Clean Water Services

November 05, 2019

AAI ENGINEERING
4875 SW GRIFFITH DR #300
BEAVERTON OR 97005

**Re: CWS file 19-003074; 11045 SW Tualatin-Sherwood Road (Tax map 2S122DD Tax lot 00700, Tax map 2S127AA Tax lot 00500, Tax map 2S122D0 Tax lot 00600)**

Clean Water Services has reviewed your proposal for the above referenced activity on your site. Staff has conducted a pre-screen review and requested completion of a Sensitive Areas Certification Form. Following review of submitted materials it appears that Sensitive Areas do not exist on-site or within 200' from your project. In light of this result, this document will serve as your Service Provider letter as required by Resolution and Order 19-5, Section 3.02.1. All required permits and approvals must be obtained and completed under applicable local, state, and federal law.

This concurrence letter does NOT eliminate the need to protect Sensitive Areas if they are subsequently identified on your site.

If you have any questions, please feel free to call me at (503) 681-3667.

Sincerely,

Stacy Benjamin

Stacy Benjamin
Environmental Plan Review

2550 SW Hillsboro Highway • Hillsboro, Oregon 97123
Phone: (503) 681-3600 • Fax: (503) 681-3603 • cleanwaterservices.org


#6836

Pacific Habitat Services, Inc
9450 SW Commerce Circle, Suite 180 Wilsonville, OR 97070
Phone: (503) 570-0800 Fax: (503) 570-0855

CWS FILE NO. 19-003074
Approved
Clean Water Services
FOR ENVIRONMENTAL REVIEW
By SNB Date 11/5/19
SPL ATTACHMENT 1 OF 2

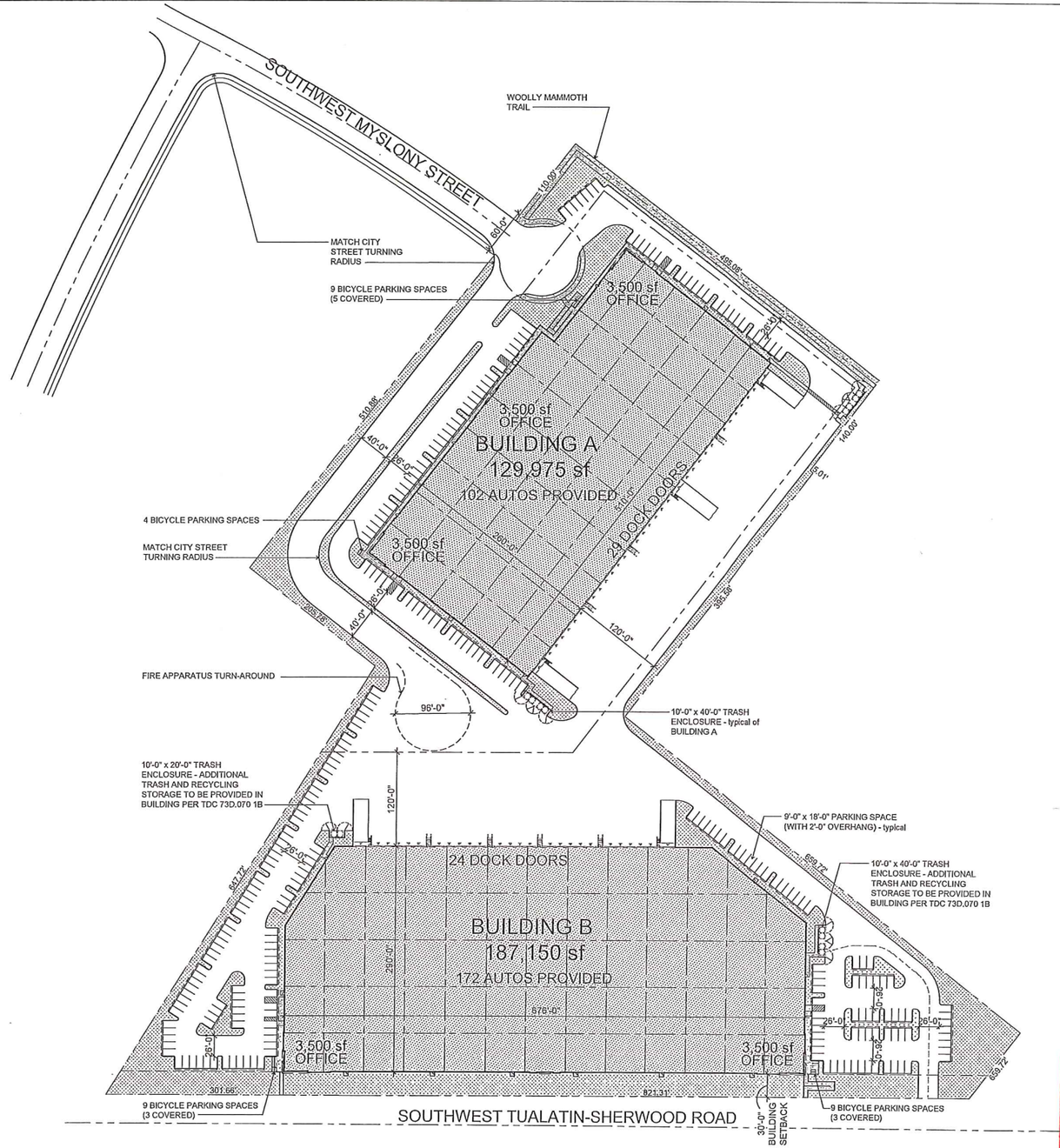
11045, 10835, 10775 Tualatin-Sherwood Road, Tualatin, OR

Wetland Determination and Vegetated Corridor Assessment

FIGURE 2
10-11-2019

| | |
|---|---|
| **LOT AREA:** | **717,020 sf ± 16.46 acres ±** |
| LOT A: | 308,679 sf ± |
| LOT B: | 408,341 sf ± |
| **TOTAL BUILDING AREA:** | **317,125 sf** |
| BUILDING A: | 129,975 sf |
| MANUFACTURING: | 45,491.25 sf (35%) |
| WAREHOUSE: | 84,484.75 sf (65%) |
| BUILDING B: | 187,150 sf |
| MANUFACTURING: | 84,217.5 sf (45%) |
| WAREHOUSE: | 102,932.5 sf (55%) |
| **SITE COVERAGE:** | **44.23 %** |
| LOT A: | 42.11% |
| LOT B: | 45.83% |
| **DOCK DOOR RATIO:** | **1 / 5,975 sf** |
| BUILDING A: | 1 / 4,475 sf |
| BUILDING B: | 1 / 7,800 sf |
| **PARKING REQUIRED** | **264 spaces** |
| BUILDING A: | 98 spaces |
| MANUFACTURING (1.6 / 1,000 sf) | 73 spaces |
| WAREHOUSE (0.3 / 1,000 sf) | 25 spaces |
| BUILDING B: | 166 spaces |
| MANUFACTURING (1.6 / 1,000 sf) | 135 spaces |
| WAREHOUSE (0.3 / 1,000 sf) | 31 spaces |
| **PARKING PROVIDED:** | **274 spaces** |
| BUILDING A: | 102 spaces |
| STANDARD: | 96 spaces |
| HANDICAP ACCESSIBLE: | 6 spaces |
| BUILDING B: | 172 spaces |
| STANDARD: | 166 spaces |
| HANDICAP ACCESSIBLE: | 6 spaces |
| **LANDSCAPE REQUIRED:** | **71,702 sf (10%)** |
| LOT A: | 30,868 sf |
| LOT B: | 40,834 sf |
| **LANDSCAPE PROVIDED:** | **116,444 sf (16.24%)** |
| | 33,890 sf (10.98%) |
| | 82,554 sf (20.22%) |

3 October 2019 p:\2019\19500 phelan development\19500.21-tualatin industrial park (pascuzzi property), tualatin, or\19500.21 site plan scheme 13r2.dwg




CWS FILE NO. 19-003074
Approved
Clean Water Services
FOR ENVIRONMENTAL REVIEW
By SUB Date 11/5/19
SPL ATTACHMENT 2 OF 2

# PRELIMINARY SITE PLAN
## SCHEME 13 R2
03 October 2019

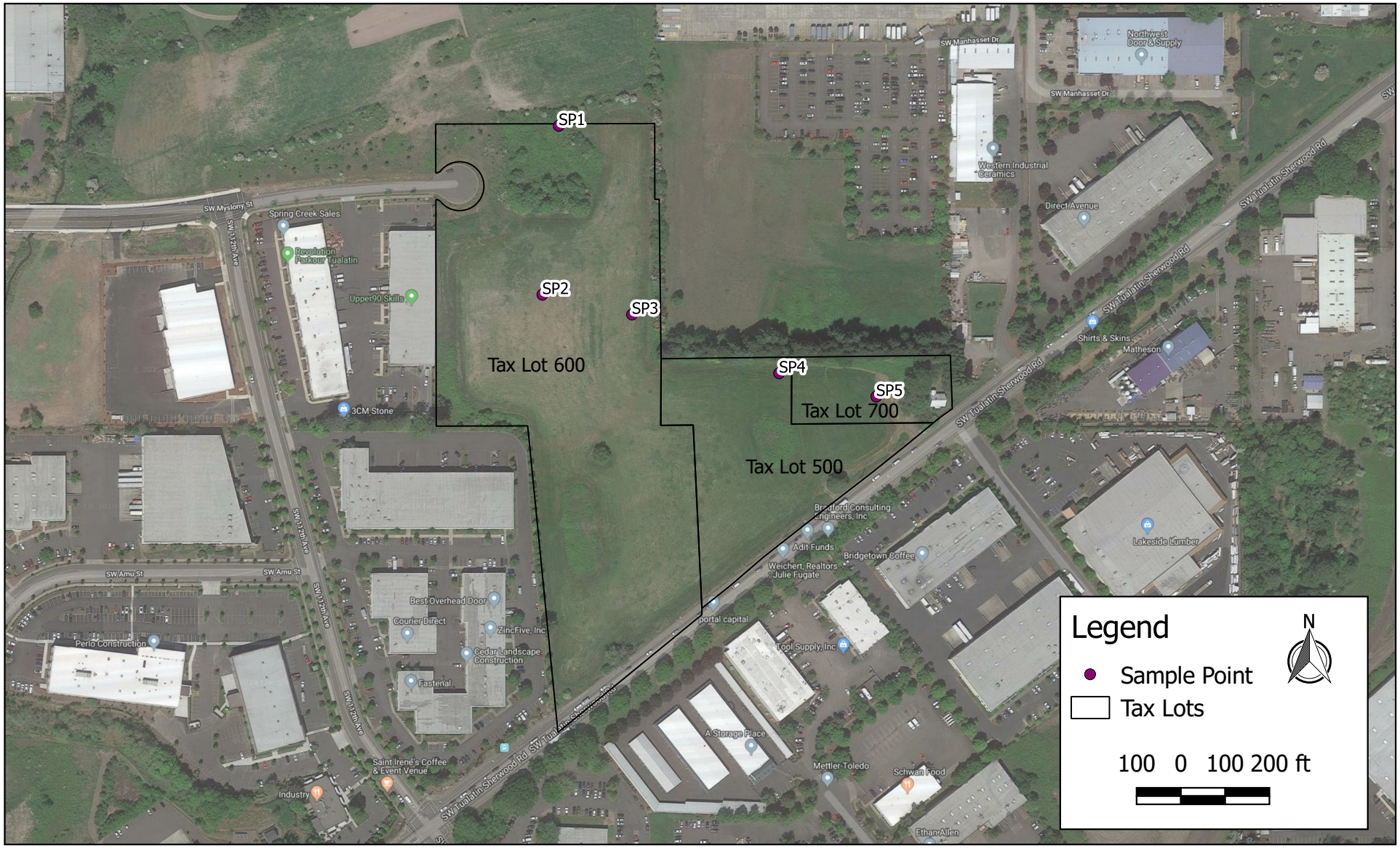
Tualatin Industrial Park
Tualatin, Oregon

SCALE: 1" = 60'

A-1


Carlile Coatsworth Architects, Inc
18201 MacArthur Boulevard - Suite 300 - Irvine, CA 92612 - Phone: (949) 833-1330

PHELAN DEVELOPMENT
450 Newport Center Drive, Suite 405
Newport Beach, CA 92660

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9450 SW Commerce Circle, Suite 180 Wilsonville, OR 97070

Phone: (503) 570-0800 Fax: (503) 570-0855

Wetland Determination

11045, 10835, 10775 Tualatin-Sherwood Road, Tualatin, OR

PACIFIC HABITAT SERVICES, INC.
9450 SW Commerce Circle, Suite 180
Wilsonville, OR 97070
(800) 871-9333 ● (503) 570-0800 ● Fax (503) 570-0855

October 11, 2019

**Phelan Development Company, LLC**
**Attn: Dane Palanjian**
450 Newport Center Drive, Suite 405
Newport Beach, CA 92660

**RE: Wetland Determination and Vegetated Corridor Assessment for 10835, 11045, 10775 Tualatin-Sherwood Road, Tualatin, Oregon**
**PHS #6836**

Pacific Habitat Services, Inc. (PHS) conducted a wetland determination and vegetated corridor assessment on September 19, 2019, of City of Tualatin Parcels 500, 600, and 700, Tax Map 2S122D (T2S, R1W, Section 22D), which together comprise a study area of 16.34 acres (Figures 1 and 2, attached). The result of the wetland determination is that **no potentially jurisdictional wetlands or waters are present on the property and no sensitive areas are located within 200 feet of the study area**.

Pacific Habitat Services (PHS) has been on the site on three prior occasions for wetland determinations and in each instance did not find wetlands. In 2008, PHS conducted a wetland delineation of the southern portion of Tax Lot 550 (formerly Tax Lot 502), which is adjacent to the northern and northwestern boundary of the study area (North of SW Myslony Street). A wetland was identified on Tax Lot 550, approximately 540 feet west of the study area; however, no sensitive areas including wetlands or waters were present within 200 feet of the study area boundary.

## Existing Conditions

The study area is located in the western portion of Tualatin in an area where former agricultural lands are gradually being converted to industrial uses. The topography is relatively flat and slopes gently to the north, toward Hedges Creek, which is a perennial stream and tributary to the Tualatin River. The largest vegetation community is a large agricultural grass field that appears to have been fallow for several years and is dominated by mixed grass species including oat (*Avena* spp.), ryegrass (*Lolium* spp.), velvet grass (*Holcus lanatus*, FAC), and tall fescue (*Schedonorus arundinaceus*, FAC) as well as rough cat's ear (*Hypochaeris radicata*, FACU), Queen Anne's lace (*Daucus carota*, FACU), and lesser hawkbit (*Leontodon saxatilis*, FACU). There are several large stands of Himalayan blackberry (*Rubus armeniacus*, FAC) intermixed with English hawthorn (*Crataegus monogyna*, FAC) and black hawthorn (*Crataegus douglasii*, FAC). A large stand of this vegetation community extends north of Tax Lot 600 for approximately 30 feet where it transitions to an agricultural field. A large area of earthen fill, approximately three feet above the natural grade, extends west of Tax Lot 600, north of SW Myslony Street.

West of the study area and south of SW Myslony Street is a large industrial park and northeast of the study area there is a large agricultural field with a narrow strip of Douglas fir (*Pseudotsuga menziesii*, FACU) trees along the property boundary. There is a farmhouse in the far eastern portion of the study area, surrounded by Douglas' fir and Oregon oak (*Quercus garryana*, FACU) trees. The southern boundary of the study area borders SW Tualatin-Sherwood Road.

## Offsite and On-site Determination of Wetlands or Waterways

Prior to the field investigation, precipitation information from the Rex 1 S WETS station was examined to determine hydrological conditions for the three months preceding the September wetland delineation fieldwork and the Weather Underground website (https://www.wunderground.com) was examined to determine hydrological conditions for the preceding two weeks. As shown below in Table 1, precipitation for the preceding three months of June, July, and August were well below normal; however, precipitation for the preceding two weeks was 3.02 inches, which is 495 percent of normal (0.61 inches).

**Table 1. Average Monthly and observed precipitation for Rex 1 S (NRCS WETS Table)**

| Month | Average Precipitation[1] | 30% chance will have | | Observed Precipitation[1] | Percent of Normal |
|---|---|---|---|---|---|
| | | Less than[1] | More than[1] | | |
| June | 1.69 | 0.98 | 2.06 | 0.54 | 32 |
| July | 0.7 | 0.22 | 0.81 | 0.46 | 66 |
| August | 0.89 | 0.29 | 1 | 0.21 | 24 |

Notes: [1]*Source: http://agacis.rcc-acis.org/?fips=41071*

Below-normal rainfall for the three months preceding the wetland determination fieldwork and above normal precipitation for the preceding two weeks did not result in significant variations in the typical hydrological conditions for groundwater during late summer in the Willamette Valley, when water tables are either at or near their lowest point. Although sufficient hydrology indicators for a wetland determination were not present at any sample point, dry season evaluations for oxidized rhizospheres along living roots geomorphic position, and the Fac-Neutral test were utilized. Five sample points were taken throughout the property to determine if wetland existed with in the study area.

Sample Point 1 (Tax lot 600) was placed in the northern portion of the study area. Dominant vegetation in this area consists of Himalayan blackberry, colonial bentgrass (*Agrostis capillaris*, FAC), and velvet grass and meets the wetland vegetation criteria for wetlands. Hydric soils meet the requirements for depleted matrix; however, wetland hydrology indicators are not present.

Sample Point 2 (Tax lot 600) was placed in the center of the field, which had recently been mowed. Vegetation consists of unidentified grasses and lesser hawkbit and does not meet the wetland vegetation criteria; hydric soils and wetland hydrology are also not present.

Sample point 3 (Tax lot 600) was placed in an area that had recently been disturbed, possibly for geotechnical excavations; however, there was adequate undisturbed ground available to assess vegetation, soils, and hydrology. Vegetation consists of unidentified grasses, black-bindweed (*Fallopia convolvulus*, FACU), and oat (assumed UPL) and does not meet wetland vegetation criteria; hydric soils and wetland hydrology are also not present.

Sample Point 4 (Tax lot 500) was placed in a large, open field in the western portion of the study area. The dominant vegetation is ryegrass, which meets wetland vegetation criteria; however, hydric soils and wetland hydrology are not present.

Sample Point 5 (Tax lot 700) was placed in the northeast portion of the study area. The dominant vegetation consists of Himalayan blackberry and ryegrass, which meets wetland vegetation criteria; however, hydric soils and wetland hydrology are not present.

Wetland Determination Data Forms for Sample Points 1-5 and photographs of the site are attached.

## Results and Conclusions

### Wetland Determination

As described above, PHS did not identify any potentially jurisdictional wetlands or waters of the State/US within the study area. This finding is in agreement with the Tualatin Natural Resource Inventory and Local Wetland Inventory (LWI) mapping, which also did not map any wetlands or waters within the study area.

### Vegetated Corridor Assessment

As a result of the wetland determination and the previous wetland delineation performed by PHS, it is clear that there are no sensitive areas or regulated vegetated corridors affecting the study area. As slopes in the study area and to the north range from 0 to 4 percent, regulated vegetated corridors would extend no further than 50 feet from any sensitive areas that may be located north of the study area. As the nearest wetland is approximately 540 feet west of the northern portion of the study area, there are no vegetated corridors within a minimum of 50 feet from the site.

## Required Disclaimer

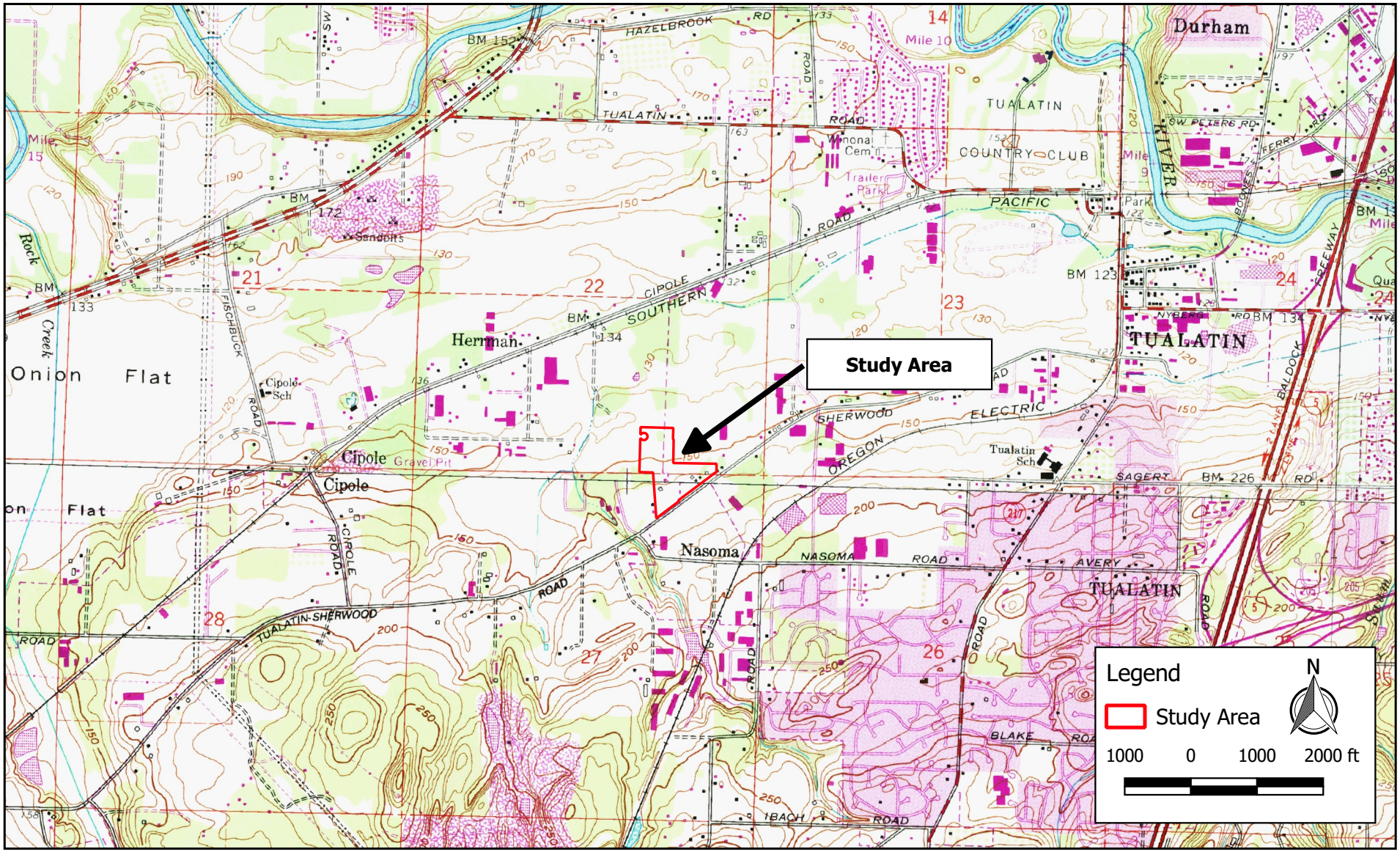
This letter documents the investigation, best professional judgment and conclusions of the investigators. It is correct and complete to the best of our knowledge. It should be considered a Preliminary Jurisdictional Determination of wetlands and other waters and used at your own risk unless it has been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

Feel free to contact me directly should you require any additional information pertinent to this determination memo and Vegetated Corridor Assessment.

Sincerely

Joe Thompson

Enclosures: Figures 1 and 2
Wetland Determination Data Forms
Site Photos

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11045, 10835, 10775 Tualatin-Sherwood Road, Tualatin, OR

USGS 7.5-minute Quadrangle Map, Beaverton, Oregon 1984

FIGURE
1
10-11-2019


#6836

PHS

Pacific Habitat Services, Inc

9450 SW Commerce Circle, Suite 180 Wilsonville, OR 97070

Phone: (503) 570-0800 Fax: (503) 570-0855

11045, 10835, 10775 Tualatin-Sherwood Road, Tualatin, OR

Wetland Determination and Vegetated Corridor Assessment

FIGURE 2

10-11-2019

PHS # 6836

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

Project/Site: **Tualatin-Sherwood Rd Property** City/County: **Tualatin/Washington** Sampling Date: **9/19/2019**

Applicant/Owner: **Phelan Development** State: **OR** Sampling Point: **1**

Investigator(s): **JT/MS** Section, Township, Range: **Township 2S, Range 1 W, Section 22D**

Landform (hillslope, terrace, etc.:) **Flat** Local relief (concave, convex, none): **None** Slope (%): **0**

Subregion (LRR): **LRR A** Lat: **45.376791** Long: **-122.791179** Datum: **WSG85**

Soil Map Unit Name: **Labish Mucky Clay - Hydric** NWI Classification: **None**

Are climatic/hydrologic conditions on the site typical for this time of year? Yes **X** No ____ (if no, explain in Remarks)

Are vegetation ____ Soil ____ or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) **Y**

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 | **X** | No | | **Is Sampled Area within a Wetland?** Yes ____ No **X** |
| Hydric Soil Present? | Yes | **X** | No | | |
| Wetland Hydrology Present? | Yes | | No | **X** | |

Remarks:

## VEGETATION - Use scientific names of plants.

| | absolute % cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| Tree Stratum (plot size: ____) | | | |
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| | **0** | = Total Cover | |
| Sapling/Shrub Stratum (plot size: **15**) | | | |
| 1 ***Rubus armeniacus*** | **70** | **X** | **FAC** |
| 2 ***Crataegus douglasii*** | **10** | | **FAC** |
| 3 ***Crataegus monogyna*** | **10** | | **FAC** |
| 4 | | | |
| 5 | | | |
| | **90** | = Total Cover | |
| Herb Stratum (plot size: **5**) | | | |
| 1 ***Agrostis capillaris*** | **80** | **X** | **FAC** |
| 2 ***Holcus lanatus*** | **20** | **X** | **FAC** |
| 3 ***Hypericum perforatum*** | **1** | | **FACU** |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| | **101** | = Total Cover | |
| Woody Vine Stratum (plot size: ____) | | | |
| 1 | | | |
| 2 | | | |
| | **0** | = Total Cover | |

% Bare Ground in Herb Stratum **0**

**Dominance Test worksheet:**

Number of Dominant Species That are OBL, FACW, or FAC: **3** (A)

Total Number of Dominant Species Across All Strata: **3** (B)

Percent of Dominant Species That are OBL, FACW, or FAC: **100%** (A/B)

**Prevalence Index Worksheet:**

| Total % Cover of | | Multiply by: | |
|---|---|---|---|
| OBL Species | | x 1 = | **0** |
| FACW species | | x 2 = | **0** |
| FAC Species | | x 3 = | **0** |
| FACU Species | | x 4 = | **0** |
| UPL Species | | x 5 = | **0** |
| Column Totals | **0** (A) | | **0** (B) |

Prevalence Index =B/A = **#DIV/0!**

**Hydrophytic Vegetation Indicators:**

____ 1- Rapid Test for Hydrophytic Vegetation

**X** 2- Dominance Test is >50%

____ 3-Prevalence Index is ≤ 3.0[1]

____ 4-Morphological Adaptations[1] (provide supporting data in Remarks or on a separate sheet)

____ 5- Wetland Non-Vascular Plants[1]

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** **Yes X** **No** ____

Remarks:

**Tellima grandiflora <1**

**SOIL** PHS # **6836** Sampling Point: **1**

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

| Depth | Matrix | | Redox Features | | | | | |
|---|---|---|---|---|---|---|---|---|
| (Inches) | Color (moist) | % | Color (moist) | % | Type[1] | Loc[2] | Texture | Remarks |
| **0-2** | **10YR 3/2** | **100** | **10YR 3/4** | **<1** | **C** | **PL** | **Silty Clay Loam** | |
| **2-9** | **10YR 3/2** | **100** | | | | | **Silty Clay Loam** | |
| **9-15** | **10YR 5/2** | **85** | **5YR 4/6** | **15** | **C** | **M** | **Silt Loam** | **Medium, Coarse** |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

[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.)**

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

**Indicators for Problematic Hydric Soils[3]:**

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

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

**Restrictive Layer (if present):**

Type:

Depth (inches):

**Hydric Soil Present? Yes X No**

Remarks:

**Labish mucky clay (hydric)**

## HYDROLOGY

**Wetland Hydrology Indicators:**

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

| | | | |
|---|---|---|---|
| | Surface Water (A1) | | Water stained Leaves (B9) **(Except MLRA 1, 2, 4A, and 4B)** |
| | High Water Table (A2) | | |
| | Saturation (A3) | | Salt Crust (B11) |
| | Water Marks (B1) | | Aquatic Invertebrates (B13) |
| | Sediment Deposits (B2) | | Hydrogen Sulfide Odor (C1) |
| | Drift Deposits (B3) | | Oxidized Rhizospheres along Living Roots (C3) |
| | Algal Mat or Crust (B4) | | Presence of Reduced Iron (C4) |
| | Iron Deposits (B5) | | Recent Iron Reduction in Plowed Soils (C6) |
| | Surface Soil Cracks (B6) | | Stunted or Stressed Plants (D1) **(LRR A)** |
| | Inundation Visible on Aerial Imagery (B7) | | Other (Explain in Remarks) |
| | Sparsely Vegetated Concave Surface (B8) | | |

Secondary Indicators (2 or more required)

| | |
|---|---|
| | Water stained Leaves (B9) **(MLRA1, 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 **X** | Depth (inches): | |
| Water Table Present? | Yes | | No **X** | Depth (inches): | **>15** |
| Saturation Present? (includes capillary fringe) | Yes | | No **X** | Depth (inches): | **>15** |

**Wetland Hydrology Present?**

**Yes** **No X**

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

Remarks:

PHS # 6836

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

Project/Site: **Tualatin-Sherwood Rd Property** City/County: **Tualatin/Washington** Sampling Date: **9/19/2019**

Applicant/Owner: **Phelan Development** State: **OR** Sampling Point: **2**

Investigator(s): **JT/MS** Section, Township, Range: **Township 2S, Range 1 W, Section 22D**

Landform (hillslope, terrace, etc.:) **Flat** Local relief (concave, convex, none): **None** Slope (%): **1**

Subregion (LRR): **LRR A** Lat: **45.376075** Long: **-122.791242** Datum: **WSG85**

Soil Map Unit Name: **Quatama Loam, 0-3 Percent Slopes** NWI Classification: **None**

Are climatic/hydrologic conditions on the site typical for this time of year? Yes **X** No ____ (if no, explain in Remarks)

Are vegetation ____ Soil ____ or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) **Y**

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 | X | **Is Sampled Area within a Wetland?** Yes ____ No **X** |
| Hydric Soil Present? | Yes | | No | X | |
| Wetland Hydrology Present? | Yes | | No | X | |

Remarks:

## VEGETATION - Use scientific names of plants.

| | absolute % cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| Tree Stratum (plot size: ____) | | | |
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| | 0 | = Total Cover | |
| Sapling/Shrub Stratum (plot size: ____) | | | |
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| | 0 | = Total Cover | |
| Herb Stratum (plot size: 5) | | | |
| 1 ***Unidentified grass*** | 80 | X | (FAC) |
| 2 ***Leontodon saxatilis*** | 20 | X | FACU |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| | 100 | = Total Cover | |
| Woody Vine Stratum (plot size: ____) | | | |
| 1 | | | |
| 2 | | | |
| | 0 | = Total Cover | |

% Bare Ground in Herb Stratum ____

**Dominance Test worksheet:**

Number of Dominant Species That are OBL, FACW, or FAC: **1** (A)

Total Number of Dominant Species Across All Strata: **2** (B)

Percent of Dominant Species That are OBL, FACW, or FAC: **50%** (A/B)

**Prevalence Index Worksheet:**

| Total % Cover of | | Multiply by: | |
|---|---|---|---|
| OBL Species | | x 1 = | 0 |
| FACW species | | x 2 = | 0 |
| FAC Species | | x 3 = | 0 |
| FACU Species | | x 4 = | 0 |
| UPL Species | | x 5 = | 0 |
| Column Totals | 0 (A) | | 0 (B) |

Prevalence Index =B/A = **#DIV/0!**

**Hydrophytic Vegetation Indicators:**

____ 1- Rapid Test for Hydrophytic Vegetation

____ 2- Dominance Test is >50%

____ 3-Prevalence Index is ≤ 3.0[1]

____ 4-Morphological Adaptations[1] (provide supporting data in Remarks or on a separate sheet)

____ 5- Wetland Non-Vascular Plants[1]

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes ____ No **X**

Remarks:

**Remnants of oat (Avena sp.).**

**SOIL** PHS # **6836** Sampling Point: **2**

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

| Depth | Matrix | | Redox Features | | | | | |
|---|---|---|---|---|---|---|---|---|
| (Inches) | Color (moist) | % | Color (moist) | % | Type[1] | Loc[2] | Texture | Remarks |
| **0-14** | **10YR 3/4** | **100** | | | | | **Silt Loam** | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

[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.)**

- 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 Soils[3]:**

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

[3]Indicators 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 Plowed Soils (C6)
- Stunted or Stressed Plants (D1) **(LRR A)**
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water stained Leaves (B9) **(MLRA1, 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 **X** | Depth (inches): | |
| Water Table Present? | Yes | | No **X** | Depth (inches): | **>14** |
| Saturation Present? (includes capillary fringe) | Yes | | No **X** | Depth (inches): | **>14** |

**Wetland Hydrology Present?**

**Yes** _____ **No X**

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

Remarks:

PHS # 6836

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

Project/Site: **Tualatin-Sherwood Rd Property** City/County: **Tualatin/Washington** Sampling Date: **9/19/2019**

Applicant/Owner: **Phelan Development** State: **OR** Sampling Point: **3**

Investigator(s): **JT/MS** Section, Township, Range: **Township 2S, Range 1 W, Section 22D**

Landform (hillslope, terrace, etc.:) **Flat** Local relief (concave, convex, none): **None** Slope (%): **1**

Subregion (LRR): **LRR A** Lat: **45.377702** Long: **-122.790458** Datum: **WSG85**

Soil Map Unit Name: **Woodburn Silt Loam, 0-3 Percent Slopes** NWI Classification: **None**

Are climatic/hydrologic conditions on the site typical for this time of year? Yes **X** No ____ (if no, explain in Remarks)

Are vegetation ____ Soil ____ or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) **Y**

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 | **X** | **Is Sampled Area within a Wetland?** Yes ____ No **X** |
| Hydric Soil Present? | Yes | | No | **X** | |
| Wetland Hydrology Present? | Yes | | No | **X** | |

Remarks:

## VEGETATION - Use scientific names of plants.

| | absolute % cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| Tree Stratum (plot size: ____) | | | |
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| | **0** | = Total Cover | |
| Sapling/Shrub Stratum (plot size: ____) | | | |
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| | **0** | = Total Cover | |
| Herb Stratum (plot size: **5**) | | | |
| 1 ***Unidentified grass*** | **40** | **X** | **(FAC)** |
| 2 ***Fallopia convolvulus*** | **40** | **X** | **FACU** |
| 3 ***Avena sp*** | **20** | | **(UPL)** |
| 4 ***Lolium perenne*** | **20** | | **FAC** |
| 5 ***Holcus lanatus*** | **10** | | **FAC** |
| 6 ***Unidentified forb*** | **10** | | **(FAC)** |
| 7 | | | |
| 8 | | | |
| | **140** | = Total Cover | |
| Woody Vine Stratum (plot size: ____) | | | |
| 1 | | | |
| 2 | | | |
| | **0** | = Total Cover | |

% Bare Ground in Herb Stratum **0**

**Dominance Test worksheet:**

Number of Dominant Species That are OBL, FACW, or FAC: **1** (A)

Total Number of Dominant Species Across All Strata: **2** (B)

Percent of Dominant Species That are OBL, FACW, or FAC: **50%** (A/B)

**Prevalence Index Worksheet:**

| Total % Cover of | | Multiply by: | |
|---|---|---|---|
| OBL Species | | x 1 = | **0** |
| FACW species | | x 2 = | **0** |
| FAC Species | | x 3 = | **0** |
| FACU Species | | x 4 = | **0** |
| UPL Species | | x 5 = | **0** |
| Column Totals | **0** (A) | | **0** (B) |

Prevalence Index =B/A = **#DIV/0!**

**Hydrophytic Vegetation Indicators:**

____ 1- Rapid Test for Hydrophytic Vegetation

____ 2- Dominance Test is >50%

____ 3-Prevalence Index is ≤ 3.0[1]

____ 4-Morphological Adaptations[1] (provide supporting data in Remarks or on a separate sheet)

____ 5- Wetland Non-Vascular Plants[1]

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes ____ No **X**

Remarks:

**SOIL** PHS # **6836** Sampling Point: **3**

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

| Depth | Matrix | | Redox Features | | | | | |
|---|---|---|---|---|---|---|---|---|
| (Inches) | Color (moist) | % | Color (moist) | % | Type[1] | Loc[2] | Texture | Remarks |
| **0-13** | **10YR 3/3** | **100** | | | | | **Silt Loam** | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

[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.)**

- 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 Soils[3]:**

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

[3]Indicators 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:

**Disturbed hummocky. Recent geotechnical excavations in general area.**

## 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 Plowed Soils (C6)
- Stunted or Stressed Plants (D1) **(LRR A)**
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water stained Leaves (B9) **(MLRA1, 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 **X** | Depth (inches): | |
| Water Table Present? | Yes | | No **X** | Depth (inches): | **>14** |
| Saturation Present? (includes capillary fringe) | Yes | | No **X** | Depth (inches): | **>14** |

**Wetland Hydrology Present?**

**Yes** _____ **No X**

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

Remarks:

PHS # 6836

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

Project/Site: **Tualatin-Sherwood Rd Property** City/County: **Tualatin/Washington** Sampling Date: **9/19/2019**

Applicant/Owner: **Phelan Development** State: **OR** Sampling Point: **4**

Investigator(s): **JT/MS** Section, Township, Range: **Township 2S, Range 1 W, Section 22D**

Landform (hillslope, terrace, etc.:) **Flat** Local relief (concave, convex, none): **Flat** Slope (%): **1**

Subregion (LRR): **LRR A** Lat: **45375529** Long: **-122.789179** Datum: **WSG85**

Soil Map Unit Name: **Hillsboro Loam, 0-3 Percent Slopes** NWI Classification: **None**

Are climatic/hydrologic conditions on the site typical for this time of year? Yes **X** No ____ (if no, explain in Remarks)

Are vegetation ____ Soil ____ or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) **Y**

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 | **X** | No | | **Is Sampled Area within a Wetland?** Yes ____ No **X** |
| Hydric Soil Present? | Yes | | No | **X** | |
| Wetland Hydrology Present? | Yes | | No | **X** | |

Remarks:

## VEGETATION - Use scientific names of plants.

| | absolute % cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| Tree Stratum (plot size: ____) | | | |
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| | **0** | = Total Cover | |
| Sapling/Shrub Stratum (plot size: ____) | | | |
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| | **0** | = Total Cover | |
| Herb Stratum (plot size: **5**) | | | |
| 1 ***Lolium sp*** | **100** | **X** | **(FAC)** |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| | **100** | = Total Cover | |
| Woody Vine Stratum (plot size: ____) | | | |
| 1 | | | |
| 2 | | | |
| | **0** | = Total Cover | |

% Bare Ground in Herb Stratum **0**

**Dominance Test worksheet:**

Number of Dominant Species That are OBL, FACW, or FAC: **1** (A)

Total Number of Dominant Species Across All Strata: **1** (B)

Percent of Dominant Species That are OBL, FACW, or FAC: **100%** (A/B)

**Prevalence Index Worksheet:**

| Total % Cover of | | Multiply by: | |
|---|---|---|---|
| OBL Species | | x 1 = | **0** |
| FACW species | | x 2 = | **0** |
| FAC Species | | x 3 = | **0** |
| FACU Species | | x 4 = | **0** |
| UPL Species | | x 5 = | **0** |
| Column Totals | **0** (A) | | **0** (B) |

Prevalence Index =B/A = **#DIV/0!**

**Hydrophytic Vegetation Indicators:**

____ 1- Rapid Test for Hydrophytic Vegetation

**X** 2- Dominance Test is >50%

____ 3-Prevalence Index is ≤ 3.0[1]

____ 4-Morphological Adaptations[1] (provide supporting data in Remarks or on a separate sheet)

____ 5- Wetland Non-Vascular Plants[1]

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** **Yes X** **No** ____

Remarks:

**Lactuca serriola <1%.**

## SOIL

PHS # 6836 Sampling Point: 4

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

| Depth | Matrix | | Redox Features | | | | | |
|---|---|---|---|---|---|---|---|---|
| (Inches) | Color (moist) | % | Color (moist) | % | Type[1] | Loc[2] | Texture | Remarks |
| **0-10** | **10YR 3/3** | **100** | | | | | **Silt Loam** | |
| **10-14** | **7.5YR 4/4** | **100** | | | | | **Silt Loam** | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

[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.)**

- ___ 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 Soils[3]:**

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

[3]Indicators 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 Plowed Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water stained Leaves (B9) **(MLRA1, 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 **X** | Depth (inches): | | |
| Water Table Present? | Yes ___ | No **X** | Depth (inches): | **>14** | |
| Saturation Present? (includes capillary fringe) | Yes ___ | No **X** | Depth (inches): | **>14** | |

**Wetland Hydrology Present?**

**Yes** ___ **No X**

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

Remarks:

PHS # 6836

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

Project/Site: **Tualatin-Sherwood Rd Property** City/County: **Tualatin/Washington** Sampling Date: **9/19/2019**

Applicant/Owner: **Phelan Development** State: **OR** Sampling Point: **5**

Investigator(s): **JT/MS** Section, Township, Range: **Township 2S, Range 1 W, Section 22D**

Landform (hillslope, terrace, etc.:) **Flat** Local relief (concave, convex, none): **Flat** Slope (%): **1**

Subregion (LRR): **LRR A** Lat: **45.375524** Long: **-122.788449** Datum: **WSG85**

Soil Map Unit Name: **Hillsboro Loam, 3-7 Percent Slopes** NWI Classification: **None**

Are climatic/hydrologic conditions on the site typical for this time of year? Yes **X** No ____ (if no, explain in Remarks)

Are vegetation ____ Soil ____ or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) **Y**

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 | **X** | No | | **Is Sampled Area within a Wetland?** Yes ____ No **X** |
| Hydric Soil Present? | Yes | | No | **X** | |
| Wetland Hydrology Present? | Yes | | No | **X** | |

Remarks:

## VEGETATION - Use scientific names of plants.

| | absolute % cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| Tree Stratum (plot size: ____) | | | |
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| | **0** | = Total Cover | |
| Sapling/Shrub Stratum (plot size: **15**) | | | |
| 1 ***Rubus armeniacus*** | **10** | **X** | **FAC** |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| | **10** | = Total Cover | |
| Herb Stratum (plot size: **5**) | | | |
| 1 ***Lolium sp*** | **60** | **X** | **(FAC)** |
| 2 ***Unidentified grass*** | **38** | **X** | **(FAC)** |
| 3 ***Lapsana communis*** | **2** | | **FACU** |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| | **100** | = Total Cover | |
| Woody Vine Stratum (plot size: ____) | | | |
| 1 | | | |
| 2 | | | |
| | **0** | = Total Cover | |

% Bare Ground in Herb Stratum **0**

**Dominance Test worksheet:**

Number of Dominant Species That are OBL, FACW, or FAC: **3** (A)

Total Number of Dominant Species Across All Strata: **3** (B)

Percent of Dominant Species That are OBL, FACW, or FAC: **100%** (A/B)

**Prevalence Index Worksheet:**

| Total % Cover of | | Multiply by: | |
|---|---|---|---|
| OBL Species | | x 1 = | **0** |
| FACW species | | x 2 = | **0** |
| FAC Species | | x 3 = | **0** |
| FACU Species | | x 4 = | **0** |
| UPL Species | | x 5 = | **0** |
| Column Totals | **0** (A) | | **0** (B) |

Prevalence Index =B/A = **#DIV/0!**

**Hydrophytic Vegetation Indicators:**

____ 1- Rapid Test for Hydrophytic Vegetation

**X** 2- Dominance Test is >50%

____ 3-Prevalence Index is ≤ 3.0[1]

____ 4-Morphological Adaptations[1] (provide supporting data in Remarks or on a separate sheet)

____ 5- Wetland Non-Vascular Plants[1]

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** **Yes X** **No** ____

Remarks:

**SOIL** PHS # **6836** Sampling Point: **5**

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

| Depth | Matrix | | Redox Features | | | | | |
|---|---|---|---|---|---|---|---|---|
| (Inches) | Color (moist) | % | Color (moist) | % | Type[1] | Loc[2] | Texture | Remarks |
| **0-10** | **10YR 3/3** | **100** | | | | | **Silt Loam** | |
| **10-13** | **7.5YR 3/3** | **100** | | | | | **Silt Loam** | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

[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.)**

- 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 Soils[3]:**

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

[3]Indicators 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 Plowed Soils (C6)
- Stunted or Stressed Plants (D1) **(LRR A)**
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water stained Leaves (B9) **(MLRA1, 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 **X** | Depth (inches): | |
| Water Table Present? | Yes | | No **X** | Depth (inches): | **>13** |
| Saturation Present? (includes capillary fringe) | Yes | | No **X** | Depth (inches): | **>13** |

**Wetland Hydrology Present?**

**Yes** _____ **No X**

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

Remarks:

Photo A:

Looking southwest at Sample Point 1.

Photo taken on September 19, 2019

Photo B:

Looking west at a raised area with fill, north of SW Myslony Street in the northwest corner of the study area.

Photo taken on September 19, 2019

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9/23/2019

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9450 SW Commerce Circle, Suite 180
Wilsonville, OR 97070

Photo documentation

11045, 10835, 10775 Tualatin-Sherwood Road, Tualatin, Oregon

Photo C:

Looking southwest at Sample Point 2.

Photo taken on September 19, 2019

Photo D:

Looking east at Sample Point 3.

Photo taken on September 19, 2019

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Photo documentation

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Photo E:

Looking south at southwest portion of study area (Tax lot 600).

Photo taken on September 19, 2019

Photo F:

Looking west at Sample Point 4.

Photo taken on September 19, 2019

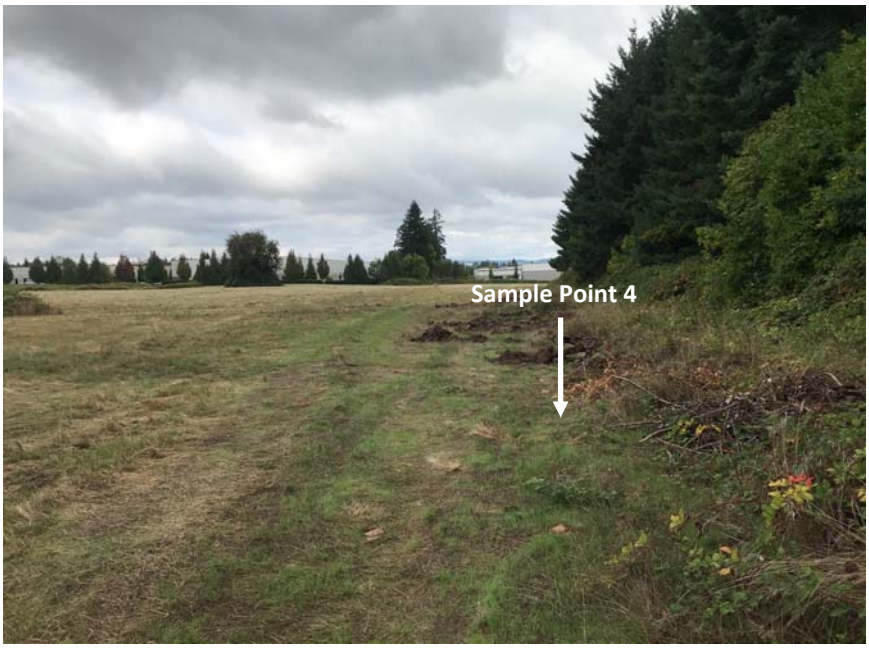


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Photo documentation

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Photo G:

Looking east at Sample Point 5.

Photo taken on September 19, 2019

Photo H:

Looking east at residence in northeast portion of study area (Tax lot 700).

Photo taken on September 19, 2019



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