



May 3, 2019

EXHIBIT H

Carey Sheldon
PO Box 883
Fairview, OR 97024

RE: Dubarko Road Subdivision – Wetland Determination

Carey:

This letter provides findings of a wetlands determination conducted by Environmental Science & Assessment, LLC (ES&A) at 40808 & 41010 Highway 26 in Sandy, Oregon (TL# 25E18CD00900 & TL#25E18CD01000) to evaluate the existing conditions. The 16.12-acre site is located directly east of a subdivision near Dubarko Road and Meadows Avenue and south of Highway 26 in the east end of Sandy, Oregon (Figure 1; Attachment A). The parcel boundaries and base topographic survey were provided by All County Surveyors and Planners, Inc.

A 6-lot subdivision and 216-unit condominium complex site is planned for the project. The project developer contracted ES&A to determine the presence of jurisdictional resources on site and determine the presence or absence of potential stream or wetland within the site.

METHODOLOGY

Potential wetland areas on the parcel were evaluated using the methodology provided in the Army Corps of Engineers *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region*, (U.S. Army Corps of Engineers, 2010). This methodology defines criteria for hydrology, soils, and vegetation to identify wetland areas.

Two levels of investigation were used to evaluate the presence or absence of Sensitive Areas. The first level included a review of existing and available background data. The second level consisted of an on-site field investigation.

Reviewed background data included the following information:

- Aerial Photography (Google Earth, 2018)
- City of Sandy Local Wetland Inventory (Sri/Shapiro AGCO Inc., 1997)
- USFWS National Wetland Inventory (NWI) (USFWS, 2019)
- Natural Resource Conservation Service (NRCS) Soil Survey of Clackamas County, Oregon (Web Soil Survey, 2019)
- Topography (Metro Data Resource Center's MetroMap, 2018)

The lots within site are currently undeveloped, but a small structure was located on TL 1000 in 2012 based on the available 2012 aerial photos (Figure 2). The only evidence of water or wetland resources on site is an intermittent stream mapped on the City of Sandy Local Wetland Inventory (LWI) extending east to west through the site. The USFWS NWI does not map wetland or waters within the site (Figure 3) and the NRCS soil survey does not map hydric soils on site (Figure 4).

ES&A wetland scientist, Jack Dalton, conducted the site assessment on March 23, 2019, with a preliminary site visit on June 8, 2018. Three (3) wetland determination data plots were established to document existing conditions on-site (Figure 5). The data sheets are included in Appendix C of this report. Data plot locations were mapped in the field using a hand-held resource grade GPS unit and transferred to a base topographic survey provided by All County Surveyors and Planners, Inc. (Attachment A).

EXISTING CONDITIONS

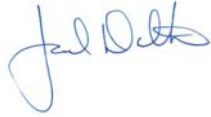
The 16.12-acre site located at 40808 & 41010 Highway 26, Sandy, Oregon (TL# 25E18CD00900 & TL#25E18CD01000) is bordered by Highway 26 to the north and a neighborhood to the west. Agricultural land is located east of the site and a single-family residence is located on the lot directly east (Figure 1). A stub for Dubarko Road and a second road stub for Fawn Street are located along the west site boundary (Figure 2).

The investigation found no water feature at the mapped location in the middle of the site. While there is a narrow linear depression extending roughly east to west through the site, no defined channel bed or bank is present, as documented by site data plot locations (Figure 5). No evidence of ponding was observed in the lowest points in the west end of the site and no evidence of seasonal surface water flow was observed in the area of the mapped stream. The plant community is primarily a weedy cleared field dominated by Himalayan blackberry (*Rubus armeniacus*, FAC) and pasture grasses. The tree groves on site are primarily Douglas fir (*Pseudotsuga menziesii*, FACU) with small clusters of western red-cedar (*Thuja plicata*, FAC). No wetland vegetation is present on site. Soils sampled at the three data plots all lacked hydric soil indicators and showed no evidence of sub-surface saturation, high seasonal groundwater, saturation or other hydrology indicators. Photos documenting the existing conditions and plant community are provided in Attachment B. Detailed plant and soil data is provided in Attachment C.

It is my conclusion that the intermittent stream feature mapped on the LWI mapping is not longer accurate and no stream feature or wetland is currently present on site. Any historic drainage that may have extended through the site has is no longer present and was altered by past land use or a change in the surrounding basin hydrology up slope of site. There is no evidence of any surface water entering the site from the east and no evidence of wetland or seasonal ponded water features was observed in the lowest topographic point of site where wetland or were most likely to be located.

If you have any questions about the findings presented in this letter, I would be happy to discuss the determination findings further.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jack Dalton". The signature is fluid and cursive, with the first name "Jack" being more prominent than the last name "Dalton".

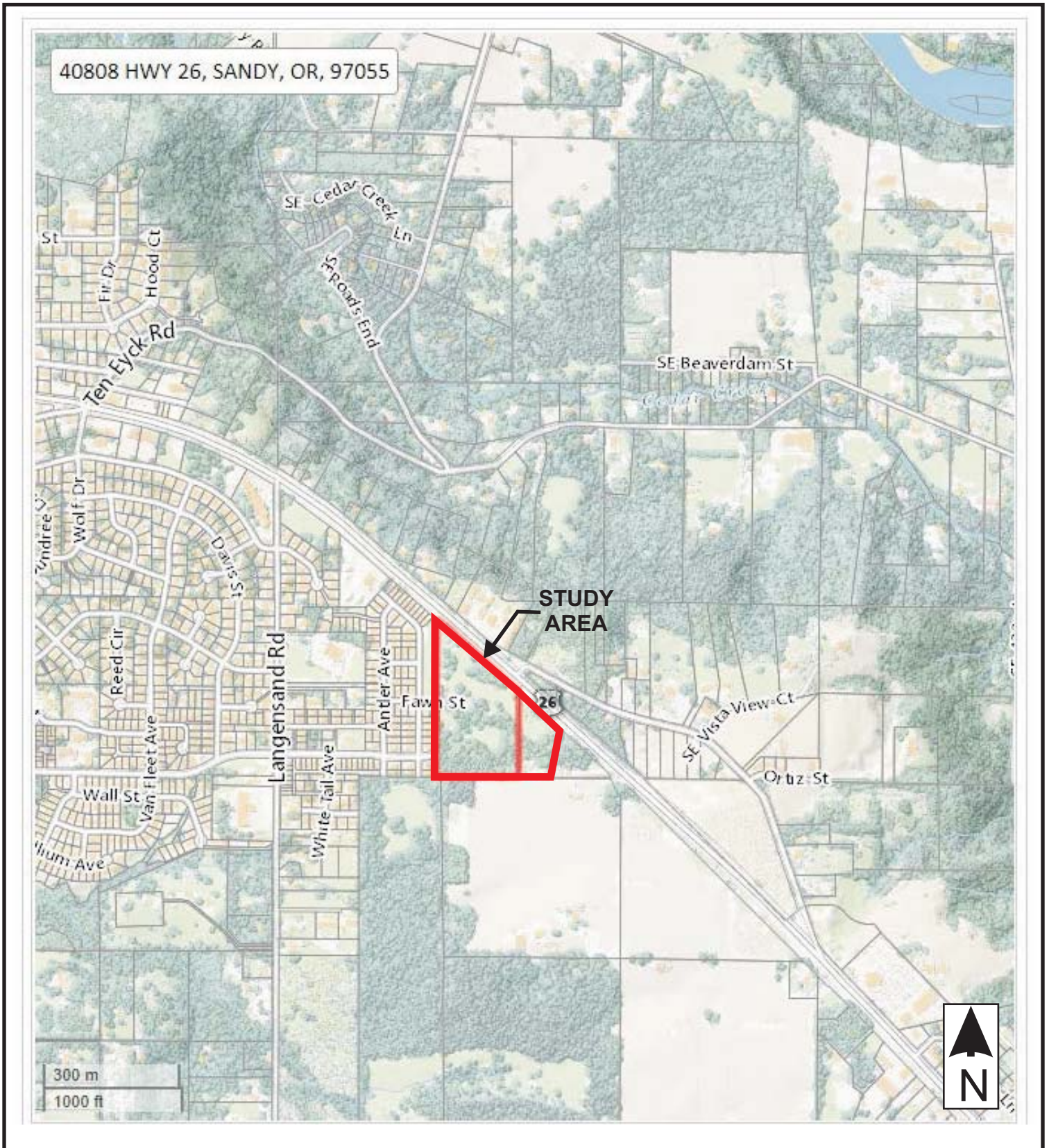
Jack Dalton
Environmental Science & Assessment, LLC

Cc: Alex Reverman (via email)
Ray Moore (via email)

Attachments

- A – Figures
- B – Site Photos
- C - Wetland Determination Data

ATTACHMENT A: FIGURES



Source: Metro Data Resource Center. <http://gis.oregonmetro.gov/metromap/>

Environmental
Science &
Assessment, LLC

Vicinity Map
Dubarko Road Subdivision
Sandy, Oregon

Figure 1

Approx. Scale:
1in. = 100 ft.



Source: Google Earth

Image Date: 9/3/2018

Environmental
Science &
Assessment, LLC



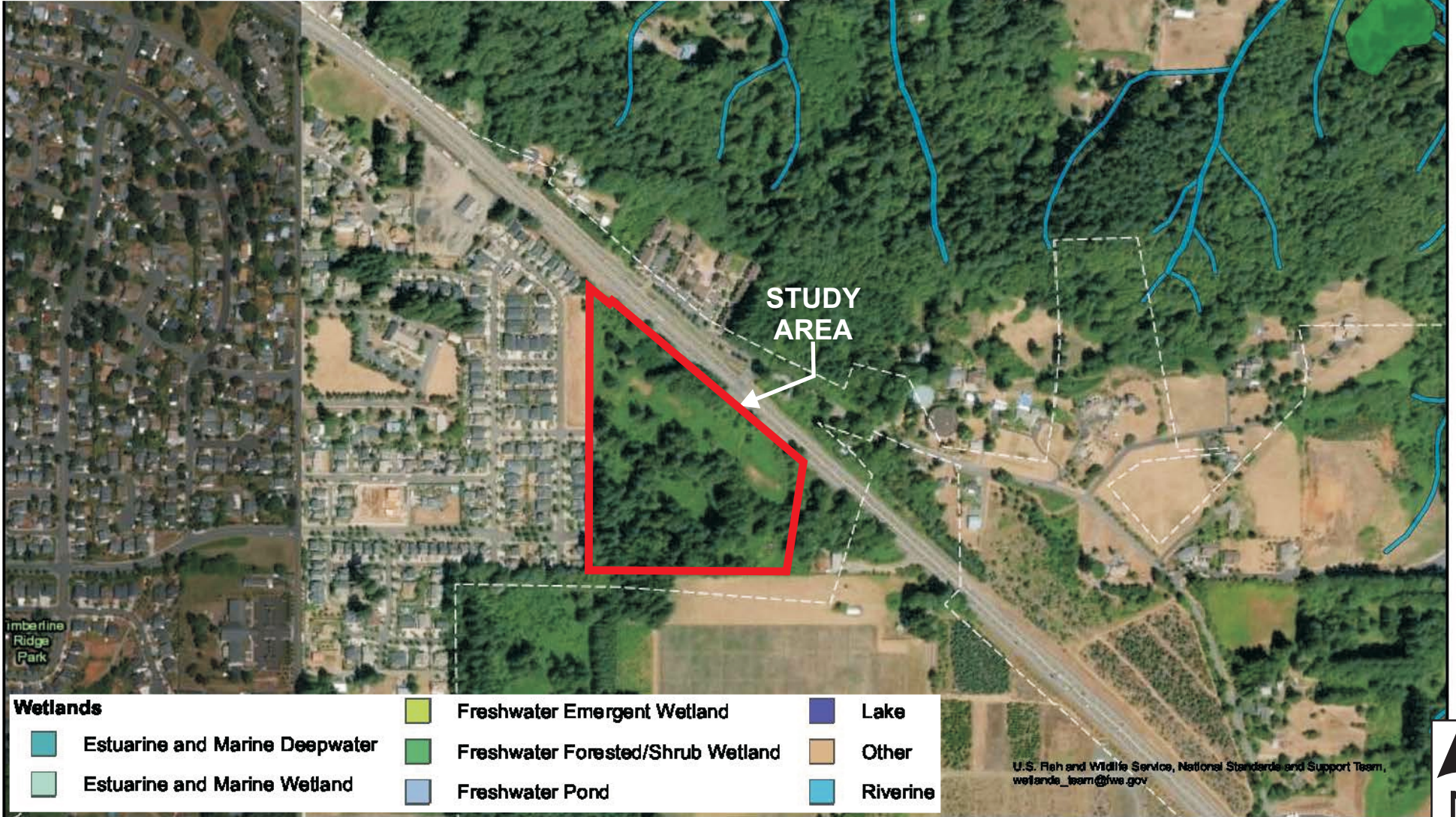
Aerial Photograph
Dubarko Road Subdivision
Sandy, Oregon

Approx. Scale:
1in. = 345ft.

Figure 2



U.S. Fish and Wildlife Service
National Wetlands Inventory



Source: National Wetlands Inventory <https://www.fws.gov/wetlands/data/mapper.HTML>

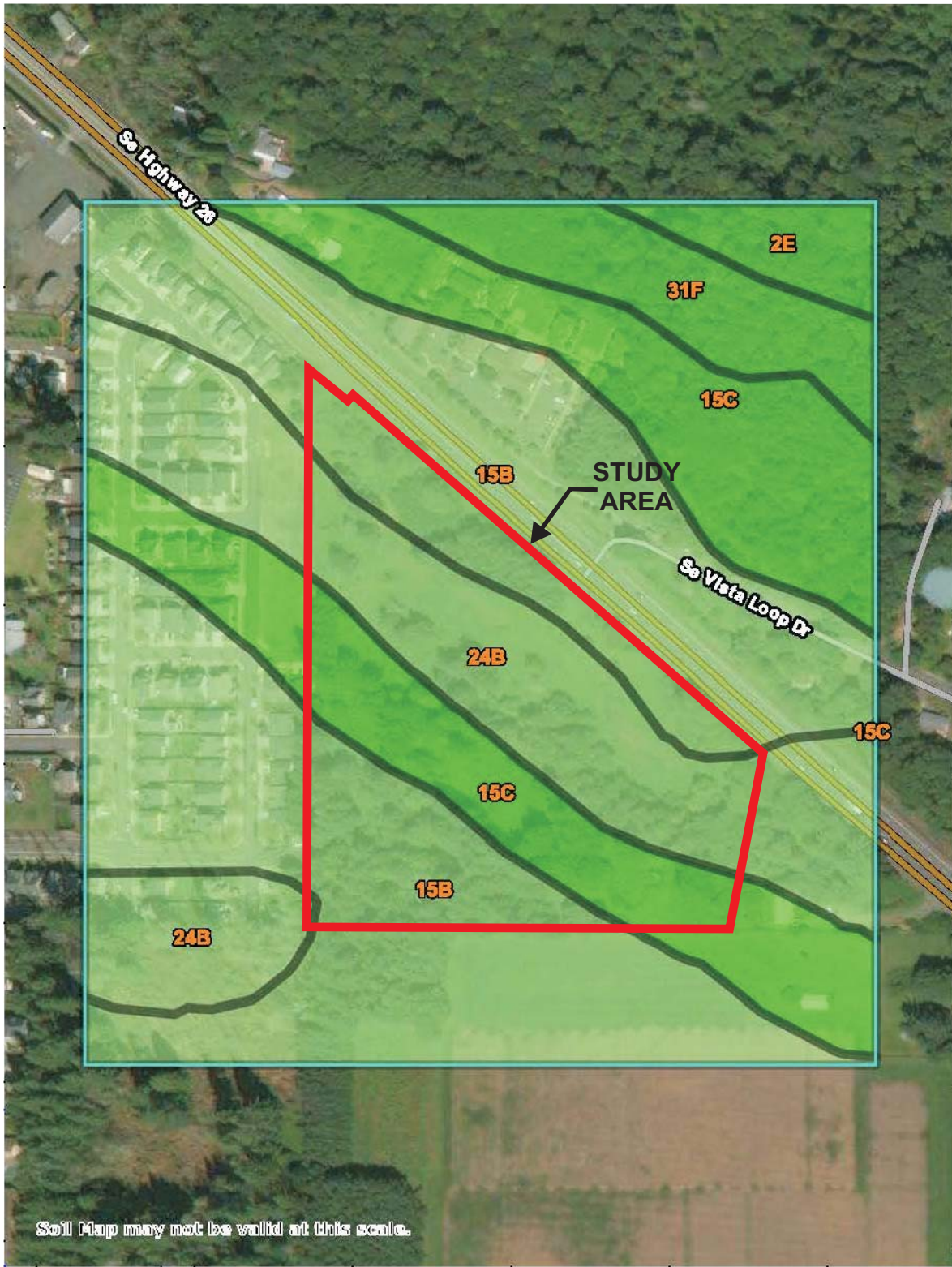
Environmental
 Science &
 Assessment, LLC




NWI Map
 Dubarko Road Subdivision
 Sandy, Oregon

Not to Scale

Figure 3



Source: NRCS Web Soil Survey <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>

<p>Environmental Science & Assessment, LLC</p> 	<p>NRCS Soil Map Dubarko Road Subdivision Sandy, Oregon</p>	<p>Figure 4</p> <hr/> <p>Not to Scale</p>
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Existing Conditions Map
Dubarko Road Subdivision
40808, 41010 HWY 26
Sandy, Oregon

Base Map Source:
All County Surveyors
& Planners, Inc.

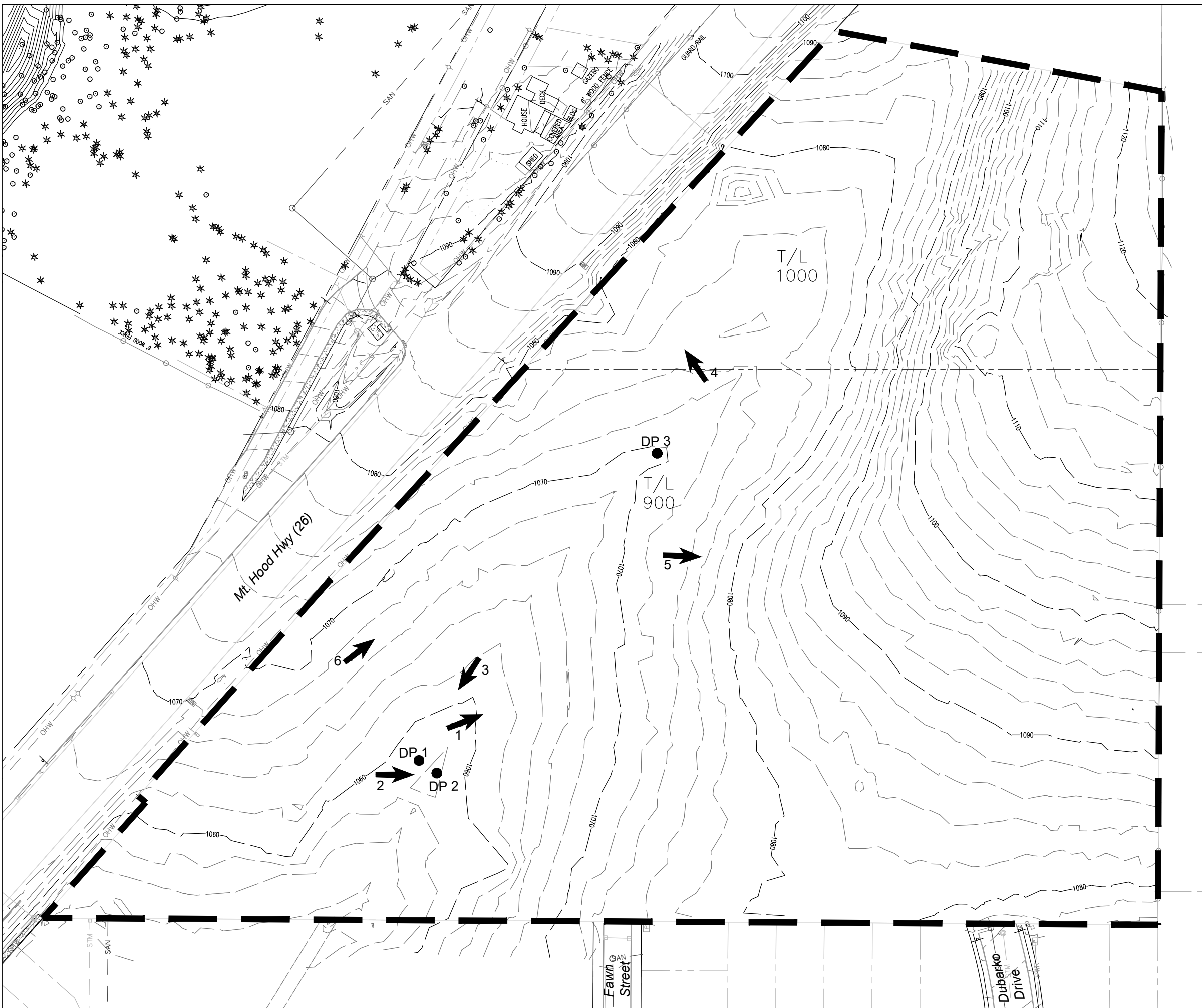
Modified By: KR

Date: 4/19

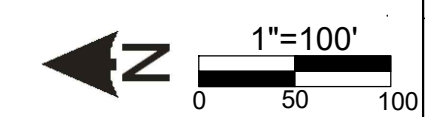
Job: 18042

Rev: 00/00

Figure 5



- Wetland Data Plot
- ➔ Photo Point



ATTACHMENT B: SITE PHOTOS



Photo 1: View SE of low point in the middle of the site.



Photo 2: View S by DP-1 and DP-2. Shallow swale with no offsite connection.



Photo 3: View NW of the middle of the site.



Photo 4: View NE of overgrown blackberry area.



Photo 5: View S of Doug fir forest in SW corner.



Photo 6: View NE of doug fir grove at N end.

ATTACHMENT C: WETLAND DETERMINATION DATA SHEETS

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

Project/Site: Dubarko Road Subdivision City/County: Sandy/Clackamas Sampling Date: 3/28/19
 Applicant/Owner: Roll Tide Properties Corp State: OR Sampling Point: DP-1
 Investigator(s): Jack Dalton Section, Township, Range: S18 T2S R5E
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): none Slope (%): _____
 Subregion (LRR): A-Northwest Forests and Coasts Lat: 45.392061° Long: -122.244803° Datum: N/A
 Soil Map Unit Name: Cottrell silty clay loam (24B) NWI classification: N/A

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

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

Hydrophytic Vegetation Present?	Yes _____	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>			
Remarks: <u>Data point taken at grassy, flat area in the lower topo in west end.</u>					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30' diameter</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)	
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>4</u> (B)	
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)	
4. _____	_____	_____	_____		
_____ = Total Cover					
Sapling/Shrub Stratum (Plot size: _____)				Prevalence Index worksheet:	
1. <u>Rubus armeniacus</u>	<u>25</u>	<u>yes</u>	<u>FAC</u>	Total % Cover of: _____ Multiply by: _____	
2. _____	_____	_____	_____	OBL species _____ x 1 = _____	
3. _____	_____	_____	_____	FACW species _____ x 2 = _____	
4. _____	_____	_____	_____	FAC species <u>60</u> x 3 = <u>180</u>	
5. _____	_____	_____	_____	FACU species <u>45</u> x 4 = <u>180</u>	
<u>25</u> = Total Cover				UPL species <u>20</u> x 5 = <u>100</u>	
				Column Totals: <u>125</u> (A) <u>460</u> (B)	
				Prevalence Index = B/A = <u>3.6</u>	
Herb Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators:	
1. <u>Schedonorus arundinaceus</u>	<u>50</u>	<u>yes</u>	<u>FAC</u>	___ 1 - Rapid Test for Hydrophytic Vegetation	
2. <u>Agrostis sp.</u>	<u>20</u>	<u>yes</u>	<u>UPL</u>	___ 2 - Dominance Test is >50%	
3. <u>Dactylis glomerata</u>	<u>20</u>	<u>yes</u>	<u>FACU</u>	___ 3 - Prevalence Index is ≤3.0 ¹	
4. <u>Poa sp.</u>	<u>10</u>	_____	<u>FAC</u>	___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
5. _____	_____	_____	_____	___ 5 - Wetland Non-Vascular Plants ¹	
6. _____	_____	_____	_____	___ Problematic Hydrophytic Vegetation ¹ (Explain)	
7. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
<u>100</u> = Total Cover					
Woody Vine Stratum (Plot size: _____)				Hydrophytic Vegetation Present?	
1. _____	_____	_____	_____	Yes _____ No <input checked="" type="checkbox"/>	
2. _____	_____	_____	_____		
_____ = Total Cover					
% Bare Ground in Herb Stratum _____					
Remarks: _____					

SOIL

Sampling Point: DP-1

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	7.5 YR 3/2	100			C	M	silt loam	no redox
12-16	7.5YR 4/4	99	7.5YR 4/6	1	C	M	silt loam	
16-20	7.5YR 3/4	99	7.5YR 4/6	1	C	M	silt clay loam	

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

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

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

Indicators for Problematic Hydric Soils³:

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

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

Restrictive Layer (if present):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

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

Wetland Hydrology Present? Yes _____ No X

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

Remarks: No saturation/O.R. or evidence of surface flow.

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

Project/Site: Dubarko Road Subdivision City/County: Sandy/Clackamas Sampling Date: 3/28/19
 Applicant/Owner: Roll Tide Properties Corp State: OR Sampling Point: DP-2
 Investigator(s): Jack Dalton Section, Township, Range: S18 T2S R5E
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): none Slope (%): _____
 Subregion (LRR): A-Northwest Forests and Coasts Lat: 45.392061° Long: -122.244803° Datum: N/A
 Soil Map Unit Name: Cottrell silty clay loam (24B) NWI classification: N/A

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

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

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____	No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes _____	No <input checked="" type="checkbox"/>	
Remarks: <u>Data point taken at low point in linear swale in the west end - no evidence of wetland hydrology.</u>			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30' diameter</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species <u>115</u> x 3 = <u>345</u> FACU species <u>5</u> x 4 = <u>20</u> UPL species <u>30</u> x 5 = <u>150</u> Column Totals: <u>150</u> (A) <u>515</u> (B) Prevalence Index = B/A = <u>3.43</u>
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Rubus armeniacus</u>	<u>50</u>	<u>yes</u>	<u>FAC</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Schedonorus arundinaceus</u>	<u>50</u>	<u>yes</u>	<u>FAC</u>	
2. <u>Agrostis sp.</u>	<u>30</u>	<u>yes</u>	<u>UPL</u>	
3. <u>Holcus lanatus</u>	<u>15</u>	_____	<u>FAC</u>	
4. <u>Galium aparine</u>	<u>5</u>	_____	<u>FACU</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum _____				
Remarks: <u>Veg meets dominance test, but fails prevalence index test - marginal FAC dominated community that lacks FACW or OBL veg.</u>				

SOIL

Sampling Point: DP-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-9	7.5 YR 3/2	100			C	M	silt loam	no redox, 10% pebbles
9-12	7.5YR 3/2	99	7.5YR 3/4	1	C	M	silt loam	
12-16	7.5YR 4/4	80	7.5YR 3/2	18	C	M		
			7.5YR 3/4	2	C	M		
16-20	7.5YR 4/4	90	7.5YR 4/6	10	C	M		
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix.								
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)						Indicators for Problematic Hydric Soils³:		
<input type="checkbox"/> Histosol (A1)		<input type="checkbox"/> Sandy Redox (S5)		<input type="checkbox"/> 2 cm Muck (A10)				
<input type="checkbox"/> Histic Epipedon (A2)		<input type="checkbox"/> Stripped Matrix (S6)		<input type="checkbox"/> Red Parent Material (TF2)				
<input type="checkbox"/> Black Histic (A3)		<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)		<input type="checkbox"/> Very Shallow Dark Surface (TF12)				
<input type="checkbox"/> Hydrogen Sulfide (A4)		<input type="checkbox"/> Loamy Gleyed Matrix (F2)		<input type="checkbox"/> Other (Explain in Remarks)				
<input type="checkbox"/> Depleted Below Dark Surface (A11)		<input type="checkbox"/> Depleted Matrix (F3)						
<input type="checkbox"/> Thick Dark Surface (A12)		<input type="checkbox"/> Redox Dark Surface (F6)						
<input type="checkbox"/> Sandy Mucky Mineral (S1)		<input type="checkbox"/> Depleted Dark Surface (F7)						
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		<input type="checkbox"/> Redox Depressions (F8)						
Restrictive Layer (if present):								
Type: _____								
Depth (inches): _____								
						Hydric Soil Present? Yes _____ No <u>X</u>		
Remarks:								

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		
Field Observations:		
Surface Water Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	Wetland Hydrology Present? Yes _____ No <u>X</u>
Water Table Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No saturation, O.R. or evidence of surface flow.		

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

Project/Site: Dubarko Road Subdivision City/County: Sandy/Clackamas Sampling Date: 3/28/19
 Applicant/Owner: Roll Tide Properties Corp State: OR Sampling Point: DP-3
 Investigator(s): Jack Dalton Section, Township, Range: S18 T2S R5E
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR): A-Northwest Forests and Coasts Lat: 45.392061° Long: -122.244803° Datum: N/A
 Soil Map Unit Name: Cottrell silty clay loam (24B) NWI classification: N/A

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

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

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/> Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks: <u>Data point taken up linear depression in middle of site - no wetland hydrology evident.</u>	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30' diameter</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species <u>40</u> x 3 = <u>120</u> FACU species <u>80</u> x 4 = <u>320</u> UPL species <u>30</u> x 5 = <u>150</u> Column Totals: <u>150</u> (A) <u>590</u> (B) Prevalence Index = B/A = <u>3.9</u>
Sapling/Shrub Stratum	(Plot size: _____)			
1. <u>Rubus armeniacus</u>	<u>50</u>	<u>yes</u>	<u>FAC</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				
Herb Stratum	(Plot size: _____)			
1. <u>Holcus lanatus</u>	<u>35</u>	<u>yes</u>	<u>FAC</u>	
2. <u>Anthoxanthum odoratum</u>	<u>30</u>	<u>yes</u>	<u>FACU</u>	
3. <u>Agrostis sp.</u>	<u>30</u>	<u>yes</u>	<u>UPL</u>	
4. <u>Schedonorus arundinaceus</u>	<u>5</u>	_____	<u>FAC</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
_____ = Total Cover				
Woody Vine Stratum	(Plot size: _____)			
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum _____				
Remarks: <u>Marginal degraded plant community - lacks FACW or greater plants.</u>				

Hydrophytic Vegetation Present? Yes _____ No

SOIL

Sampling Point: DP-3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-10	7.5 YR 3/3	100			C	M	silt loam	no redox,
10-13	7.5YR 4/3	98	10YR 3/6	2	C	M		
13-15	10YR 4/4	95	7.5YR 4/6	5	C	M		
15-20	10YR 4/3	80	7.5YR 4/6	10	C	M		
			10YR 4/4	10				
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=Matrix.								
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)						Indicators for Problematic Hydric Soils³:		
<input type="checkbox"/> Histosol (A1)			<input type="checkbox"/> Sandy Redox (S5)			<input type="checkbox"/> 2 cm Muck (A10)		
<input type="checkbox"/> Histic Epipedon (A2)			<input type="checkbox"/> Stripped Matrix (S6)			<input type="checkbox"/> Red Parent Material (TF2)		
<input type="checkbox"/> Black Histic (A3)			<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)			<input type="checkbox"/> Very Shallow Dark Surface (TF12)		
<input type="checkbox"/> Hydrogen Sulfide (A4)			<input type="checkbox"/> Loamy Gleyed Matrix (F2)			<input type="checkbox"/> Other (Explain in Remarks)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)			<input type="checkbox"/> Depleted Matrix (F3)			³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.		
<input type="checkbox"/> Thick Dark Surface (A12)			<input type="checkbox"/> Redox Dark Surface (F6)					
<input type="checkbox"/> Sandy Mucky Mineral (S1)			<input type="checkbox"/> Depleted Dark Surface (F7)					
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			<input type="checkbox"/> Redox Depressions (F8)					
Restrictive Layer (if present):						Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Type: _____ Depth (inches): _____								
Remarks:								

HYDROLOGY

Wetland Hydrology Indicators:					
Primary Indicators (minimum of one required; check all that apply)			Secondary Indicators (2 or more required)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)	<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Iron Deposits (B5)			<input type="checkbox"/> Surface Soil Cracks (B6)		
<input type="checkbox"/> Surface Water Cracks (B6)			<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		
Field Observations:					
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____			
Saturation Present? (includes capillary fringe)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks: faint O.R. at 13"					

OFFSITE WETLAND DETERMINATION REPORT
OREGON DEPARTMENT OF STATE LANDS

BATCH
WD#: 2019-0386

775 Summer Street NE, Suite 100, Salem OR 97301-1279 Phone: (503) 986-5200

At your request, an offsite wetland determination has been conducted on the property described below.

County: Clackamas

City: Sandy

Agent Name & Address: Tracy Brown, Tracy Brown Planning Consultants, LLC, 17075 Fir Dr., Sandy, OR 97055

Township: 2S

Range: 5E

Section: 18 Q/Q: CD

Tax Lot(s): 900, 1000

Project Name: Site Evaluation

Site Address/Location: 40808 and 41010 Highway 26, Sandy, OR

- The National Wetlands Inventory or Local Wetlands Inventory shows a wetland on the property.
- The county soil survey shows hydric (wet) soils on the property. Hydric soils indicate that there may be wetlands.
- It is unlikely that there are jurisdictional wetlands or waterways on the property based upon a review of wetlands maps, the county soil survey and other information. An onsite investigation by a qualified professional is the only way to be certain that there are no wetlands.
- There may be wetlands/waterways on the property that are subject to the state Removal-Fill Law.
 - A state permit is required for ≥ 50 cubic yards of fill, removal, or ground alteration in the wetlands or waterways.
 - A state permit may be required for any amount of fill, removal, or other ground alteration in the Essential Salmonid Habitat and hydrologically associated wetlands.
- A state permit will be/will not be required for project because/if .
- The proposed parcel division may create a lot that is largely wetland and thus create future development problems.
- A wetland delineation by a qualified wetland consultant is recommended prior to site development. The wetland delineation report should be submitted to DSL for review and approval.
- A permit may be required by the Army Corps of Engineers: (503) 808-4373

Note: This report is for the state Removal-Fill Law only. City or County permits may be required for the proposed activity.

Comments: Based on a review of the available information, there are no jurisdictional wetlands or waters on the property.

Determination by:



Date:

7/03/19

This jurisdictional determination is valid for five years from the above date, unless new information necessitates a revision. Circumstances under which the Department may change a determination and procedures for renewal of an expired determination are found in OAR 141-090-0045 (available on our web site or upon request). The applicant, landowner, or agent may submit a request for reconsideration of this determination in writing within six months from the above date.

This is a preliminary jurisdictional determination and is advisory only.

Copy To: Other Enclosures: email: tbrownplan@gmail.com

City of Sandy

FOR OFFICE USE ONLY

Entire Lot(s) Checked? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Waters Present <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Maybe	Request Received: 6/27/2019
LWI Area: Sandy LWI Code: N/A	Latitude: 45.390763 Longitude: -122.244278	Related DSL File # N/A
Has Wetlands? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Unk	ESH? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	Wild & Scenic? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N
	State Scenic? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	Coast Zone? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Unk
Adjacent Waterbody: N/A	NWI Quad: Sandy	Scanned <input checked="" type="checkbox"/> Mailings Completed <input checked="" type="checkbox"/> Data Entry Completed <input checked="" type="checkbox"/>

proj:# 78454