A3)			Lc	bamy Muc	cky Mineral (F1) (e	∋xcept MLRA 1)	Very Shallow Dark Surface (TF12)
H	Hydrogen Sulfide (A	.4)		Lr	bamy Gley	yed Matrix (F2)		Other (explain in Remarks)
[Depleted Below Dark	k Surface (A11)	D	epleted Ma	atrix (F3)		
7	Thick Dark Surface ((A12)		X R	edox Dark	k Surface (F6)		
	Sandy Mucky Minera	al (S1)		D	epleted Da	ark Surface (F7)		³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or
	Sandy Gleyed Matrix	к (S4)		R	edox Depr	ressions (F8)		problematic.
Restrictive I	Layer (if present)):						
Туре:								
Depth (inches	s):						Hydric Soil Pres	sent? Yes X No
Remarks:							<u> </u>	
HYDROLO Wetland Hyd	GY drology Indicato	irs:						
Primary Indic	cators (minimum o	of o <u>ne rec</u>	uired; check all t	hat apply)				Secondary Indicators (2 or more required)
	Surface Water (A1)		·		/ater stain	ned Leaves (B9) (Except MLRA	Water stained Leaves (B9)
	High Water Table (A	1 2)		1,	, 2, 4A, an	id 4B)		(MLRA1, 2, 4A, and 4B)
	Saturation (A3)			S	alt Crust (E	B11)		Drainage Patterns (B10)
\	Water Marks (B1)			A	quatic Inve	ertebrates (B13)		Dry-Season Water Table (C2)
	Sediment Deposits ((B2)		H	ydrogen S	Sulfide Odor (C1)		Saturation Visible on Aerial Imagery (CS
[Drift Deposits (B3)			0	xidized Rh	nizospheres alon	g Living Roots (C3)	X Geomorphic Position (D2)
	Algal Mat or Crust (B	34)		Pr	resence of	of Reduced Iron (C	24)	Shallow Aquitard (D3)
I	Iron Deposits (B5)			R	ecent Iron	n Reduction in Plo	wed Soils (C6)	X Fac-Neutral Test (D5)
	Surface Soil Cracks	(B6)		S1	tunted or S	Stressed Plants (D1) (LRR A)	Raised Ant Mounds (D6) (LRR A)
I	Inundation Visible or	n Aerial Ima	agery (B7)	O	ther (Expl;	lain in Remarks)		Frost-Heave Hummocks (D7)
	Sparsely Vegetated	Concave S	urface (B8)					
Field Observ	vations:							
Surface Water	Present? Yes		No X	Depth (ir	nches):			
Water Table Pr	resent? Yes		No X	Depth (ir	nches):	>17	Wetland Hyd	rology Present?
Saturation Pres (includes capillar		X	No	Depth (ir	1ches):	0-1; >17		Yes X No
Describe Reco	orded Data (stream g	auge, mon	itoring well, aerial pł	notos, previor	us inspect ⁱ	ions), if available		
	•	0	U .	· •	·			
Remarks:								
	not tied to high w	vater tabl	le					

Project/Site: Ri	vianna Bea	ch Devel	opment	City/County:	West	Linn/Clackamas	Sampli	ng Date:	1/29	/2024
pplicant/Owner:			velopment	City/County.	West	State:	OR		oling Point:	10
vestigator(s):		CM	velopinent	Section To	wnship, Range:			3S, R 1E		10
andform (hillslope, t	errace etc.)		Slope	-		ncave, convex, none):	<u> </u>		Slope (%):	2
ubregion (LRR):		LRRA		Lat:	45.34	· -	-122.		Datum:	
oil Map Unit Name:		2100		ilty clay loam			ssification:		N/A	
re climatic/hydrolog		on the site t			Yes	X No	-	if no, explain in		
re vegetation				significantly dist		Are "Normal Circumstance	`		Y	
re vegetation	_ Soil	_				, explain any answers in Rer			<u> </u>	
		,					ilainioi)			
UMMARY OF	FINDINGS	- Attac	ch site map s	showing san	npling point	locations, transects	, importa	int features	, etc.	
ydrophytic Vegetati	on Present?	Yes	X No		Is Sampled Ar	oo within				
lydric Soil Present?		Yes	No	X	a Wetla	nd? Yes_		No	Х	
/etland Hydrology P	resent?	Yes	No	X						
emarks:										
EGETATION -	Use scier	itific nai	absolute	s. Dominant	Indicator	Dominance Test work	kshoot:			
			% cover	Species?	Status	Dominance rest work	ASHEEL.			
ree Stratum (plot	size:	30)				Number of Dominant Spec	cies			
Fraxinus latif	olia		75	X	FACW	That are OBL, FACW, or F	AC:	2		(A)
3						Total Number of Dominant				
1			75	- Tatal Oauan		Species Across All Strata:	-	2		(B)
			75	= Total Cover						
apling/Shrub Stratu		e: 15	_)			Percent of Dominant Spec				
Rubus armen			100	<u> </u>	FAC	That are OBL, FACW, or	FAC:	100%	0	(A/B)
2 Fraxinus latifo	olia		5		FACW	Prevalence Index Wo	rkehoot:			
, 1						Total % Cover of		Aultiply by:		
5						OBL Species	<u></u>	x 1 =	0	
			105	= Total Cover		FACW species		x 2 =	0	
						FAC Species		x 3 =	0	
	size:)				FACU Species		x 4 =	0	
1						UPL Species		x 5 =	0	
						Column Totals	0 (A)	0	(B)
3 4						Prevalence Index =B	$8/\Delta =$	#DIV/0	וח	
5 <u> </u>						Hydrophytic Vegetation	on Indicat	ors:		
7								t for Hydrophyti	c Vegetatior	ı
3						X 2	2- Dominanc	e Test is >50%		
			0	= Total Cover				e Index is $\leq 3.0^1$		
	(ml-+-')					ical Adaptations		
oody Vine Stratum	(plot size:)					arks or on a sep Ion-Vascular Pl		
 2								ion-vascular Pl Hydrophytic Ve		(nlain)
<u> </u>			0	= Total Cover		¹ Indicators of hydric soil ar				
						disturbed or problematic.		,	p. 00011, U	
						Hydrophytic				
6 Bare Ground in He			00			Vegetation	Yes	Х	No	

SOIL			PHS #	729	8			Sampling Po	oint:	10
		the depth	needed to docume			nfirm the absen	ice of indicators.)			
Depth (Inches)	Matrix Color (moist)	%	Color (moist)	Redox F	Features Type ¹	Loc ²	Texture	R	emarks	
(inches) 0-8	10YR 2/2	100		/0	1340		Silty Clay Loam		Bilidika	
8-12	101R 2/2 10YR 3/2	99	10YR 3/4	<u> </u>	с			Fino		
		<u>99</u> 99		<u> </u>	<u>с</u>	M	Silty Clay Loam	Fine Fine		
12-17	10YR 3/1	33	10YR 3/3	<u> </u>	<u>ر</u>		Clay Loam	Fine		
				<u> </u>						
	contration D=Denlet	ion RM=R	Reduced Matrix, CS=0		Costed Sar	ad Craine		² Location: PL=Pore Lini	ing M=Matrix	
			o all LRRs, unless				Indica	ators for Problemati	-	le ^{3.}
-	Histosol (A1)		/ un Ereres,		andy Redo			2 cm Muc	-	
	Histic Epipedon (A2)	١			tripped Ma				nt Material (TF:	2)
	Black Histic (A3)					ky Mineral (F1) (except MLRA 1)		llow Dark Surfa	
	Hydrogen Sulfide (A4)	4)			-	/ed Matrix (F2)	except million		plain in Remark	
	Depleted Below Dark		(^ 11)		epleted Ma	. ,			Jammin Koman	.5)
	Thick Dark Surface (ATT)			Surface (F6)				
	Sandy Mucky Minera					ark Surface (F0)		³ Indicators of hydrophyt		
	Sandy Gleyed Matrix				-	ressions (F8)		hydrology must be pre	sent, unless dis ematic.	turbed or
	Layer (if present)			<u> </u>	EUON DOP.		T	P1-22.	Siliauo.	
)-								
Type: Dopth (inchor	`							40 Maa	No	v
Depth (inches Remarks:	3):						Hydric Soil Pres	ent? res	No	<u>X</u>
HYDROLO Wetland Hy	OGY drology Indicator	rs:								
Primary India	cators (minimum o	of one rec	quired; check all th					Secondary Indicato	rs (2 or more	required)
	Surface Water (A1)					ed Leaves (B9) (Except MLRA		ined Leaves (B	
	High Water Table (A	.2)			, 2, 4A, and	-			2, 4A, and 4B	-
	Saturation (A3)				alt Crust (E				Patterns (B10)	
	Water Marks (B1)					ertebrates (B13)			on Water Table	
	Sediment Deposits (B2)				Sulfide Odor (C1)				rial Imagery (C9
	Drift Deposits (B3)	741				-	ng Living Roots (C3)		hic Position (D2 Aquitard (D3)	<u>')</u>
	Algal Mat or Crust (B Iron Deposits (B5)	54)				f Reduced Iron (,		ral Test (D3)	
	Surface Soil Cracks	(R6)				Stressed Plants (nt Mounds (D6)	(LRR A)
	Inundation Visible on	. ,	agery (B7)			ain in Remarks)			ave Hummocks	
	Sparsely Vegetated				u.e. (= 1	, , , , , , , , , , , , , , , , , , ,				(2.)
Field Obser	vations:						Τ			
Surface Water	r Present? Yes		No X	Depth (ir	nches):					
Water Table P	Present? Yes		No X	Depth (ir	nches):	>17	Wetland Hydr	rology Present?		
Saturation Pre (includes capillar			No X	Depth (ir	nches):	>17		Yes	No	x
		auge, mon	nitoring well, aerial ph	notos, previou	us inspecti	ions), if available	 e:			
		5	-	-	-					
Remarks:										

	WETLAND	DETER			RM - Weste	rn Mountains, Vall	eys, and Coa	PHS # st Region	7298
roject/Site:	Rivianna Beac			City/County:		_inn/Clackamas	Sampling Date:	-	/2024
plicant/Owner:	Forward Vi	ision Dev	velopment			State:	OR	Sampling Point:	11
vestigator(s):		СМ		Section, To	wnship, Range:		S 2, T 3S, R	1E	
andform (hillslope	e, terrace, etc.:)		Bank		Local relief (cor	ncave, convex, none):	Convex	Slope (%):	25
ubregion (LRR):		LRRA		Lat:	45.343	31 Long:	-122.6409	Datum:	WGS84
oil Map Unit Nam	ne:		Newberg fi	ne sandy loan	n	NWI Cla	ssification:	R2UBH	
re climatic/hydrol	logic conditions or	n the site ty	pical for this tim	ne of year?	Yes	X No	(if no, ex	plain in Remarks)	
re vegetation	Soil	or Hyd	drology	significantly dist	urbed?	Are "Normal Circumstanc	es" present? (Y/N)	Y	
re vegetation	Soil	or Hyd	drology	naturally problem	matic? If needed	, explain any answers in Rer	marks.)		
		• • •		- 					
					npling point	locations, transects	, important fea	tures, etc.	
lydrophytic Veget		Yes	No		Is Sampled Ar	ea within			
lydric Soil Presen		Yes	No		a Wetlar	nd? Yes_		No X	
Vetland Hydrology	y Present?	Yes	No	<u> </u>					
lemarks:									
	N - Use scient	tific nam	nes of plant	ts					
			absolute	Dominant	Indicator	Dominance Test wor	ksheet:		
			% cover	Species?	Status				
r <u>ee Stratum</u> (p		30)				Number of Dominant Spec			(a)
1 Populus ba			70	<u> </u>	FAC FACU	That are OBL, FACW, or F	-AC:	3	(A)
Pseudotsug	ga menziesii		30	<u> </u>	FACU	Total Number of Dominan			
3 4						Species Across All Strata:		7	(B)
·			100	= Total Cover		opeoles / closs / li oli did.			(8)
apling/Shrub Stra	otum (alataiaa	45	<u>,</u>				·		
1 Symphorica		15	_) 25	x	FACU	Percent of Dominant Spec That are OBL, FACW, or		43%	(A/B)
2 Rubus arme			20	<u> </u>	FAC	That are ODE, I ACW, O	TAC.	43 /0	(~,'D)
B Populus ba			20	<u> </u>	FAC	Prevalence Index Wo	rksheet:		
4 Cornus alba	а		15		FACW	Total % Cover of	Multiply b	by:	
5 Prunus aviu	um		10		FACU	OBL Species	x 1 =	= 0	
			100	= Total Cover		FACW species	x 2 =		
	-1-4 -!	E \				FAC Species	x 3 =		
l <u>erb Stratum</u> (p 1 Pteridium a		5)	40	x	FACU	FACU Species	x 4 = x 5 =		
2	quinnum		40		FACU	Column Totals	0 (A)		(B)
3							(//)		(0)
4						Prevalence Index =E	8/A =	#DIV/0!	
5									
6						Hydrophytic Vegetati	on Indicators:		
7						1	- Rapid Test for Hyd	drophytic Vegetation	ı
3							2- Dominance Test is		
			40	= Total Cover			B-Prevalence Index is		upporting
oody Vine Stratu	um (plot size:	30)				I-Morphological Ada lata in Remarks or c		
1 Hedera heli.			_ [/] 80	x	FACU		5- Wetland Non-Vas	•	,
	~						Problematic Hydroph		(plain)
			80	= Total Cover		¹ Indicators of hydric soil ar			
						disturbed or problematic.			
6 Bare Ground in	Herb Stratum	c				disturbed or problematic. Hydrophytic Vegetation	Yes	No	x

Shrubs continued: Alnus rubra (FACU) 10%.

SOIL			PHS #	7298				Sampling Po	oint:	11
	ription: (Describe to	the depth	needed to docume			nfirm the absen	ce of indicators.)			
Depth	Matrix			Redox Fea		Loc ²		D		
(Inches)	Color (moist)	%	Color (moist)	<u>%</u> T	Гуре¹	LUC			emarks	
0-2	10YR 2/2	100	·	·			Silty Clay Loam			
2-6	10YR 3/2	100		·			Silty Clay Loam			
6-16	10YR 3/2	98	10YR 5/6	2	С	<u> </u>	Silty Clay Loam	Coarse		
			·			·				
¹ Type: C=Con	ncentration, D=Deplet	ion, RM=R	Reduced Matrix, CS=	-Covered or Coa	ited San	nd Grains.		² Location: PL=Pore Linir	ng, M=Matrix.	
Hydric Soil	Indicators: (Appl	licable to	all LRRs, unles	s otherwise r	noted.))	Indica	ators for Problematic	Hydric Soi	ls ³ :
	Histosol (A1)			Sand	dy Redo	ox (S5)		2 cm Mucł	k (A10)	
	Histic Epipedon (A2))		Strip	ped Ma	atrix (S6)		Red Parer	nt Material (TF	2)
	Black Histic (A3)			Loar	ny Muck	ky Mineral (F1) (except MLRA 1)	Very Shall	low Dark Surfa	ce (TF12)
	- Hydrogen Sulfide (A4	4)		Loar	nv Gley	ed Matrix (F2)		Other (exp	olain in Remarl	ks)
	Depleted Below Dark		(Δ11)			atrix (F3)		· 、 .		,
	Thick Dark Surface (Surface (F6)				
	-							³ Indicators of hydrophyti	c vegetation a	nd wetland
	Sandy Mucky Minera					ark Surface (F7) ressions (F8)		hydrology must be pres	sent, unless dis ematic.	turbed or
	Layer (if present)						T	· · ·		
Туре:										
Depth (inches	es):						Hydric Soil Pres	ent? Yes	No	х
Remarks:			·				-			
HYDROLO Wetland Hy	DGY ydrology Indicator	rs:								
Primary Indi	icators (minimum o	of one rec	quired; check all t	hat apply)				Secondary Indicator	s (2 or more	required)
	Surface Water (A1)	_				ed Leaves (B9) (d 4 B)	Except MLRA		ined Leaves (E 2, 4A, and 4B	,
	High Water Table (A Saturation (A3)	.2)			4A, and Crust (B				2, 4A, and 4B Patterns (B10)	
	Water Marks (B1)					ertebrates (B13)			on Water Table	
	Sediment Deposits ((RO)				ulfide Odor (C1)				rial Imagery (Cs
		D2)				. ,			nic Position (D2	
	Drift Deposits (B3)	241				f Reduced Iron (g Living Roots (C3)	·	quitard (D3)	-)
	Algal Mat or Crust (B	4)							• • • •	
	Iron Deposits (B5)					Reduction in Plo			al Test (D5) at Mounds (D6)	
	Surface Soil Cracks					Stressed Plants (DT) (LKK A)		it Mounds (D6)	
	Inundation Visible on Sparsely Vegetated				∦ (Ехріа	ain in Remarks)		FIUSI-Nea	ve Hummocks	(07)
Field Obser	rvations:									
Surface Water	er Present? Yes		No <u>X</u>	Depth (inch	ies):					
Water Table P	Present? Yes		No X	Depth (inch	ies):	>16	Wetland Hyd	rology Present?		
Saturation Pre (includes capillat			No X	Depth (inch	ies):	>16		Yes	No	X
	orded Data (stream g	nauge mon	aitoring well, aerial n	hotos previous	inenectiu	one) if available	 			
Describe root	Juca Data (Sucan S	auge, mom	Itomiy wen, achar pr	10103, previous i	Пареон	0115), 11 availabio				
Remarks:										

		UCIER		DAIAFU	rtivi - vveste	rn Mountains, Val	ieys, and	i Coasi r	region	
Project/Site:	Rivianna Bea	ch Develo	pment	City/County:	West L	_inn/Clackamas	Samplir	ng Date:	1/29/	2024
Applicant/Owner:	Forward V	/ision Dev	elopment			State:	OR	Sa	mpling Point:	12
nvestigator(s):		СМ		Section, To	wnship, Range:		S 2, T	3S, R 1E		
andform (hillslop	e, terrace, etc.:)		Swale		Local relief (cor	ncave, convex, none):	Con	cave	Slope (%):	3
Subregion (LRR):		LRRA		Lat:	45.343	31 Long:	-122.	6444	Datum:	WGS84
Soil Map Unit Na	ne:		Wapato s	ilty clay loam		NWI Cla	assification:		N/A	
re climatic/hydro	ologic conditions o	on the site ty	pical for this tim	e of year?	Yes	X No	(i	f no, explain	in Remarks)	
re vegetation	Soil	or Hyd	lrology	significantly dist	urbed?	Are "Normal Circumstand	ces" present?	? (Y/N)	Y	
re vegetation	Soil	or Hyd	lrology	naturally problem	matic? If needed	, explain any answers in Re	emarks.)			
		A44				le estime trenest				
			-	snowing san	npling point	locations, transects	s, importa	nt feature	es, etc.	
lydrophytic Vege		Yes	X No		Is Sampled Ar	ea within				
lydric Soil Prese		Yes	X No		a Wetlar	nd? Yes	<u> </u>	No		
Vetland Hydrolog	gy Present?	Yes	X No							
emarks:										
	N - Use scier	tific nam	os of nlant	e						
LOLIANO			absolute	Dominant	Indicator	Dominance Test wor	ksheet:			
			% cover	Species?	Status					
ree Stratum (plot size:	30)				Number of Dominant Spe	cies			
Fraxinus la	atifolia		10	Χ	FACW	That are OBL, FACW, or	FAC:	6	((A)
3						Total Number of Dominar			,	
1			10	- Total Cavar		Species Across All Strata		6	(В)
			10	= Total Cover						
apling/Shrub Sti		e: 15)			Percent of Dominant Spe				
Rubus arm			30	<u> </u>	FAC	That are OBL, FACW, or	FAC:	100	<u>%</u> ((A/B)
2 Fraxinus la 3 Populus ba			<u>20</u> 10	<u> </u>	FACW FAC	Prevalence Index Wo	orkobooti			
1	aisaillileia		10			Total % Cover of		fultiply by:		
5						OBL Species	<u>.</u>	x 1 =	0	
			60	= Total Cover		FACW species		x 2 =	0	
						FAC Species		x 3 =	0	
erb Stratum (plot size:	5)				FACU Species		x 4 =	0	
Schedono	rus arundinace	eus	40	X	FAC	UPL Species		x 5 =	0	
Phalaris a			30	Χ	FACW	Column Totals	0 (A)	0 (B)
3 Unidentifie	-		20	Χ	(FAC)					
Cirsium ar	vense		10		FAC	Prevalence Index =	B/A =	#DI\	//0!	
5						Hydrophytic Vegetat	ion Indicat	ore		
6									ytic Vegetation	
3							-	e Test is >50	-	
·			100	= Total Cover				Index is ≤ 3 .		
							4-Morphologi	ical Adaptatio	ns ¹ (provide su	upporting
oody Vine Strat	<u>tum</u> (plot size:)				data in Rema	arks or on a s	eparate sheet)	
l								lon-Vascular		
2						L	Problematic	Hydrophytic V	egetation ¹ (Ex	plain)
			0	= Total Cover		¹ Indicators of hydric soil a	nd wetland h	ydrology mus	t be present, u	nless
						disturbed or problematic. Hydrophytic				
	h Herb Stratum	()			Vegetation	Yes	х	No	
Bare Ground Ir										

SOIL			PHS #	7:	298	_		Sampling Point: 12
Profile Descri	ption: (Describe to	the depth	needed to docume	ent the ind	icator or c	onfirm the abser	nce of indicators.)	
Depth	Matrix	0/			x Features	Loc ²	T4	Demedia
(Inches)	Color (moist)	%	Color (moist)	%	Type'			Remarks
0-5	10YR 3/2	99	10YR 3/4		<u> </u>	<u>M</u>	Silty Clay Loam	Fine
5-15	10YR 3/2	95	10YR 3/4	5	<u> </u>	M	Silty Clay Loam	Fine
					·			
	centration, D=Deple							² Location: PL=Pore Lining, M=Matrix.
-	Indicators: (App	licable to	all LRRs, unles	s otherw			Indica	ators for Problematic Hydric Soils ³ :
	Histosol (A1)				Sandy Red	· · /		2 cm Muck (A10)
	Histic Epipedon (A2)			Stripped N	. ,		Red Parent Material (TF2)
	Black Histic (A3)				Loamy Mu	cky Mineral (F1) (except MLRA 1)	Very Shallow Dark Surface (TF12)
	Hydrogen Sulfide (A	4)			Loamy Gle	eyed Matrix (F2)		Other (explain in Remarks)
	Depleted Below Dar		A11)		Depleted N	Matrix (F3)		
	Thick Dark Surface	(A12)		X	Redox Dar	rk Surface (F6)		³ Indicators of hydrophytic vegetation and wetland
	Sandy Mucky Minera	al (S1)			Depleted I	Dark Surface (F7)		hydrology must be present, unless disturbed or
	Sandy Gleyed Matrix	(S4)			Redox Dep	pressions (F8)		problematic.
Restrictive	Layer (if present):						
Туре:								
Depth (inches	s):				_		Hydric Soil Pres	ent? Yes X No
Remarks:								
HYDROLO Wetland Hy	GY drology Indicato	rs:						
-	cators (minimum		nuired: check all t	hat annly)			Secondary Indicators (2 or more required)
-	Surface Water (A1)		quired, check all t	nat appiy		ned Leaves (B9)	Except MLRA	Water stained Leaves (B9)
	High Water Table (A	(2)			1, 2, 4A, a			(MLRA1, 2, 4A, and 4B)
	Saturation (A3)	(2)			Salt Crust	(B11)		Drainage Patterns (B10)
	Water Marks (B1)				•	vertebrates (B13)		Dry-Season Water Table (C2)
	Sediment Deposits	(B2)				Sulfide Odor (C1)		X Saturation Visible on Aerial Imagery (CS
	Drift Deposits (B3)						g Living Roots (C3)	Geomorphic Position (D2)
	Algal Mat or Crust (E	34)			Presence	of Reduced Iron (C4)	Shallow Aquitard (D3)
	Iron Deposits (B5)				Recent Iro	n Reduction in Ple	owed Soils (C6)	X Fac-Neutral Test (D5)
	Surface Soil Cracks	(B6)			Stunted or	Stressed Plants	(D1) (LRR A)	Raised Ant Mounds (D6) (LRR A)
	Inundation Visible o	n Aerial Ima	agery (B7)		Other (Exp	olain in Remarks)		Frost-Heave Hummocks (D7)
	Sparsely Vegetated	Concave S	Surface (B8)		-			
Field Obser	vations:							
Surface Water	Present? Yes		No X	Depth	(inches):			
Water Table P	resent? Yes	x	No	-	(inches):	3	Wetland Hyd	rology Present?
Saturation Pre	sent? Yes	x	No	-	(inches):	Surface		Yes X No
(includes capillar	ry fringe)							
Describe Reco	orded Data (stream g	jauge, mon	itoring well, aerial pl	hotos, prev	vious inspec	tions), if available		
Remarks:								

	WETLAND	DETER	RMINATIO		RM - Weste	ern Mountains, Vall	eys, and C	PHS : oast Region	-
roject/Site:	Rivianna Bea	ch Develo	opment	City/County:	West	Linn/Clackamas	Sampling D	Date:	1/29/2024
pplicant/Owner:	Forward V	ision Dev	/elopment			State:	OR	Sampling Po	int: 13
vestigator(s):		СМ		Section, To	wnship, Range:		S 2, T 3S	, R 1E	
andform (hillslop	e, terrace, etc.:)		Slope/Ber	m	Local relief (co	ncave, convex, none):	Convex	Slope (%): 25
ubregion (LRR):		LRRA		Lat:	45.34	30 Long:	-122.644	I3 Date	um: WGS84
oil Map Unit Nan	ne:		Wapato s	ilty clay loam		NWI Clas	ssification:	N/A	
re climatic/hydro	logic conditions o	on the site ty	pical for this tim	ne of year?	Yes	X No	(if no	, explain in Remarl	(s)
re vegetation	Soil	or Hyd	drology	significantly dist	urbed?	Are "Normal Circumstanc	es" present? (Y	/N) Y	
e vegetation	Soil	or Hyd	drology	naturally probler	matic? If needed	l, explain any answers in Rer	marks.)		
_				_					
UMMARY O	of FINDINGS	– Attac	h site map	showing san	npling point	locations, transects	, important	features, etc.	
ydrophytic Vege	tation Present?	Yes	X No		Is Sampled A	rea within			
ydric Soil Preser	nt?	Yes	No	X	a Wetla			No X	
etland Hydrolog/	y Present?	Yes	No	Χ					
emarks:									
EGETATION	N - Use scien	tific nan			In Beach	Deminent T (a ha c to		
			absolute % cover	Dominant Species?	Indicator Status	Dominance Test wor	ksneet:		
ee Stratum (p	plot size:	30)				Number of Dominant Spec	cies		
Populus ba	alsamifera		40	х	FAC	That are OBL, FACW, or F	AC:	3	(A)
						Total Number of Dominan	t		
1						Species Across All Strata:		3	(B)
			40	= Total Cover					
apling/Shrub Str	atum (plot size	e: 15)			Percent of Dominant Spec	ies		
Rubus arm	eniacus		75	х	FAC	That are OBL, FACW, or	FAC:	100%	(A/B)
Corylus co	rnuta		20		FACU				
Populus ba	alsamifera		20		FAC	Prevalence Index Wo	rksheet:		
Crataegus	monogyna		10		FAC	Total % Cover of	Multi	ply by:	
Fraxinus la	tifolia		5		FACW	OBL Species		k 1 = 0	
			135	= Total Cover		FACW species		<pre>< 2 = 0</pre>	
	alat aiza	5)				FAC Species		<pre><3 = 0</pre>	
	plot size: rus arundinace		70	x	FAC	FACU Species		4 = 0	
2 Phalaris ar		eus	10		FAC	UPL Species Column Totals	0 (A)	< 5 = <u>0</u>	(B)
Unidentifie			10		(FAC)		0 (A)		(D)
Cirsium arv	-		10		FAC	Prevalence Index =E	3/A =	#DIV/0!	
						Hydrophytic Vegetati	on Indicators	:	
,								Hydrophytic Veget	ation
3							2- Dominance Te		
			100	= Total Cover			3-Prevalence Ind	lex is $\leq 3.0^1$	
								Adaptations ¹ (provi	
oody Vine Strat	um (plot size:)					or on a separate s	heet)
								Vascular Plants ¹	1
								rophytic Vegetation	
			0	= Total Cover		¹ Indicators of hydric soil ar disturbed or problematic.	nd wetland hydro	ology must be prese	ent, unless
						Hydrophytic			
	Horb Stratum		0			Vegetation	Yes	х	No
Bare Ground in	Therb Stratum		-						

SOIL			PHS #	7298			Sampling Poi	int: 13		
	•	the depth	needed to docume	ent the indicator or con	firm the absen	ce of indicators.)				
Depth	Matrix			Redox Features	Loc ²	- ,	5			
(Inches)	Color (moist)	%	Color (moist)	% Type		Texture		narks		
0-16	10YR 3/2	40				Sandy Clay Loam				
	10YR 3/3	60			;	Sandy Clay Loam	Mixed Matrix			
¹ Type: C=Con	centration, D=Depleti	ion, RM=R	educed Matrix, CS=	Covered or Coated San	d Grains.		² Location: PL=Pore Linin	g, M=Matrix.		
Hydric Soil	Indicators: (Appl	icable to	all LRRs, unles	s otherwise noted.))	Indica	tors for Problematic	Hydric Soils ³ :		
	Histosol (A1)			Sandy Redox	x (S5)		2 cm Muck	(A10)		
	Histic Epipedon (A2)	1		Stripped Mat	trix (S6)		Red Parent	t Material (TF2)		
	Black Histic (A3)			Loamy Muck	ky Mineral (F1) (e	except MLRA 1)	Very Shallc	w Dark Surface (TF1	2)	
	Hydrogen Sulfide (A4	4)		Loamv Gleve	ed Matrix (F2)				,	
	Depleted Below Dark	-	A11)	Depleted Ma				,		
	Thick Dark Surface (,	<u> </u>	Surface (F6)					
	Sandy Mucky Minera				ark Surface (F7)			•		
	Sandy Gleyed Matrix			Redox Depre					or	
	Layer (if present)				55510115 (1 5)	1		Ilduo.		
	Layer (ii present,	-								
Type:										
Depth (inches	s):					Hydric Soil Prese	ent? Yes	Remarks Matrix Problematic Hydric Soils ³ : 2 cm Muck (A10) Red Parent Material (TF2) Very Shallow Dark Surface (TF) Other (explain in Remarks) Dres of hydrophytic vegetation and weth gy must be present, unless disturbed problematic. //es No //es No		
HYDROLO Wetland Hy)GY /drology Indicator	rs:								
Primary Indi	cators (minimum c	of one rec	uired; check all t	hat apply)			Secondary Indicators	s (2 or more requir	ed)	
,	Surface Water (A1)		· · · ·	11 37	ed Leaves (B9) (Except MLRA			<u> </u>	
	High Water Table (A	.2)		1, 2, 4A, and	1 4B)					
	Saturation (A3)			Salt Crust (B	311)		Drainage P	atterns (B10)		
	Water Marks (B1)			Aquatic Inve	ertebrates (B13)		Dry-Seasor	ו Water Table (C2)		
	Sediment Deposits (I	B2)		Hydrogen St	ulfide Odor (C1)		Saturation '	Visible on Aerial Ima	gery (C	
	Drift Deposits (B3)			Oxidized Rh	izospheres alon	g Living Roots (C3)	Geomorphi	c Position (D2)		
	Algal Mat or Crust (B	34)		Presence of	Reduced Iron (C	24)	Shallow Aq	uitard (D3)		
	Iron Deposits (B5)			Recent Iron	Reduction in Plo	wed Soils (C6)	Fac-Neutra	l Test (D5)		
	Surface Soil Cracks	(B6)		Stunted or S	Stressed Plants (D1) (LRR A)	Raised Ant	Mounds (D6) (LRR /	4)	
	Inundation Visible on	Aerial Ima	agery (B7)	Other (Expla	ain in Remarks)		Frost-Heav	e Hummocks (D7)		
	Sparsely Vegetated	Concave S	urface (B8)							
Field Obser	vations:									
Surface Water	r Present? Yes		No X	Depth (inches):						
Water Table P	Present? Yes		No X	Depth (inches):	>16	Wetland Hydr	ology Present?			
Saturation Pre (includes capillat		<u>x</u>	No	Depth (inches):	0-3; >16		Yes	<u> </u>		
Describe Reco	orded Data (stream g	auge, mon	itoring well, aerial pł	hotos, previous inspectio	ons), if available	:				
Remarks:										
	not tied to high w	/ater tabl	e							

roject/Site:	Rivianna Bea	ch Devel	opment	City/County:	West I	_inn/Clackamas	Sampling D	Date:	1/29/2024
oplicant/Owner:			velopment	City/County.	West	State:		Sampling Po	
vestigator(s):		CM/AS	velopment	Section To	wnship, Range:		<u> </u>		Jint. 14
	e, terrace, etc.:)		Slope	-		ncave, convex, none):	None		(%): 10
ubregion (LRR):		LRRA		Lat:	45.344	-	-122.644		um: WGS84
oil Map Unit Nar		LINIA		ilty clay loam			ssification:		
	logic conditions c	on the site t			Yes			, explain in Remar	
re vegetation				significantly dist		Are "Normal Circumstanc	`	<i>,</i> ,	K5)
re vegetation	Soil	_				, explain any answers in Rer		/in) <u> </u>	
	301						lidiks.)		
UMMARY C	OF FINDINGS	– Attac	h site map s	showing sar	npling point	locations, transects	, important	features, etc.	
ydrophytic Vege	tation Present?	Yes	X No		Is Sampled Ar				
ydric Soil Preser	nt?	Yes	No	Х	a Wetlar	nd? Yes_		No X	
etland Hydrolog/	y Present?	Yes	No	Х					
emarks:									
EGETATIO	N - Use scier	ntific nar	-		Inc. 18 1	Deminer - T	a ha c to		
			absolute % cover	Dominant Species?	Indicator Status	Dominance Test worl	ksneet:		
ree Stratum (plot size:)				Number of Dominant Spec	cies		
1						That are OBL, FACW, or F	AC:	2	(A)
3						Total Number of Dominant	t		
1						Species Across All Strata:		2	(B)
			0	= Total Cover					
apling/Shrub Str	atum (plot size	e: 15)			Percent of Dominant Spec	ies		
Rubus arm	eniacus		100	Χ	FAC	That are OBL, FACW, or	FAC:	100%	(A/B)
3 4						Prevalence Index Wo			
·						Total % Cover of OBL Species		ply by: x 1 = 0	
			100	= Total Cover		FACW species		$x^{2} = 0$	
						FAC Species		x 3 = 0	
erb Stratum (I	plot size:	5)				FACU Species		x 4 = 0	
1 Unidentifie	d grass		5	X	(FAC)	UPL Species		x 5 = 0	
2						Column Totals	0 (A)	0	(B)
3									
-		<u> </u>				Prevalence Index =B	3/A =	#DIV/0!	
5 6						Hydrophytic Vegetati	on Indicators		
7								•• Hydrophytic Vege	tation
3							2- Dominance To		
			5	= Total Cover			B-Prevalence Inc		
						4	-Morphological	Adaptations ¹ (prov	ide supporting
oody Vine Strat	um (plot size:)					or on a separate s	sheet)
l								Vascular Plants ¹	1
								rophytic Vegetation	
			0	= Total Cover		¹ Indicators of hydric soil ar disturbed or problematic.	nd wetland hydro	plogy must be pres	ent, unless
						Hydrophytic			
	Herb Stratum		95			Vegetation	Yes	х	No

SOIL			PHS #	7298	_		Sampling Point:	14
			needed to docume	nt the indicator or co	onfirm the absen	ce of indicators.)		
Depth	Matrix	%		Redox Features % Type ¹	Loc ²	Tautura	Demen	
(Inches) 1-12	Color (moist)	<u></u> 100	Color (moist)	Туре	LUC	Texture	Remar	KS
	10YR 3/3				_	Silty Clay Loam		
12-17	10YR 3/4	100		·		Silty Clay Loam		
¹ Type: C=Con	centration, D=Deplet	tion, RM=Re	duced Matrix, CS=0	Covered or Coated Sa	and Grains.		² Location: PL=Pore Lining, I	∕I=Matrix.
Hydric Soil	Indicators: (App	licable to	all LRRs, unles	s otherwise noted	l.)	Indica	ators for Problematic Hy	dric Soils ³ :
	Histosol (A1)			Sandy Rec	lox (S5)		2 cm Muck (A1	0)
	Histic Epipedon (A2)		Stripped M	latrix (S6)		Red Parent Ma	iterial (TF2)
	Black Histic (A3)			Loamy Mu	cky Mineral (F1) (except MLRA 1)	Very Shallow [0ark Surface (TF12)
	Hydrogen Sulfide (A	4)		Loamy Gle	yed Matrix (F2)		Other (explain	in Remarks)
	Depleted Below Dar	k Surface (A	(11)	Depleted N	/latrix (F3)			
	Thick Dark Surface	(A12)		Redox Dar	k Surface (F6)			
	Sandy Mucky Minera	al (S1)		Depleted D	Dark Surface (F7)		³ Indicators of hydrophytic ve	
	Sandy Gleyed Matrix	x (S4)		Redox Dep	pressions (F8)		hydrology must be present, problemat	
Restrictive	Layer (if present):						
Туре:								
Depth (inches	s):					Hydric Soil Pres	ent? Yes	No X
Remarks:						-		
HYDROLO	GY							
Wetland Hy	drology Indicato	rs:						
Primary Indi	cators (minimum	of one req	uired; check all th	nat apply)			Secondary Indicators (2	or more required)
	Surface Water (A1)			Water stai	ned Leaves (B9) (Except MLRA	Water stained	Leaves (B9)
	High Water Table (A	(2)		1, 2, 4A, a	nd 4B)		(MLRA1, 2, 4	A, and 4B)
	Saturation (A3)			Salt Crust	(B11)		Drainage Patte	erns (B10)
	Water Marks (B1)			Aquatic Inv	vertebrates (B13)		Dry-Season W	ater Table (C2)
	Sediment Deposits ((B2)		Hydrogen	Sulfide Odor (C1)		Saturation Visi	ble on Aerial Imagery (CS
	Drift Deposits (B3)			Oxidized R	hizospheres alon	g Living Roots (C3)	Geomorphic P	osition (D2)
	Algal Mat or Crust (E	34)		Presence	of Reduced Iron (C4)	Shallow Aquita	rd (D3)
	Iron Deposits (B5)			Recent Iro	n Reduction in Plo	owed Soils (C6)	Fac-Neutral Te	est (D5)
	Surface Soil Cracks	(B6)		Stunted or	Stressed Plants (D1) (LRR A)	Raised Ant Mo	unds (D6) (LRR A)
	Inundation Visible or	n Aerial Ima	gery (B7)	Other (Exp	lain in Remarks)		Frost-Heave H	ummocks (D7)
	Sparsely Vegetated	Concave Su	ırface (B8)					
Field Obser	vations:							
Surface Water	Present? Yes		No <u>X</u>	Depth (inches):				
Water Table P	resent? Yes		No <u>X</u>	Depth (inches):	>17	Wetland Hyd	rology Present?	
Saturation Pre (includes capillar		<u>X</u>	No	Depth (inches):	0-3; >17		Yes	No <u>X</u>
		auge moni	oring well aerial ph	otos, previous inspec	tions) if available	<u> </u>		
2000112011000		Jaago, mom	ioning tren, aonai pri		liono), il aranazio			
Remarks:								
	not tied to high w	vater table)					
	-							

				ON DATA FOI	1101 - 446316		neys, an		egion	
roject/Site:	Rivianna Bea	ch Develo	opment	City/County:	West	Linn/Clackamas	Sampl	ng Date:	1/29	/2024
pplicant/Owner:	Forward V	ision Dev	velopment			State:	OR	Sar	mpling Point:	15
vestigator(s):		CM/AS		Section, To	wnship, Range:		S 2, 1	3S, R 1E		
andform (hillslope,	, terrace, etc.:)		Slop	е	Local relief (co	ncave, convex, none):	Con	cave	Slope (%):	5
ubregion (LRR):		LRRA		Lat:	45.34	47 Long:	-122	.6445	Datum:	WGS84
oil Map Unit Name	e:		Wapato	o silty clay loam		NWI Cla	assification:		N/A	
re climatic/hydrolo	gic conditions of	on the site ty	pical for this	time of year?	Yes	X No		(if no, explain i	n Remarks)	
re vegetation	Soil	or Hy	drology	significantly dist	urbed?	Are "Normal Circumstan	ces" present	? (Y/N)	Y	
re vegetation	Soil	or Hy	drology	naturally probler	matic? If needed	l, explain any answers in Re	emarks.)			
UMMARY OF	FINDINGS			p showing san	npling point	locations, transects	s, importa	ant feature	s, etc.	
ydrophytic Vegeta	tion Present?	Yes	1 <u>X</u>	No	Is Sampled A	rea within				
ydric Soil Present	?	Yes	X	No	a Wetla		<u> </u>	No		
/etland Hydrology	Present?	Yes	1 X	No						
emarks:										
EGETATION	- Use scier	ntific nan			Indiantan	Dominance Test wo				
			absolute % cover	Dominant Species?	Indicator Status	Dominance Test wo	rksneet:			
ee Stratum (pl	ot size:	30)				Number of Dominant Spe	ecies			
Alnus rubra			20	x	FAC	That are OBL, FACW, or	FAC:	6		(A)
Fraxinus lati	ifolia		10	X	FACW		-			
				_		Total Number of Dominal	nt			
1				<u> </u>		Species Across All Strata	a:	6		(B)
			30	= Total Cover						
apling/Shrub Strat	tum (plot siz	e: 15)			Percent of Dominant Spe	cies			
Rubus arme	niacus		20	X	FAC	That are OBL, FACW, or	r FAC:	100	%	(A/B)
2				_						
}				<u> </u>		Prevalence Index W	orksheet:			
۱ <u> </u>						Total % Cover of		Multiply by:		
5						OBL Species		x 1 =	0	
			20	= Total Cover		FACW species		x 2 =	0	
erb Stratum (pl	ot size:	5)				FAC Species FACU Species		x 3 = x 4 =	0	
Ranunculus		/	30	х	FAC	UPL Species		x 5 =	0	
Phalaris aru			30	<u> </u>	FACW	Column Totals	0	(A)		(B)
Unidentified			30	X	(FAC)			-		()
Scirpus mic	-		20		OBL	Prevalence Index =	B/A =	#DIV	//0!	
Juncus effus	sus		10		FACW		-			
Cirsium arve	ense		5		FAC	Hydrophytic Vegetat	tion Indica	tors:		
7							1- Rapid Te	st for Hydrophy	/tic Vegetatio	ı
3						X	2- Dominan	ce Test is >509	%	
			125	= Total Cover				e Index is ≤ 3.0		
	(mlc+-:-		`				•	ical Adaptatio		
oody Vine Stratur	<u>m</u> (plot size:)					arks or on a se Non-Vascular I	•)
								Non-Vascular I Hydrophytic V		(nlain)
			0	= Total Cover		¹ Indicators of hydric soil a				
						disturbed or problematic.		iyarology musi	. 50 piesein, t	
6 Bare Ground in F			0			Hydrophytic Vegetation	Yes	x	No	

SOIL			PHS #	72	298	_		Sampling Point: 15
	iption: (Describe to f	he depth	needed to docume			onfirm the absen	ce of indicators.)	
Depth (Inches)	Matrix Color (moist)	%	Color (moist)	Redo %	x Features Type ¹	Loc ²	Texture	Remarks
0-12	10YR 3/2	95	10YR 3/4	2	<u> </u>		Silty Clay Loam	Fine
012	1011(0/2		2.5Y 4/1	3	 	 M	Silty Clay Loam	Medium
	·		2.01 4/1				only only Louin	modium
	·							
¹ Type: C=Con	centration, D=Depletion	on, RM=R	educed Matrix, CS=	Covered o	r Coated Sa	and Grains.		² Location: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Appli	cable to	all LRRs, unles	s otherw	vise noted	l.)	Indica	ators for Problematic Hydric Soils ³ :
	Histosol (A1)				Sandy Red	lox (S5)		2 cm Muck (A10)
	Histic Epipedon (A2)				Stripped M			Red Parent Material (TF2)
	Black Histic (A3)				Loamy Mu	cky Mineral (F1) (except MLRA 1)	Very Shallow Dark Surface (TF12)
X	Hydrogen Sulfide (A4				•	yed Matrix (F2)		Other (explain in Remarks)
	Depleted Below Dark	Surface (A11)		Depleted N	/atrix (F3)		
	Thick Dark Surface (-	k Surface (F6)		³ Indicators of hydrophytic vegetation and wetland
	Sandy Mucky Mineral				•	Oark Surface (F7)		hydrology must be present, unless disturbed or
	Sandy Gleyed Matrix	(S4)			Redox Dep	pressions (F8)		problematic.
Restrictive	Layer (if present)							
Type:					_			
Depth (inche	s):				_		Hydric Soil Pres	ent? Yes X No
Remarks:								
-	drology Indicator							
Primary Ind	cators (minimum o	t one red	quired; check all t	nat apply				Secondary Indicators (2 or more required)
x	Surface Water (A1) High Water Table (A2	2)			1, 2, 4A, a	ned Leaves (B9) (n d 4B)	Except MERA	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
X	Saturation (A3)	-)			Salt Crust	(B11)		Drainage Patterns (B10)
	Water Marks (B1)				•	vertebrates (B13)		Dry-Season Water Table (C2)
	Sediment Deposits (E	32)		Х	•	Sulfide Odor (C1)		X Saturation Visible on Aerial Imagery (C
	Drift Deposits (B3)				Oxidized R	hizospheres alon	g Living Roots (C3)	X Geomorphic Position (D2)
	Algal Mat or Crust (B	4)			Presence	of Reduced Iron (C4)	Shallow Aquitard (D3)
	Iron Deposits (B5)				Recent Iro	n Reduction in Plo	owed Soils (C6)	X Fac-Neutral Test (D5)
	Surface Soil Cracks (B6)			Stunted or	Stressed Plants ((D1) (LRR A)	Raised Ant Mounds (D6) (LRR A)
	Inundation Visible on				Other (Exp	lain in Remarks)		Frost-Heave Hummocks (D7)
	Sparsely Vegetated C	Concave S	Surface (B8)					
Field Obse	rvations:							
Surface Wate	r Present? Yes		No <u>X</u>	Depth	(inches):			
Water Table F		<u> </u>	No		(inches):	7	Wetland Hyd	rology Present?
Saturation Pre (includes capilla		X	No	Depth	(inches):	Surface		Yes X No
Describe Rec	orded Data (stream ga	auge, mon	itoring well, aerial ph	notos, prev	ious inspec	tions), if available	:	
Remarks:								

v	VETLAND DET	ERMINATIO	N DATA FO	RM - Weste	rn Mountains, Val	leys, and C	oast Regi	on	
roject/Site: Ri	ivianna Beach Dev	velopment	City/County:	West I	Linn/Clackamas	Sampling D	ate:	1/29/	2024
pplicant/Owner:	Forward Vision	Development			State:	OR	Sampling	g Point:	16
vestigator(s):	СМ		Section, To	wnship, Range:		S 401, T 3	S, 1 E		
andform (hillslope, t	errace, etc.:)	Depressio	on	Local relief (co	ncave, convex, none):	Concave	e Slo	pe (%):	3
ubregion (LRR):	LR	RA	Lat:	45.342	22 Long:	-122.643	6	Datum:	WGS84
oil Map Unit Name:		Newberg fi	ine sandy loan	n	NWI Cla	ssification:		N/A	
re climatic/hydrolog	ic conditions on the si	te typical for this tim	ne of year?	Yes	X No	(if no,	explain in Rer	narks)	
re vegetation	Soil or	Hydrology	significantly dist	urbed?	Are "Normal Circumstand	ces" present? (Y/	N)	Y	
re vegetation	Soil or	Hydrology	naturally problem	matic? If needed	, explain any answers in Re	marks.)			
			- h h		I				
				npling point	locations, transects	, important	reatures, e	IC.	
lydrophytic Vegetati		<u>X</u> No		Is Sampled Ar	ea within			v	
lydric Soil Present?		No		a Wetlar	nd? Yes		No	<u>x</u>	
Vetland Hydrology P	Present? Yes	No	<u> </u>						
Remarks:									
FGETATION -	Use scientific r	ames of plan	ts.						
	200 Solontino I	absolute	Dominant	Indicator	Dominance Test wor	ksheet:			
		% cover	Species?	Status					
ree Stratum (plot)	_	_	Number of Dominant Spe				
1 Rubus armen		100	<u> </u>	FAC	That are OBL, FACW, or	FAC:	2	(A)
2 Populus bals	amifera	20		FAC					
3					Total Number of Dominan		3	,	B)
+		120	= Total Cover		Species Across All Strata		ა	(B)
anling/Oberto Ot									
apling/Shrub Stratu	(5) 100	v	FAC	Percent of Dominant Spec		670/	,	۸/B)
Rubus armen 2 Populus bals		100	<u> </u>	FAC FAC	That are OBL, FACW, or	FAC:	67%	(A/B)
2 Fopulus bais	anniera				Prevalence Index Wo	orksheet.			
4					Total % Cover of		bly by:		
5					OBL Species	· · · · ·		0	
		110	= Total Cover		FACW species	x	2 =	0	
					FAC Species	x	3 =	0	
	t size:)			FACU Species			0	
1					UPL Species		·	0	
2					Column Totals	0 (A)		0 (B)
3 4					Drovolopes Index -	2/A -	#DIV/0!		
+5					Prevalence Index =	- אוכ	#017/0	<u> </u>	
5 6					Hydrophytic Vegetati	ion Indicators	:		
7						1- Rapid Test for		egetation	
8						' 2- Dominance Te		-	
		0	= Total Cover			3-Prevalence Ind			
						4-Morphological /			ipporting
loody Vine Stratum	(plot size: 30					data in Remarks	-		
1 Hedera helix			<u> </u>	FACU		5- Wetland Non-\			-1-:->
2						Problematic Hydr			. ,
		30	= Total Cover		¹ Indicators of hydric soil a	nu wetland hydro	logy must be p	resent, ur	liess
					disturbed or problematic.				
					disturbed or problematic. Hydrophytic				

Depth (Inches)							
(Inches)		he depth	needed to docume		or or confirm the abser	nce of indicators.)	
	Matrix Color (moist)	%	Color (moist)	Redox Fe %	Type ¹ Loc ²	Texture	Remarks
0-10	10YR 3/3	99	10YR 3/4	<u> </u>	C M	Loam	Organic; Fine
10-17	10YR 3/3	97	10YR 3/4	3	<u>с м</u>	Loam	Organic; Fine
		. <u> </u>					
	centration, D=Depletic					Indic	² Location: PL=Pore Lining, M=Matrix. ators for Problematic Hydric Soils ³ :
-	Histosol (A1)		dii Eritə, unicə		ndy Redox (S5)	IIIIII	2 cm Muck (A10)
	Histic Epipedon (A2)				ipped Matrix (S6)		Red Parent Material (TF2)
					amy Mucky Mineral (F1) (
	Black Histic (A3)					except MLRA 1)	Very Shallow Dark Surface (TF12)
	Hydrogen Sulfide (A4				amy Gleyed Matrix (F2)		Other (explain in Remarks)
	Depleted Below Dark		A11)		pleted Matrix (F3)		
1	Thick Dark Surface (A	412)			dox Dark Surface (F6)		³ Indicators of hydrophytic vegetation and wetland
s	Sandy Mucky Mineral	(S1)		Dep	pleted Dark Surface (F7)		hydrology must be present, unless disturbed or
s	Sandy Gleyed Matrix	(S4)		Rec	dox Depressions (F8)		problematic.
Restrictive L	Layer (if present):	:					
ype:							
Depth (inches)	;):					Hydric Soil Pres	sent? Yes No X
Remarks:						-	
IYDROLO	GY						
-	drology Indicators						
Primary Indic	cators (minimum o		uired; check all tl				Secondary Indicators (2 or more required)
Primary Indic		of one req	juired; check all ti	Wa	ter stained Leaves (B9) 2, 4A, and 4B)	(Except MLRA	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
Primary Indic	cators (minimum o Surface Water (A1)	of one req	juired; check all ti	Wa 1, 2	()	(Except MLRA	Water stained Leaves (B9)
Primary Indic	cators (minimum o Surface Water (A1) High Water Table (A2	of one req	juired; check all t	Wa 1, 2 Sal	2, 4A, and 4B)		Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
Primary Indic 5 H S V	cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3)	of one req	juired; check all t	Wa 1, 2 Sali Aqu	2, 4A, and 4B) t Crust (B11)		Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10)
Primary Indic	cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1)	of one req	<u>luired; check all t</u>	Wa 1, 2 Sal Aqu Hyd	2, 4A, and 4B) t Crust (B11) uatic Invertebrates (B13))	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Primary Indic F F S V S C C	cators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B	of one req 2) 32)	luired; check all t	Wa 1, 2 Sal Aqu Hyc Oxi	2, 4A, and 4B) t Crust (B11) uatic Invertebrates (B13) drogen Sulfide Odor (C1)) ng Living Roots (C3)	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (
Primary Indic	cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3)	of one req 2) 32)	juired; check all t	Wa 1, 2 Sal Aqu Hyc Oxi Pre	2, 4A, and 4B) t Crust (B11) uatic Invertebrates (B13) drogen Sulfide Odor (C1) idized Rhizospheres alor) ng Living Roots (C3) C4)	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (X
Primary Indic F F S V S C C A A	cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3) Algal Mat or Crust (B4	of one req 2) 32) 4)	juired; check all t	Wa 1, 2 Sal Aqu Hyc Oxi Pre Rec	2, 4A, and 4B) t Crust (B11) uatic Invertebrates (B13) drogen Sulfide Odor (C1) idized Rhizospheres alon esence of Reduced Iron () ng Living Roots (C3) C4) owed Soils (C6)	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (X Geomorphic Position (D2) Shallow Aquitard (D3)
Primary Indic	Cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5)	of one req 2) 32) 4) (B6)		Wa 1, 2 Sali Aqu Hyc Oxi Pre Reco Stu	2, 4A, and 4B) t Crust (B11) uatic Invertebrates (B13) drogen Sulfide Odor (C1) dized Rhizospheres alon esence of Reduced Iron (cent Iron Reduction in Pla) ng Living Roots (C3) C4) owed Soils (C6)	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5)
Primary Indic S F S S S S S S S S S S S S S S S S S	cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (I	of one req 2) 32) 4) (B6) Aerial Ima	agery (B7)	Wa 1, 2 Sali Aqu Hyc Oxi Pre Reco Stu	2, 4A, and 4B) t Crust (B11) uatic Invertebrates (B13) drogen Sulfide Odor (C1) idized Rhizospheres alon esence of Reduced Iron (cent Iron Reduction in Pla inted or Stressed Plants) ng Living Roots (C3) C4) owed Soils (C6)	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Primary Indic S F S S S S S S S S S S S S S S S S S	cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (I Inundation Visible on Sparsely Vegetated C	of one req 2) 32) 4) (B6) Aerial Ima	agery (B7)	Wa 1, 2 Sali Aqu Hyc Oxi Pre Reco Stu	2, 4A, and 4B) t Crust (B11) uatic Invertebrates (B13) drogen Sulfide Odor (C1) idized Rhizospheres alon esence of Reduced Iron (cent Iron Reduction in Pla inted or Stressed Plants) ng Living Roots (C3) C4) owed Soils (C6)	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Primary Indic	cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (I Inundation Visible on Sparsely Vegetated C vations:	of one req 2) 32) 4) (B6) Aerial Ima	agery (B7)	Wa 1, 2 Sali Aqu Hyc Oxi Pre Reco Stu	2, 4A, and 4B) t Crust (B11) uatic Invertebrates (B13) drogen Sulfide Odor (C1) idized Rhizospheres alon esence of Reduced Iron (cent Iron Reduction in Plu inted or Stressed Plants her (Explain in Remarks)) ng Living Roots (C3) C4) owed Soils (C6)	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Primary Indic	cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (I Inundation Visible on Sparsely Vegetated C vations: Present? Yes	of one req 2) 32) 4) (B6) Aerial Ima	agery (B7) urface (B8)	Wa 1, 2 Sali Aqu Hyc Oxi Pre Rec Stu Oth	2, 4A, and 4B) t Crust (B11) uatic Invertebrates (B13) drogen Sulfide Odor (C1) idized Rhizospheres alon esence of Reduced Iron (cent Iron Reduction in Pla- inted or Stressed Plants her (Explain in Remarks) ches):	ng Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A)	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Primary Indic	cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (I Inundation Visible on Sparsely Vegetated C vations: Present? Yes resent? Yes	of one req 2) 32) 4) (B6) Aerial Ima	agery (B7) urface (B8) No <u>X</u>	Wa 1, 2 Sali Aqu Diamond Oxi Pre Rec Stu Oth	2, 4A, and 4B) t Crust (B11) uatic Invertebrates (B13) drogen Sulfide Odor (C1) idized Rhizospheres alon esence of Reduced Iron (cent Iron Reduction in Ple inted or Stressed Plants her (Explain in Remarks) ches): 	ng Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A)	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Primary Indic	cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (I Inundation Visible on Sparsely Vegetated C vations: Present? Yes resent? Yes sent? Yes y fringe)	of one req 2) 32) 4) (B6) Aerial Ima Concave Si 	agery (B7) iurface (B8) No <u>X</u> No <u>X</u> No <u>X</u>	Wa 1, 2 Salt Aqu Hyc Oxi Pre Rec Stu Oth Depth (inc Depth (inc	2, 4A, and 4B) t Crust (B11) uatic Invertebrates (B13) drogen Sulfide Odor (C1) idized Rhizospheres alon esence of Reduced Iron (cent Iron Reduction in Pla- inted or Stressed Plants her (Explain in Remarks) ches):) ng Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A) Wetland Hyd	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Primary Indic	cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (I Inundation Visible on Sparsely Vegetated C vations: Present? Yes resent? Yes sent? Yes y fringe)	of one req 2) 32) 4) (B6) Aerial Ima Concave Si 	agery (B7) iurface (B8) No <u>X</u> No <u>X</u> No <u>X</u>	Wa 1, 2 Salt Aqu Hyc Oxi Pre Rec Stu Oth Depth (inc Depth (inc	2, 4A, and 4B) t Crust (B11) uatic Invertebrates (B13) drogen Sulfide Odor (C1) idized Rhizospheres alon esence of Reduced Iron (cent Iron Reduction in Plants inted or Stressed Plants her (Explain in Remarks) ches): ches):) ng Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A) Wetland Hyd	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Primary Indic	cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (I Inundation Visible on Sparsely Vegetated C vations: Present? Yes resent? Yes sent? Yes y fringe)	of one req 2) 32) 4) (B6) Aerial Ima Concave Si 	agery (B7) iurface (B8) No <u>X</u> No <u>X</u> No <u>X</u>	Wa 1, 2 Salt Aqu Hyc Oxi Pre Rec Stu Oth Depth (inc Depth (inc	2, 4A, and 4B) t Crust (B11) uatic Invertebrates (B13) drogen Sulfide Odor (C1) idized Rhizospheres alon esence of Reduced Iron (cent Iron Reduction in Plants inted or Stressed Plants her (Explain in Remarks) ches): ches):) ng Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A) Wetland Hyd	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

	WEILAND	DETER	KMINATI	ION DATA FOI	≺w - weste	ern Mountains, Val	leys, and	Coast Reg	ion	
oject/Site:	Rivianna Bea	ch Develo	opment	City/County:	West	Linn/Clackamas	Sampling	Date:	1/29/	2024
pplicant/Owner:	Forward V	ision Dev	velopment	t		State:	OR	Samplin	g Point:	17
vestigator(s):		СМ		Section, To	wnship, Range:		S 2, T 3	S, R 1E		
andform (hillslop	e, terrace, etc.:)		Swa	le	Local relief (co	ncave, convex, none):	Conca	ave Slo	ope (%):	3
ubregion (LRR):		LRRA		Lat:	45.34	48 Long:	-122.6	394	Datum:	WGS84
oil Map Unit Nar	me:		Wapat	o silty clay loam		NWI Cla	ssification:		N/A	
re climatic/hydro	ologic conditions o	on the site ty	pical for this	s time of year?	Yes	X No	(if	no, explain in Re	marks)	
e vegetation	Soil	or Hy	drology	significantly dist	urbed?	Are "Normal Circumstanc	es" present?	(Y/N)	Y	
e vegetation	Soil	or Hy	drology	naturally probler	natic? If needed	l, explain any answers in Rei	marks.)			
		- Attac	h cito ma	an chowing can	anling noint	locations, transects	importan	t foaturos a	te	
	tation Present?	Yes		No			, importan	it leatures, e		
ydric Soil Prese		Yes —		No	Is Sampled Ar		x	No		
/etland Hydrolog		Yes			a Wetla	nd?		No		
	Jy Flesent?	163	<u> </u>	No						
emarks:										
EGETATIO	N - Use scier	ntific nan	nes of pla	ants.						
			absolute		Indicator	Dominance Test wor	ksheet:			
ree Stratum (nlot size:	`	% cover	r Species?	Status	Number of Domination				
<u>ee stratum</u> ()				Number of Dominant Spec		3	(A)
						That are OBL, FACW, or I	-AC:	3	(A)
						Total Number of Dominan	t			
t						Species Across All Strata:		4	(B)
			0	= Total Cover					`	
apling/Shrub Str	atum (plot size	e: 15)	_		Percent of Dominant Spec	ies			
Rubus arm			_′ 5	х	FAC	That are OBL, FACW, or		75%	(A/B)
2									`	
3						Prevalence Index Wo	orksheet:			
l						Total % Cover of	Mu	Iltiply by:		
5						OBL Species		x 1 =	0	
			5	= Total Cover		FACW species		x 2 =	0	
erb Stratum (plot size:	5)				FAC Species FACU Species		x 3 = x 4 =	0	
	rus arundinace	/	50	х	FAC	UPL Species		x 5 =	0	
Dactylis gl			20	<u> </u>	FACU	Column Totals	0 (A)			B)
Unidentifie	d grass		20	x	(FAC)	-				
Cirsium ar	vense		10		FAC	Prevalence Index =E	3/A =	#DIV/0!		
٥ 						Hydrophytic Vegetati	on Indicato	rs:		
								for Hydrophytic V	egetation/	
			400				2- Dominance			
			100	= Total Cover			3-Prevalence I 4-Morphologic	ndex is $\leq 3.0^{\circ}$ al Adaptations ¹ (provide su	Ipporting
oody Vine Strat	um (plot size:)					ks or on a separa		
		·						n-Vascular Plant	. '	
						F	Problematic H	ydrophytic Veget	ation ¹ (Ex	plain)
			0	= Total Cover		¹ Indicators of hydric soil ar	nd wetland hyd	Irology must be p	oresent, u	nless
						disturbed or problematic. Hydrophytic				
	Herb Stratum		0			Vegetation	Yes	х	No	
6 Bare Ground in										

SOIL			PHS #	72	98	_		Sampling Point:	17
Profile Descri	ption: (Describe to	the depth	needed to docume	nt the indic	ator or co	onfirm the absenc	e of indicators.)		
Depth	Matrix	~ ~ ~			Features Type ¹	Loc ²			
(Inches)	Color (moist)	%	Color (moist)	%	Туре		Texture	Remarks	
0-5	10YR 3/3	100					Loam		
5-7	10YR 3/2	50					Loam		
5-7	10YR 3/3	50					Loam	Madium	
7-15	10YR 3/2	60	10YR5/6	3	<u> </u>	<u> </u>	Loam	Medium	
7-15	10YR 3/3	35	10YR5/6	2	C	<u> </u>	Loam	Medium	
						· ·			
	centration, D=Depleti						India	² Location: PL=Pore Lining, M=Matrix. ators for Problematic Hydric Soils	3.
-	Histosol (A1)		an Eixixs, unles		Sandy Red		maic	2 cm Muck (A10)	,.
	Histic Epipedon (A2)							Red Parent Material (TF2)	N N
	,				Stripped M				
	Black Histic (A3)				-	cky Mineral (F1) (ex	Cept MLRA 1)	Very Shallow Dark Surface	
	Hydrogen Sulfide (A4	-			-	yed Matrix (F2)		Other (explain in Remarks	·)
	Depleted Below Dark	-	A11)		Depleted N				
	Thick Dark Surface (-				k Surface (F6)		³ Indicators of hydrophytic vegetation and	d wetland
	Sandy Mucky Minera	. ,			-	ark Surface (F7)		hydrology must be present, unless dist	
	Sandy Gleyed Matrix	(S4)		F	Redox Dep	pressions (F8)		problematic.	
Restrictive I	Layer (if present)	:							
Туре:					-				
Depth (inches	s):				-		Hydric Soil Pres	sent? Yes <u>X</u> No	
Remarks:									
Mixed matri	x, old disturbed	soils, no	rmal conditions	present.					
HYDROLO									
Wetland Hy	drology Indicator	rs:							
Primary Indic	cators (minimum o	of one rec	luired; check all tl	hat apply)				Secondary Indicators (2 or more r	equired)
	Surface Water (A1)					ned Leaves (B9) (E	Except MLRA	Water stained Leaves (B9)
<u> </u>	High Water Table (A	2)		1	I, 2, 4A, ar	nd 4B)		(MLRA1, 2, 4A, and 4B)	
<u> </u>	Saturation (A3)				Salt Crust ((B11)		X Drainage Patterns (B10)	
·'	Water Marks (B1)			/	Aquatic Inv	ertebrates (B13)		Dry-Season Water Table ((C2)
	Sediment Deposits (I	B2)		H	Hydrogen S	Sulfide Odor (C1)		X Saturation Visible on Aeria	al Imagery (C9)
	Drift Deposits (B3)						Living Roots (C3)	X Geomorphic Position (D2)	
·	Algal Mat or Crust (B	4)				of Reduced Iron (C		Shallow Aquitard (D3)	
·	Iron Deposits (B5)					n Reduction in Plov		Fac-Neutral Test (D5)	
	Surface Soil Cracks					Stressed Plants (D	01) (LRR A)	Raised Ant Mounds (D6) (
	Inundation Visible on Sparsely Vegetated ((Other (Exp	lain in Remarks)		X Frost-Heave Hummocks (D7)
Field Obser		-	(-)						
Surface Water			No X	Depth (inches):				
Water Table P		x	No		inches):	8	Wetland Hvd	rology Present?	
Saturation Pres	sent? Yes	Х	No		inches):	Surface		Yes <u>X</u> No	
(includes capillar						tione) if even itelate			
Describe Reco	orded Data (stream g	auye, mon	noning well, aerial pr	iolos, previo	ous inspect	uoris), it available:			
Pomerice:									
Remarks:									

				0.11			• ···			000
	Rivianna Bea			City/County:	West L	inn/Clackamas	Samplin			/2024
oplicant/Owner:	Forward V		velopment			State:			ling Point:	18
vestigator(s):		СМ		Section, To	wnship, Range:			3S, R 1E		
andform (hillslope	, terrace, etc.:)		Swale			ncave, convex, none):	Conc		Slope (%):	3
ubregion (LRR):		LRRA		Lat:	45.344		-122.6	5394	Datum:	WGS8
oil Map Unit Nam	e:		Wapato s	ilty clay loam			ssification:		N/A	
e climatic/hydrolo	ogic conditions o	on the site ty	pical for this tim	ne of year?	Yes	X No	·	no, explain in F	Remarks)	
re vegetation	Soil	or Hyd	drology	significantly dist	urbed?	Are "Normal Circumstan	ces" present?	(Y/N)	Y	
e vegetation	Soil	or Hyd	drology	naturally problem	matic? If needed	, explain any answers in Re	marks.)			
		– Attac	h site man	showing san	nolina point	locations, transects	s, importa	nt features.	etc.	
drophytic Vegeta		Yes	X No				,		0101	
ydric Soil Present		Yes	No		Is Sampled Ar			No	x	
etland Hydrology		Yes	X No		a Wetlar					
	Tresent:		<u> </u>							
emarks:										
EGETATION	- Use scier	ntific nan	nes of plant	ts.						
			absolute	Dominant	Indicator	Dominance Test wor	ksheet:			
	-4 -1	,	% cover	Species?	Status					
<u>ee Stratum</u> (pl)				Number of Dominant Spe		•		(•)
						That are OBL, FACW, or	FAC:	2		(A)
						Total Number of Dominar				
3						Species Across All Strata		3		(B)
			0	= Total Cover			· _	•		(2)
anling/Chrub Stra	turo (1,1,1	45	<u> </u>							
apling/Shrub Stra Rubus arme		e: 15	_) 5	x	FAC	Percent of Dominant Spe That are OBL, FACW, or		67%		(A/B)
Rubus anne	macus					That are OBL, FACW, O	FAC	07 /0		(A/D)
- 						Prevalence Index We	orksheet:			
ļ						Total % Cover of		ultiply by:		
5						OBL Species		x 1 =	0	
			5	= Total Cover		FACW species		x 2 =	0	
						FAC Species		x 3 =	0	
	ot size:	5)				FACU Species		x 4 =	0	
Schedonoru		eus	40	<u> </u>	FAC	UPL Species		x 5 =	0	
Dactylis glo			30	<u> </u>	FACU	Column Totals	0 (A	.)	0	(B)
Daucus card			<u> </u>		FACU	Drevelence Index -		#DIV/0		
Unidentified	•		10		(FAC) FACU	Prevalence Index =	b/A =	#DIV/0	<u>.</u>	
Cirsium arv	-		5		FAC	Hydrophytic Vegetat	ion Indicate	ors:		
	51136							for Hydrophytic	Vegetation	ı
3							-	e Test is >50%	30:00	
			105	= Total Cover				Index is $\leq 3.0^1$		
							4-Morphologi	cal Adaptations	¹ (provide s	upporting
oody Vine Stratu	m (plot size:)					rks or on a sepa	. ,)
								on-Vascular Pla		
								lydrophytic Veg		
			0	= Total Cover		¹ Indicators of hydric soil a disturbed or problematic.	nd wetland hy	drology must b	e present, u	inless
						Hydrophytic				
Bare Ground in I	Herb Stratum		0			Vegetation	Yes_	Х	No	

SOIL			PHS #	729	8	_		Sampling Point: 18	
	ption: (Describe to	the depth	needed to docume				ce of indicators.)		
Depth (Inches)	Matrix Color (moist)	%	Color (moist)	%	Features Type ¹	Loc ²	Texture	Remarks	
0-10	10YR 3/3	100		/0	.) po		Loam		—
10-17	10YR 3/3	88	10YR 3/4	1	С		Loam	Fine	—
10-17	10YR 3/2	10	10YR 3/4	<u> </u>	c		Loam	Fine	—
	1011(3/2		1011(0/4	<u> </u>	•		Loan		—
			·						
									—
			·						
									—
¹ Type: C=Cond	centration, D=Depleti	on, RM=R	educed Matrix, CS=0	Covered or C	Coated Sa	and Grains.		² Location: PL=Pore Lining, M=Matrix.	
Hydric Soil	Indicators: (Appl	icable to	all LRRs, unless	s otherwis	e notec	J.)	Indic	ators for Problematic Hydric Soils ³ :	
	Histosol (A1)			S	andy Red	dox (S5)		2 cm Muck (A10)	
	Histic Epipedon (A2)			S	tripped N	latrix (S6)		Red Parent Material (TF2)	
	Black Histic (A3)			Lo	oamy Mu	icky Mineral (F1) (e	xcept MLRA 1)	Very Shallow Dark Surface (TF12))
	Hydrogen Sulfide (A4	ł)		L	oamy Gle	eyed Matrix (F2)		Other (explain in Remarks)	
	Depleted Below Dark	Surface (A11)	D	epleted N	Matrix (F3)			
	Thick Dark Surface (A12)		R	edox Dai	rk Surface (F6)			
	Sandy Mucky Minera	l (S1)		D	epleted [Dark Surface (F7)		³ Indicators of hydrophytic vegetation and wetlan hydrology must be present, unless disturbed or	
	Sandy Gleyed Matrix	(S4)		R	edox De	pressions (F8)		problematic.	
Restrictive	Layer (if present)	:							
Type:									
Depth (inches	s):						Hydric Soil Pre	sent? Yes No X	
Remarks:									
HYDROLO Wetland Hy	GY drology Indicator	·c ·							
-									-1)
	cators (minimum c	of one rec	quired; check all tr	11.7/	lotor otoi	ned Leaves (B9) (B		Secondary Indicators (2 or more required	1)
	Surface Water (A1) High Water Table (A	2)			, 2, 4A, a		Except MERA	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)	
	Saturation (A3)	2)			alt Crust	-		Drainage Patterns (B10)	
	Water Marks (B1)					vertebrates (B13)		Dry-Season Water Table (C2)	
	Sediment Deposits (I	32)				Sulfide Odor (C1)		Saturation Visible on Aerial Image	ry (C9)
	Drift Deposits (B3)	,				Rhizospheres along	Living Roots (C3)	X Geomorphic Position (D2)	, ,
	Algal Mat or Crust (B	4)		P	resence	of Reduced Iron (C	4)	Shallow Aquitard (D3)	
	Iron Deposits (B5)			R	ecent Iro	n Reduction in Plo	wed Soils (C6)	Fac-Neutral Test (D5)	
	Surface Soil Cracks	(B6)		S	tunted or	Stressed Plants (01) (LRR A)	Raised Ant Mounds (D6) (LRR A)	
	Inundation Visible on	Aerial Ima	agery (B7)	0	ther (Exp	olain in Remarks)		Frost-Heave Hummocks (D7)	
	Sparsely Vegetated (Concave S	urface (B8)						
Field Obser	vations:								
Surface Water	Present? Yes		No <u>X</u>	Depth (ir	nches):				
Water Table P	resent? Yes	Х	No	Depth (ir	nches):	13	Wetland Hyd	Irology Present?	
Saturation Pre (includes capillar		<u>X</u>	No	Depth (ir	nches):	0-2; 10		Yes X No	
	orded Data (stream g	auge, mon	itoring well, aerial ph	iotos, previoi	us inspec	ctions), if available:			
		0							
Remarks:									

	WETLAND) DETER		N DATA FOI	RM - Weste	ern Mountains, Vall	eys, and Coa	PHS # st Region	7298
roject/Site:	Rivianna Bea			City/County:		Linn/Clackamas	Sampling Date:	-	0/2024
pplicant/Owner:	Forward \	lision Dev	elopment			State:	OR	Sampling Point:	19
/estigator(s):		СМ		Section, To	wnship, Range:		S 36, T 2S, R	1E	
ndform (hillslope	e, terrace, etc.:)	_	Slope		Local relief (co	ncave, convex, none):	None	Slope (%):	3
bregion (LRR):		LRRA		Lat:	45.34		-122.6392	Datum:	WGS84
il Map Unit Nam	ne:		Wapato s	- ilty clay loam		NWI Clas	ssification:	N/A	
e climatic/hydrol	logic conditions of	on the site ty	pical for this tim	e of year?	Yes	X No	(if no, exp	lain in Remarks)	
e vegetation	Soil	or Hyd	Irology	significantly dist	urbed?	Are "Normal Circumstance	es" present? (Y/N)	Y	
e vegetation	Soil		Irology	-		l, explain any answers in Rer	narks.)		
				_					
UMMARY O	F FINDINGS	– Attac	h site map	showing san	npling point	locations, transects	, important fea	tures, etc.	
drophytic Veget	tation Present?	Yes	X No		Is Sampled Ar	ea within			
/dric Soil Preser	nt?	Yes	No	X	a Wetlar			No X	
etland Hydrolog	y Present?	Yes	X No						
emarks:									
			.						
	N - Use scier	ianc nam	absolute	S. Dominant	Indicator	Dominance Test worl	csheet.		
			% cover	Species?	Status	Dominance Test work			
<u>ee Stratum</u> (p	olot size:	30)				Number of Dominant Spec	cies		
Populus ba	Isamifera		20	X	FAC	That are OBL, FACW, or F	AC:	5	(A)
Saliix sp			10	X	(FAC)				
Fraxinus la	tifolia		5		FACW	Total Number of Dominant	t		
						Species Across All Strata:		8	(B)
			35	= Total Cover					
pling/Shrub Stra	atum (plot siz	e: 15)			Percent of Dominant Spec	ies		
Salix sp			20	X	(FAC)	That are OBL, FACW, or	FAC:	63%	(A/B)
Corylus co	rnuta		20	<u> </u>	FACU				
Rosa sp			15	<u> </u>	(FAC)	Prevalence Index Wo			
Rubus arm			<u> </u>		FAC FAC	Total % Cover of	Multiply b	<u> </u>	
Populus ba	isainnera		100	= Total Cover	FAC	OBL Species	x 1 =	0	
			100			FAC Species	x 2 =		
erb Stratum (p	olot size:	5)				FACU Species	x 4 =		
Unidentifie	d grass		20	Х	(FAC)	UPL Species	x 5 =	0	
Polystichur	m munitum		10	Х	FACU	Column Totals	0 (A)	0	(B)
						Prevalence Index =B	3/A =	#DIV/0!	
						Hydrophytic Vegetati			
							- Rapid Test for Hyd		n
			30	= Total Cover			2- Dominance Test is 3-Prevalence Index is		
							-Morphological Adap		supporting
oody Vine Stratu	<u>um</u> (plot size:	30)				lata in Remarks or o		
Hedera heli	ix		75	X	FACU	5	- Wetland Non-Vasc	ular Plants ¹	
						F	Problematic Hydrophy	ytic Vegetation ¹ (E	xplain)
			75	= Total Cover		¹ Indicators of hydric soil ar	nd wetland hydrology	must be present,	unless
						disturbed or problematic.			
						Hydrophytic			
Bare Ground in	Herb Stratum	7	0			Vegetation	Yes X	No	

Shrubs continued: Ilex americana (UPL), Crataegus monogyna (FAC) 10% each and Prunus laurocerasus (UPL) 5%

SOIL			PHS #	72	98			Sampling Point: 19
Profile Descri	ption: (Describe to	the depth	needed to docume	nt the indi	cator or co	nfirm the absen	ce of indicators.)	
Depth	Matrix				x Features	. 2	_	
(Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-8	10YR 2/2	100					Silty Clay Loam	
8-16	10YR 2/2	98	10YR 2/3	2	С	<u>M</u>	Silty Clay Loam	Fine; minor sand
	. <u> </u>					·		
	centration, D=Deplet							² Location: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (App	licable to	all LRRs, unles	s otherwi	ise noted.)	Indica	ators for Problematic Hydric Soils ³ :
	Histosol (A1)				Sandy Redo	ox (S5)		2 cm Muck (A10)
	Histic Epipedon (A2))			Stripped Ma	. ,		Red Parent Material (TF2)
	Black Histic (A3)				Loamy Mucl	ky Mineral (F1) (e	except MLRA 1)	Very Shallow Dark Surface (TF12)
	Hydrogen Sulfide (A	4)			Loamy Gley	ed Matrix (F2)		Other (explain in Remarks)
	Depleted Below Dar	k Surface (A11)		Depleted Ma	atrix (F3)		
·	Thick Dark Surface	(A12)			Redox Dark	Surface (F6)		3
	Sandy Mucky Minera	al (S1)			Depleted Da	ark Surface (F7)		³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or
	Sandy Gleyed Matrix	(S4)			Redox Depr	essions (F8)		problematic.
Restrictive	Layer (if present):						
Type:								
Depth (inches	s):				_		Hydric Soil Pres	ent? Yes No X
Remarks:					_		-	
HYDROLO	GY							
r	drology Indicato	rs:						
Primary India	cators (minimum	of one rec	wired: check all t	hat annly)				Secondary Indicators (2 or more required)
-	Surface Water (A1)		dired, check an t			ed Leaves (B9) (Except MLRA	Water stained Leaves (B9)
	High Water Table (A	(2)			1, 2, 4A, an			(MLRA1, 2, 4A, and 4B)
	Saturation (A3))			Salt Crust (E	B11)		Drainage Patterns (B10)
	Water Marks (B1)					ertebrates (B13)		Dry-Season Water Table (C2)
	Sediment Deposits (B2)				ulfide Odor (C1)		Saturation Visible on Aerial Imagery (C
	Drift Deposits (B3)				Oxidized Rh	izospheres alon	g Living Roots (C3)	Geomorphic Position (D2)
	Algal Mat or Crust (E	34)			Presence of	Reduced Iron (0	C4)	Shallow Aquitard (D3)
	Iron Deposits (B5)				Recent Iron	Reduction in Plo	owed Soils (C6)	Fac-Neutral Test (D5)
	Surface Soil Cracks	(B6)			Stunted or S	Stressed Plants (D1) (LRR A)	Raised Ant Mounds (D6) (LRR A)
	Inundation Visible or	n Aerial Ima	agery (B7)		Other (Expla	ain in Remarks)		Frost-Heave Hummocks (D7)
	Sparsely Vegetated	Concave S	urface (B8)					
Field Obser	vations:							
Surface Water	Present? Yes		No X	Depth	(inches):			
Water Table P	resent? Yes	х	No	Depth	(inches):	12	Wetland Hyd	rology Present?
Saturation Pre (includes capillar		X	No	Depth	(inches):	10		Yes X No
	rded Data (stream g		itoring well serial pl	notos previ		ons) if available		
Describe reco	aca Dala (Silcalli g	lauge, mon	itering wen, dena pi	10103, previ				
Remarks:								

			RMINATION				-		-	
Project/Site: Rivianna Beach E				City/County:	West L	_inn/Clackamas	Sampling Date:		1/29/2024	
oplicant/Owner:	Forward \	/ision Dev	velopment			State:			pling Point:	20
vestigator(s):		СМ		Section, To	wnship, Range:		S 36, T	2S, R 1E		
andform (hillslop	e, terrace, etc.:)		Slope		Local relief (cor	ncave, convex, none):	Conc	ave	Slope (%):	3
ubregion (LRR):		LRRA		Lat:	45.345	58 Long:	-122.6	392	Datum:	WGS84
oil Map Unit Nar	ne:		Wapato s	ilty clay loam		NWI Clas	ssification:		N/A	
re climatic/hydro	ologic conditions of	on the site ty	pical for this tim	e of year?	Yes	X No	(if	no, explain in	Remarks)	
re vegetation	Soil	or Hyd	drology	significantly dist	urbed?	Are "Normal Circumstanc	es" present?	(Y/N)	Y	
e vegetation	Soil	or Hyd	drology	naturally problem	matic? If needed	, explain any answers in Rer	marks.)			
			h - 14	- 1		I			- 4 -	
				snowing san	npling point	locations, transects	, importar	it features	, etc.	
	tation Present?	Yes	X No		Is Sampled Ar	ea within				
ydric Soil Prese		Yes	X No		a Wetlar		<u>X</u>	No		
etland Hydrolog	y Present?	Yes	X No							
emarks:										
EGEIAIIO	N - Use scier	ITITIC nan	absolute	S. Dominant	Indicator	Dominance Test wor	kehoot:			
			% cover	Species?	Status	Dominance Test wor	KSneet:			
ee Stratum (plot size:	30)				Number of Dominant Spec	cies			
Salix sp			25	Х	(FAC)	That are OBL, FACW, or F	FAC:	6	((A)
Fraxinus la	ntifolia		10	Х	FACW					
						Total Number of Dominan	t			
·						Species Across All Strata:		6	(В)
			35	= Total Cover						
apling/Shrub Str	<u>atum</u> (plot siz	e: 15)			Percent of Dominant Spec	cies			
Salix sp			60	Х	(FAC)	That are OBL, FACW, or	FAC:	100%	<u>(</u>)	A/B)
Fraxinus la	ntifolia		40	Х	FACW					
Rosa sp			20		(FAC)	Prevalence Index Wo	orksheet:			
						Total % Cover of	Mu	ultiply by:		
. <u> </u>						OBL Species		x 1 =	0	
			120	= Total Cover		FACW species		x 2 =	0	
erb Stratum (plot size:	5)				FAC Species		x 3 = x 4 =	0	
Phalaris ar	·		75	х	FACW	UPL Species		x 5 =	0	
Unidentifie			20	<u> </u>	(FAC)	Column Totals	0 (A			B)
3	<u> </u>					-				,
						Prevalence Index =E	3/A =	#DIV/	0!	
						Hydrophytic Vegetati	on Indicato	ors:		
						1	1- Rapid Test	for Hydrophyti	c Vegetation	
							2- Dominance			
			95	= Total Cover			3-Prevalence			innortin ~
oody Vine Strat	um (plot size:)				4-Morphologic data in Remar			
oody vine Strai	<u>uni</u> (piot 5126.		_'				5- Wetland No		,	
2							Problematic H			plain)
			0	= Total Cover		¹ Indicators of hydric soil ar				
						disturbed or problematic.		5,	, .	
Bare Ground ir			5			Hydrophytic Vegetation	Yes	x	No	

SOIL			PHS #	72	98	_		Sampling Point: 20		
	ption: (Describe to	the depth	needed to docume			onfirm the absen	ce of indicators.)			
Depth	Matrix	0/			Features	Loc ²	- .			
	(Inches) Color (moist) %		Color (moist)	%	Type ¹	LOC		Remarks		
0-5	10YR 3/2	100					Silty Clay Loam	<u> </u>		
5-15	10YR 2/2	95	10YR 3/4	5	C	M	Silty Clay Loam	Medium		
	centration, D=Deplet							² Location: PL=Pore Lining, M=Matrix.		
-	Indicators: (App	licable to	all LRRs, unles				Indica	ators for Problematic Hydric Soils ³ :		
	Histosol (A1)				Sandy Rec			2 cm Muck (A10)		
	Histic Epipedon (A2)				Stripped M			Red Parent Material (TF2)		
	Black Histic (A3)				-	cky Mineral (F1) (e	except MLRA 1)	Very Shallow Dark Surface (TF12)		
	Hydrogen Sulfide (A				-	eyed Matrix (F2)		Other (explain in Remarks)		
	Depleted Below Darl		A11)		Depleted N					
	Thick Dark Surface ((A12)				k Surface (F6)		³ Indicators of hydrophytic vegetation and wetland		
	Sandy Mucky Minera					Dark Surface (F7)		hydrology must be present, unless disturbed or		
	Sandy Gleyed Matrix	(S4)			Redox Dep	pressions (F8)	-	problematic.		
Restrictive	Layer (if present)):								
Туре:					_					
Depth (inches	s):						Hydric Soil Present? Yes X No			
Remarks:										
	<u></u>									
HYDROLO										
_	drology Indicato									
	cators (minimum o	of one rec	uired; check all t					Secondary Indicators (2 or more required)		
	Surface Water (A1)				Water staiı 1, 2, 4A, a	ned Leaves (B9) (nd 4 B)	Except MLRA	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)		
	High Water Table (A	.2)								
	Saturation (A3)				Salt Crust			Drainage Patterns (B10)		
	Water Marks (B1)				-	vertebrates (B13)		Dry-Season Water Table (C2)		
	Sediment Deposits (Drift Deposite (B2)	B2)				Sulfide Odor (C1)	a Living Deate (C2)	Saturation Visible on Aerial Imagery (C9)		
	Drift Deposits (B3) Algal Mat or Crust (E	24)				of Reduced Iron (g Living Roots (C3)	X Geomorphic Position (D2) Shallow Aquitard (D3)		
	Iron Deposits (B5)	, ,				n Reduction in Plo	,	X Fac-Neutral Test (D5)		
	Surface Soil Cracks	(B6)				Stressed Plants (Raised Ant Mounds (D6) (LRR A)		
	Inundation Visible or		agery (B7)			lain in Remarks)	, (,	Frost-Heave Hummocks (D7)		
	Sparsely Vegetated					,				
Field Obser			. ,							
Surface Water			No X	Dopth	(inches):					
Water Table P		x	No X		(inches):	8	Wetland Hyd	rology Present?		
Saturation Pre		<u>x</u>	No		(inches):	Surface	Wetland Hyd	Yes X No		
(includes capillar				Deptil	(inches).	Gunace				
Describe Reco	rded Data (stream g	auge, mon	itoring well, aerial pl	hotos, previ	ous inspec	tions), if available	:			
Remarks:										

Project/Site: Rivianna Beach Development			City/County:	West	Linn/Clackamas	Sampling Date:		1/29/2024		
plicant/Owner:			evelopment	- ,·		State:	OR	•	mpling Point:	21
estigator(s):		CM		Section To	wnship, Range:			2S, R 1E		
	e, terrace, etc.:)		Slope	-		ncave, convex, none):	No		Slope (%):	2
bregion (LRR):		LRRA		Lat:	45.34	· -			Datum:	WGS84
il Map Unit Nam				ilty clay loam			ssification:		N/A	
		on the site '	typical for this tim	-	Yes		-	f no, explain i		
-	Soil			significantly dist		Are "Normal Circumstanc	`	•	Y	
-	Soil			•		l, explain any answers in Rer	•	()		
		_ ·		<u> </u>			,			
UMMARY O	F FINDINGS	– Atta	ch site map s	showing sar	npling point	locations, transects	, importa	nt feature	es, etc.	
/drophytic Vegeta	ation Present?	Yes	X No		Is Sampled A	rea within				
ydric Soil Presen	nt?	Yes	No	Х	a Wetla	nd? Yes		No	Х	
etland Hydrology	y Present?	Yes	No	X						
emarks:										
ECETATION		tific a -	mes of plant							
	n - USE SCIEI	nine na	absolute	s. Dominant	Indicator	Dominance Test wor	ksheet [.]			
			% cover	Species?	Status					
<u>ee Stratum</u> (p	olot size:	30))	_		Number of Dominant Spec	cies			
Fraxinus lat	tifolia		20	Χ	FACW	That are OBL, FACW, or F	AC:	4		(A)
Rosa sp			5	<u> </u>	(FAC)					
					Total Number of Dominan					
			25	= Total Cover		Species Across All Strata:	-	4		(B)
apling/Shrub Stra	atum (plot siz	ə:	_)			Percent of Dominant Spec		400	N 0/	
						That are OBL, FACW, or	FAC:	100	70	(A/B)
						Prevalence Index Wo	rksheet:			
						Total % Cover of		fultiply by:		
						OBL Species	<u> </u>	x 1 =	0	
			0	= Total Cover		FACW species		x 2 =	0	
						FAC Species		x 3 =	0	
	olot size:	5)			FACU Species		x 4 =	0	
	us arundinac	eus	50	Χ	FAC	UPL Species		x 5 =	0	
Unidentified	d grass		50	Χ	(FAC)	Column Totals	0 (A)	0	(B)
						Prevalence Index =E	2/4 -	#DI\	//01	
						Prevalence Index =E	5/A =	#DI	//0!	
						Hydrophytic Vegetati	on Indicat	ors:		
									ytic Vegetatior	ı
								e Test is >50		
			100	= Total Cover				e Index is ≤ 3 .		
									ons ¹ (provide s	
	um (plot size:)						eparate sheet)
								lon-Vascular		
									/egetation ¹ (E)	• •
			-				a divetional b	vdroloav mus	the present i	INIACC
Yoody Vine Stratu			0	= Total Cover		¹ Indicators of hydric soil ar disturbed or problematic.	ia weliana n	yarology mao	t be present, t	111633
			0	= Total Cover		disturbed or problematic. Hydrophytic	ia wetiana n	yarology mao	i be present, t	111655

SOIL			PHS #	7298	_		Sampling Point:	21	
Profile Descri	ption: (Describe to	the depth	needed to docume	nt the indicator or o	confirm the abser	nce of indicators.)			
Depth	Matrix			Redox Features					
(Inches)	Color (moist)	%	Color (moist)	% Type'	Loc ²	Texture	Remarks	3	
0-16	10YR 3/2	100							
	-								
		·							
		·							
¹ Type: C=Con	centration, D=Deple	tion, RM=Re	educed Matrix, CS=0	Covered or Coated S	and Grains.		² Location: PL=Pore Lining, M		
Hydric Soil	Indicators: (App	licable to	all LRRs, unless	s otherwise note	d.)	Indic	ators for Problematic Hyd	ric Soils ³ :	
	Histosol (A1)			Sandy Re	edox (S5)		2 cm Muck (A10	<i>i</i>)	
	Histic Epipedon (A2)		Stripped I	Matrix (S6)		Red Parent Mate	erial (TF2)	
	Black Histic (A3)			Loamy M	ucky Mineral (F1) (except MLRA 1)	Very Shallow Da	ark Surface (TF12)	
	Hydrogen Sulfide (A	4)		Loamy G	eyed Matrix (F2)		Other (explain ir	Remarks)	
	Depleted Below Dar	-	11)		Matrix (F3)			,	
	Thick Dark Surface		(11)		ark Surface (F6)				
							³ Indicators of hydrophytic vege	etation and wetland	
	Sandy Mucky Miner				Dark Surface (F7)		hydrology must be present, u		
	Sandy Gleyed Matri	x (S4)		Redox De	pressions (F8)		problematic		
Restrictive	Layer (if present):							
Type:									
Depth (inches	s):					Hydric Soil Pres	sent? Yes	No X	
Remarks:									
HYDROLO	GY								
Wetland Hy	drology Indicato	ors:							
Primary Indi	cators (minimum	of one req	uired; check all th	nat apply)			Secondary Indicators (2 d	or more required)	
	Surface Water (A1)				ined Leaves (B9)	(Except MLRA	Water stained L		
	High Water Table (A	(2)		1, 2, 4A, a			(MLRA1, 2, 4A,		
	Saturation (A3)			Salt Crus	t (B11)		Drainage Patter	ns (B10)	
	Water Marks (B1)				vertebrates (B13)		Dry-Season Wa		
	Sediment Deposits	(B2)			Sulfide Odor (C1)		Saturation Visible on Aerial Imagery		
		(DZ)			. ,				
	Drift Deposits (B3)				-	ig Living Roots (C3)	Geomorphic Pos		
	Algal Mat or Crust (I	54)			of Reduced Iron (Shallow Aquitare		
	Iron Deposits (B5)	(= -)			on Reduction in Pl	· · · ·	X Fac-Neutral Tes		
	Surface Soil Cracks				r Stressed Plants	(D1) (LRR A)		nds (D6) (LRR A)	
	Inundation Visible o			Other (Ex	plain in Remarks)		Frost-Heave Hu	mmocks (D7)	
	Sparsely Vegetated	Concave S	urface (B8)						
Field Obser	vations:								
Surface Water	Present? Yes		No X	Depth (inches):					
Water Table P	resent? Yes		No X	Depth (inches):	>16	Wetland Hyd	Irology Present?		
Saturation Pre	sent? Yes		No X	Depth (inches):	>16		Yes	No X	
(includes capilla	y fringe)								
Describe Reco	orded Data (stream ç	gauge, moni	toring well, aerial ph	iotos, previous inspe	ctions), if available):			
Remarks:									

roject/Site: R	ivianna Bea	ch Devela	nment	City/County:	West	Linn/Clackamas	Sampling Date: 1/2			9/2024	
					west		'			2024	
plicant/Owner:	Forward V	CM	reiopment		umehin Denge	State:			npling Point:	22	
/estigator(s):	tormood ato i)	CIM	Slop		wnship, Range:			Γ2S, R1E one	$\Omega_{\rm lang}(0/)$	2	
ndform (hillslope,	terrace, etc)					ncave, convex, none):			Slope (%):		
bregion (LRR):		LRRA		Lat:	45.34		-122.		Datum:	WGS84	
oil Map Unit Name				o silty clay loam			ssification:		N/A		
e climatic/hydrolog	-		•		Yes		`	if no, explain ii			
e vegetation		_ `		significantly dist		Are "Normal Circumstand		? (Y/N) _	Y		
e vegetation	Soil	or Hyd	drology	naturally proble	matic? If needeo	l, explain any answers in Re	marks.)				
UMMARY OF	FINDINGS	– Attac	h site ma	p showing san	npling point	locations, transects	, importa	ant feature	s, etc.		
drophytic Vegetat		Yes		No			<u> </u>				
/dric Soil Present?		Yes		 No	Is Sampled A a Wetla		х	No			
etland Hydrology l		Yes		No	a wella			-			
emarks:											
marks:											
EGETATION	- Use scier	tific nan	nes of pla	ants.							
			absolute	Dominant	Indicator	Dominance Test wor	ksheet:				
Otrat ()			% cover	Species?	Status						
<u>ee Stratum</u> (plo)				Number of Dominant Spec				(A)	
						That are OBL, FACW, or I	-AU:	4		(A)	
						Total Number of Dominan	t				
						Species Across All Strata:		4		(B)	
			0	= Total Cover							
unling/Chruch Strate		45									
pling/Shrub Strate		e: 15	_)	×		Percent of Dominant Spec		100	0/		
Fraxinus lati	rolla		<u>40</u> 10	<u> </u>	FACW	That are OBL, FACW, or	FAC:	100	%	(A/B)	
Rosa sp			10	<u> </u>	(FAC)	Prevalence Index Wo	rkshoot.				
						Total % Cover of		Aultiply by:			
						OBL Species		x 1 =	0		
			50	= Total Cover		FACW species		x 2 =	0		
				_		FAC Species		x 3 =	0		
erb Stratum (plo	ot size:	5)				FACU Species		x 4 =	0		
Schedonorus	s arundinace	eus	50	X	FAC	UPL Species		x 5 =	0		
Unidentified	grass		50	X	(FAC)	Column Totals	0 (A)	0	(B)	
						Prevalence Index =E	3/A =	#DIV	/0!		
						Hadaa Lati Maria a					
						Hydrophytic Vegetati			4:- \/ · · ·		
								t for Hydrophy	-	1	
			100	= Total Cover				e Test is >50% e Index is ≤ 3.0			
			100					ical Adaptation		upporting	
oody Vine Stratun	<u>n</u> (plot size:)					arks or on a se			
			-				5- Wetland N	Ion-Vascular F	Plants ¹		
							Problematic	Hydrophytic V	egetation ¹ (Ex	(plain)	
			0	= Total Cover		¹ Indicators of hydric soil a	nd wetland h	ydrology must	be present, u	inless	
						disturbed or problematic. Hydrophytic					
						Hydronhytic					
Bare Ground in H	erh Stratum		0			Vegetation	Yes	Х	No		

SOIL			PHS #	7	298			Sampling Point: 22
	ption: (Describe to t	the depth	needed to docume			nfirm the absen	ice of indicators.)	
Depth (Inches)	Matrix Color (moist)	%	Color (moist)	Redo %	x Features Type ¹	Loc ²	Texture	Remarks
0-14	10YR 3/2	95	10YR 4/4	5	C		Silty Clay Loam	
0-14	10TR 3/2	95	101K 4/4	5	<u> </u>		Sitty Clay Loan	Coarse
						·		
						·		
						·		
						.		
						• <u> </u>		
	centration, D=Depleti							² Location: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Appl	icable to	all LRRs, unles	s otherw	vise noted.	.)	Indica	ators for Problematic Hydric Soils ³ :
	Histosol (A1)				Sandy Redo			2 cm Muck (A10)
	Histic Epipedon (A2)				Stripped Ma			Red Parent Material (TF2)
	Black Histic (A3)				Loamy Muc	ky Mineral (F1) (except MLRA 1)	Very Shallow Dark Surface (TF12)
	Hydrogen Sulfide (A4	l)			Loamy Gley	/ed Matrix (F2)		Other (explain in Remarks)
	Depleted Below Dark	Surface (A11)		Depleted M	atrix (F3)		
	Thick Dark Surface (A	A12)		X	Redox Dark	s Surface (F6)		3
	Sandy Mucky Minera	l (S1)			Depleted Da	ark Surface (F7)		³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or
	Sandy Gleyed Matrix	(S4)			Redox Depr	ressions (F8)		problematic.
Restrictive	Layer (if present)	:						
Туре:								
Depth (inches	s):				_		Hydric Soil Pres	ent? Yes X No
Remarks:					_			
HYDROLO	GY							
Wetland Hy	drology Indicator	's:						
Primary Indi	cators (minimum o	of one rec	uired; check all t	hat apply)			Secondary Indicators (2 or more required)
	Surface Water (A1)				-	ed Leaves (B9) (Except MLRA	Water stained Leaves (B9)
	High Water Table (A2	2)			1, 2, 4A, an	id 4B)		(MLRA1, 2, 4A, and 4B)
	Saturation (A3)				Salt Crust (I	B11)		Drainage Patterns (B10)
	Water Marks (B1)				Aquatic Inve	ertebrates (B13)		Dry-Season Water Table (C2)
	Sediment Deposits (E	32)			Hydrogen S	Sulfide Odor (C1)		X Saturation Visible on Aerial Imagery (C9
	Drift Deposits (B3)				Oxidized Rh	nizospheres alon	g Living Roots (C3)	Geomorphic Position (D2)
	Algal Mat or Crust (B	4)			Presence of	f Reduced Iron (C4)	Shallow Aquitard (D3)
	Iron Deposits (B5)				Recent Iron	Reduction in Plo	owed Soils (C6)	X Fac-Neutral Test (D5)
	Surface Soil Cracks ((B6)			Stunted or S	Stressed Plants ((D1) (LRR A)	X Raised Ant Mounds (D6) (LRR A)
	Inundation Visible on				Other (Expla	ain in Remarks)		X Frost-Heave Hummocks (D7)
	Sparsely Vegetated (Concave S	urface (B8)					
Field Obser	vations:							
Surface Water	Present? Yes		No X	Depth	(inches):			
Water Table P	resent? Yes		No <u>X</u>	Depth	(inches):	>14	Wetland Hyd	rology Present?
Saturation Pre (includes capillar			No <u>X</u>	Depth	(inches):	>14		Yes <u>X</u> No
	orded Data (stream ga	auge, mon	itoring well, aerial pł	notos, prev	vious inspecti	ions), if available	L	
		0,	0 / 1		·			
Remarks:								

Appendix C

Study Area Photos (ground level)





Photo A:

Looking southeast towards Sample Points 14 & 15 along Wetland A's northwest boundary. The Blue Heron Lagoon is in the background.

Photo B:

Looking southeast towards Sample Points 3 and 4 along the Wetland A's boundary. The Blue Heron Lagoon is in the background.



Project # 7298 Date 3/19/2024



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Photo C:

Looking southwest along the northern berm of the onsite settling pond (Blue Heron Lagoon). Wetland A is on right side of photo.

Photo D:

Facing northwest towards the beaver dam west of 4th Street.



Project # 7298 Date 3/19/2024



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Photo E:

Looking southeast in the downstream direction of Stream 1, east of 4th Street.

Photo F:

Looking east at Sample Points 19 & 20 on Wetland B's northern boundary.



Project # 7298 Date 3/19/2024



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Photo G:

Looking north at Sample Points 21 & 22 at northeast end of Wetland B.

Photo H:

Looking south towards the Willamette River and Sample Point 11.



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