



Oregon

Kate Brown, Governor

Department of State Lands

775 Summer Street NE, Suite 100

Salem, OR 97301-1279

(503) 986-5200

FAX (503) 378-4844

www.oregon.gov/dsl

State Land Board

September 17, 2021

Pacific Golf Communities, LLC
Attn: Michael Pearson
PO Box 3094
Florence, OR 97439

Kate Brown
Governor

Shemia Fagan
Secretary of State

Re: WD # 2021-0235 **Approved**
Wetland Delineation Report for Florence Subdivision
Lane County; T18S R12W S15 TL 1500
Florence Local Wetlands Inventory, Wetland "PW"

Tobias Read
State Treasurer

Dear Michael Pearson:

The Department of State Lands has reviewed the wetland delineation report prepared by Pacific Habitat Services for the site referenced above. Based upon the information presented in the report, we concur with the wetland boundaries as mapped in Figure 6 and 6A of the report. Please replace all copies of the preliminary wetland maps with these final Department-approved maps.

Within the study area, one wetland (Wetland A, totaling approximately 0.20 acres) was identified. The wetland is subject to the permit requirements of the state Removal-Fill Law. Under current regulations, a state permit is required for cumulative fill or annual excavation of 50 cubic yards or more in wetlands or below the ordinary high-water line (OHWL) of the waterway (or the 2-year recurrence interval flood elevation if OHWL cannot be determined).

This concurrence is for purposes of the state Removal-Fill Law only. We recommend that you attach a copy of this concurrence letter to any subsequent state permit application to speed application review. Federal or local permit requirements may apply as well. The U.S. Army Corps of Engineers will determine jurisdiction under the Clean Water Act, which may require submittal of a complete Wetland Delineation Report.

Please be advised that state law establishes a preference for avoidance of wetland impacts. Because measures to avoid and minimize wetland impacts may include reconfiguring parcel layout and size or development design, we recommend that you work with Department staff on appropriate site design before completing the city or county land use approval process.

This concurrence is based on information provided to the agency. The jurisdictional determination is valid for five years from the date of this letter unless new information necessitates a revision. Circumstances under which the Department may change a determination are found in OAR 141-090-0045 (available on our web site or upon request). In addition, laws enacted by the legislature and/or rules adopted by the Department may result in a change in jurisdiction; individuals and applicants are subject to the regulations that are in effect at the time of the removal-fill activity or complete permit application. The applicant, landowner, or agent may submit a request for reconsideration of this determination in writing within six months of the date of this letter.

Thank you for having the site evaluated. If you have any questions, please contact the Jurisdiction Coordinator for Lane County, Matt Unitis, at (503) 986-5262.

Sincerely,

A handwritten signature in black ink, appearing to read "Peter Ryan".

Peter Ryan, SPWS
Aquatic Resource Specialist

Enclosures

ec: Joe Thompson, Pacific Habitat Services
City of Florence Planning Department (Maps enclosed for updating LWI)
Daniel Griffith, Corps of Engineers
Charles Redon, DSL
Oregon Coastal Management Program

WETLAND DELINEATION / DETERMINATION REPORT COVER FORM

Fully completed and signed report cover forms and applicable fees are required before report review timelines are initiated by the Department of State Lands. Make the checks payable to the Oregon Department of State Lands. To pay fees by credit card, go online at: <https://apps.oregon.gov/DSL/EPS/program?key=4>.

Attach this completed and signed form to the front of an unbound report or include a hard copy with a digital version (single PDF file of the report cover from and report, minimum 300 dpi resolution) and submit to, **Oregon Department of State Lands, 775 Summer Street NE, Suite 100, Salem, OR 97301-1279**. A single PDF of the completed cover form and report may be e-mailed to **Wetland_Delineation@dsl.state.or.us**. For submittal of PDF files larger than 10 MB, e-mail DSL instructions on how to access the file from your ftp or other file sharing website.

Contact and Authorization Information

<input type="checkbox"/> Applicant <input checked="" type="checkbox"/> Owner Name, Firm and Address: Michael Pearson Pacific Golf Communities, LLC PO Box 3094 Florence, OR 97439	Business phone # 541-902-9222 Mobile phone # (optional) 541-350-4854 E-mail: jmichael313@gmail.com
---	--

<input checked="" type="checkbox"/> Authorized Legal Agent, Name and Address:	Business phone # Mobile phone # E-mail:
---	---

I either own the property described below or I have legal authority to allow access to the property. I authorize the Department to access the property for the purpose of confirming the information in the report, after prior notification to the primary contact.

Typed/Printed Name: _____ Signature: Joseph M. Pearson
Date: 4-22-21

Project and Site Information

Project Name: Florence Subdivision	Latitude 44.005823° Longitude -124.117772° : decimal degree - centroid of site or start & end points of linear project Tax Map # 18 12 15 Tax Lot(s) 1500
Proposed Use: Development	Tax Map # Tax Lot(s)
Project Street Address (or other descriptive location): East of Rhododendron Drive, and north of Royal St. George Drive	Township 18S Range 12W Section 15 QQ Use separate sheet for additional tax and location information Waterway: n/a River Mile: n/a
City: Florence County: Lane	NWI Quad(s): Florence

Wetland Delineation Information

Wetland Consultant Name, Firm and Address: Pacific Habitat Services Attn: Joe Thompson 9450 SW Commerce Circle, Suite 180 Wilsonville, OR 97070	Phone # 503-570-0800 Mobile phone # E-mail: jt@pacifichabitat.com
--	---

The information and conclusions on this form and in the attached report are true and correct to the best of my knowledge.
Consultant Signature: Joe Thompson Date: May 3, 2021

Primary Contact for report review and site access is Consultant Applicant/Owner Authorized Agent

Wetland/Waters Present? Yes No Study Area size: 10.33 **acre** Total Wetland Acreage: 0.02

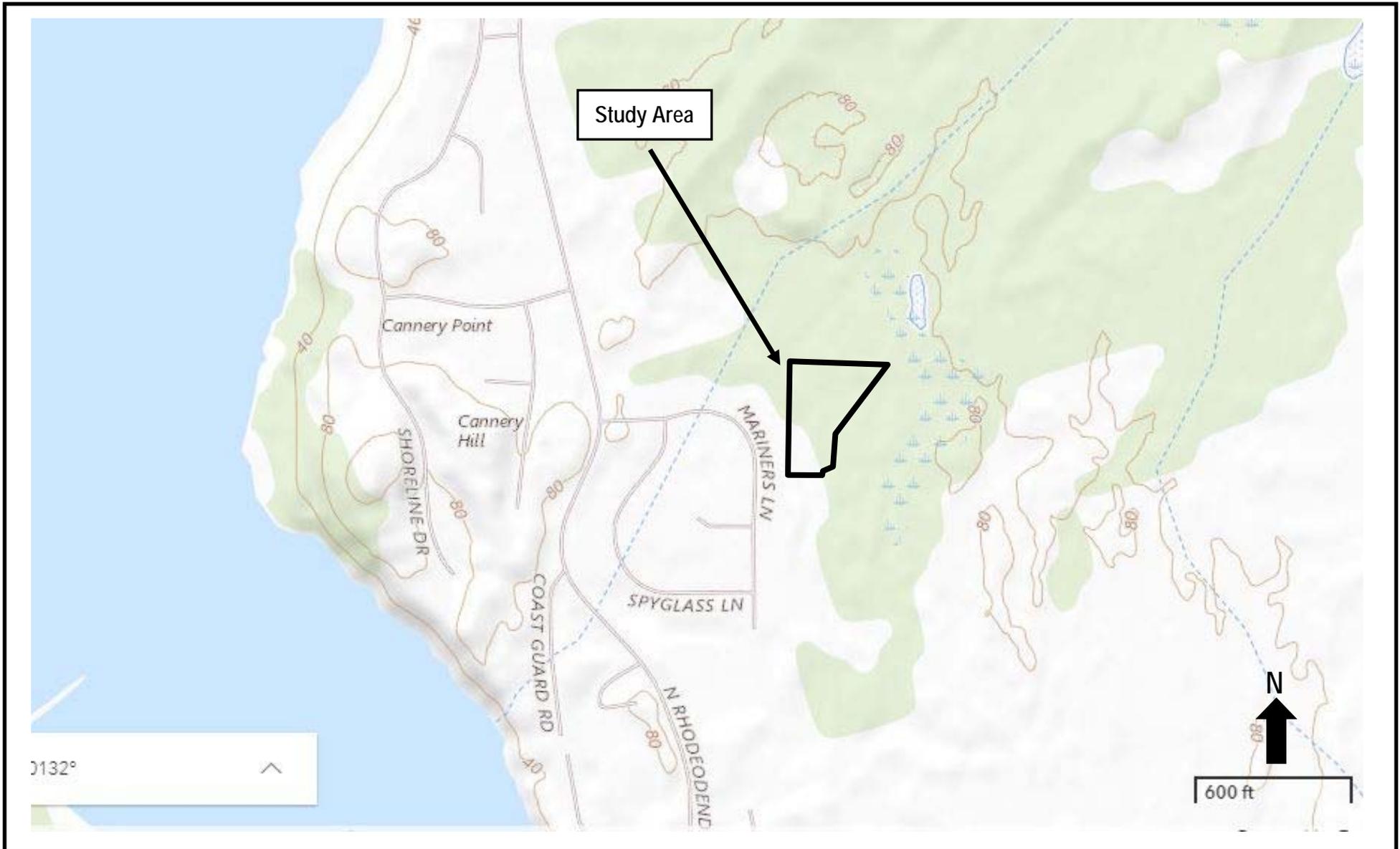
Check Applicable Boxes Below

<input type="checkbox"/> R-F permit application submitted	<input type="checkbox"/> Fee payment submitted
<input type="checkbox"/> Mitigation bank site	<input type="checkbox"/> Fee (\$100) for resubmittal of rejected report
<input type="checkbox"/> Industrial Land Certification Program Site	<input type="checkbox"/> Request for Reissuance. See eligibility criteria (no fee)
<input type="checkbox"/> Wetland restoration/enhancement project (not mitigation)	DSL # _____ Expiration Date _____

Previous delineation/application on parcel? LWI shows wetlands or waters on parcel?
If Known, previous DSL # 06-0072 Wetland ID Code Probable Wetland

For Office Use Only

DSL Reviewer: <u>MU</u>	Fee Paid Date: ___ / ___ / ___	DSL WD # <u>2021-0235</u>
Date Delineation Received: <u>5 / 3 / 21</u>	Scanned: <input type="checkbox"/> Final Scan: <input type="checkbox"/>	DSL App. #



Project #7165
3/10/2021



Pacific Habitat Services, Inc.
9450 SW Commerce Circle, Suite 180
Wilsonville, OR 97070

General Location and Topography
Proposed Fairway Estates Development - Florence, Oregon
United States Geological Survey (USGS) Mercer Lake, Oregon 7.5 quadrangle, 2020
(viewer.nationalmap.gov/basic)

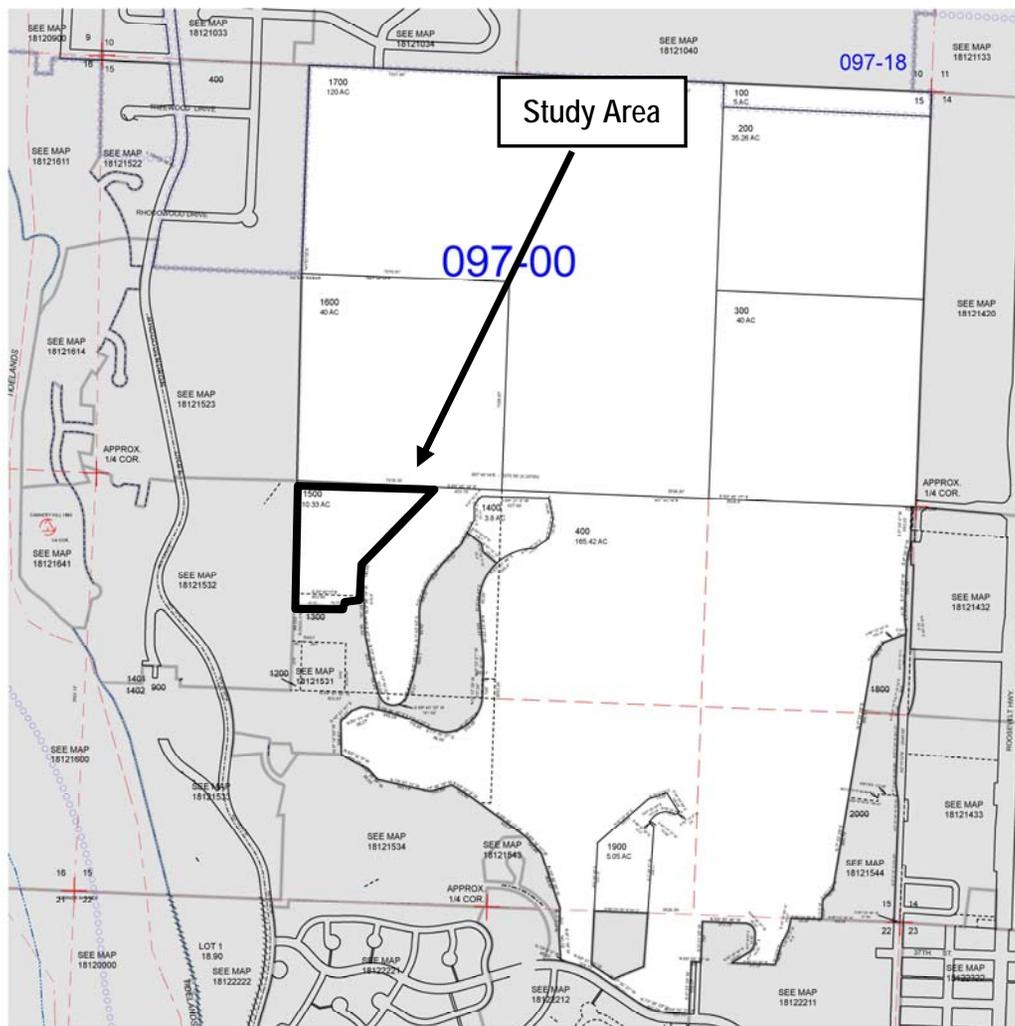
FIGURE
1

FOR ASSESSMENT AND TAXATION ONLY

SECTION 15 T.18S. R.12W. W.M.
Lane County
1" = 400'

18121500
FLORENCE

LGATSKP - 2018-12-10 11:15



- CANCELLED
- 900
 - 1401
 - 1402
 - 2000
 - 1800
 - 1800
 - 2000
 - 1300
 - 1300

FLORENCE
18121500

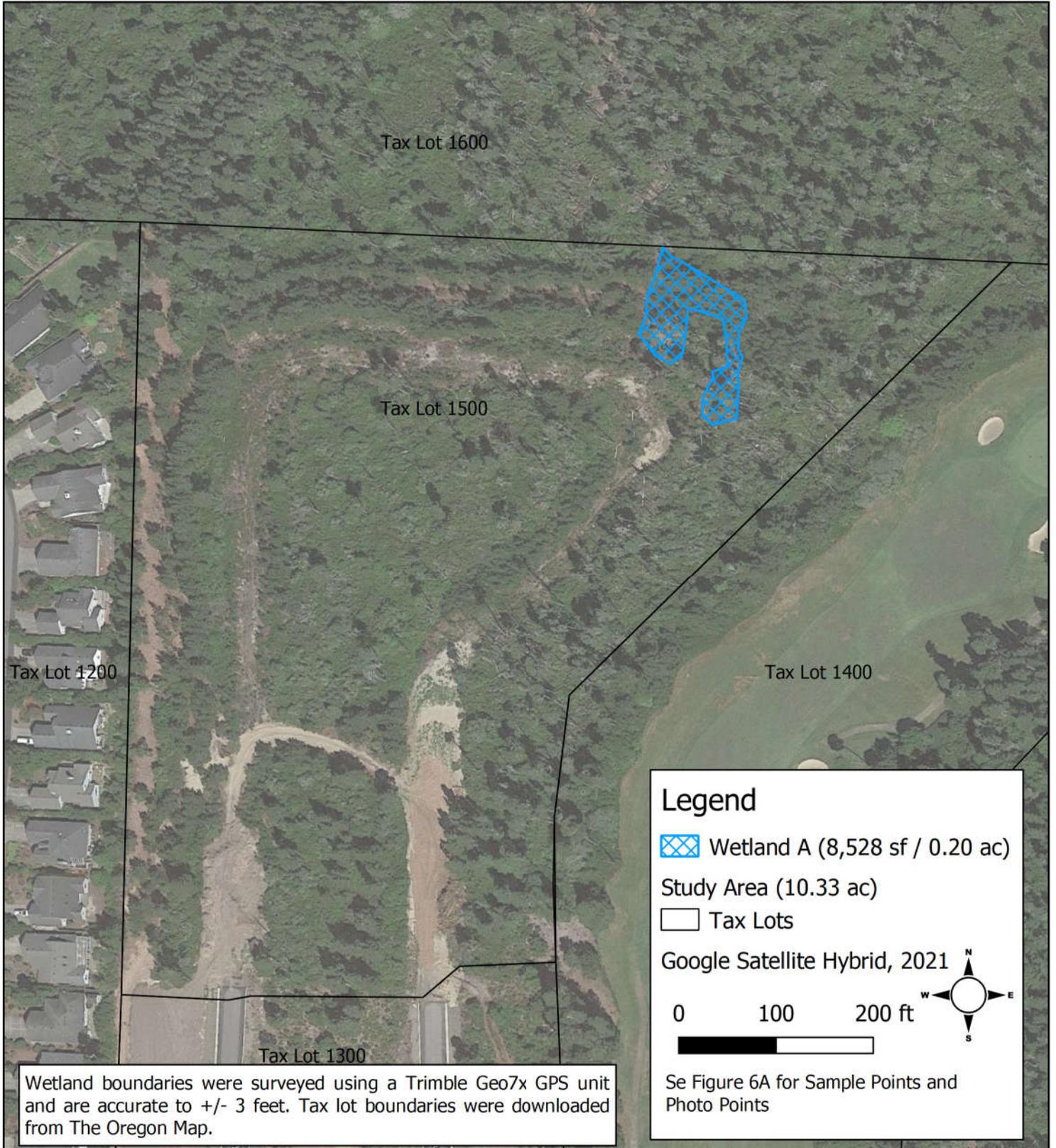
Project #7165
3/10/2021



Pacific Habitat Services, Inc.
9450 SW Commerce Circle, Suite 180
Wilsonville, OR 97070

Tax Lot Map
Proposed Fairway Estates Development - Florence, Oregon
The Oregon Map (ormap.net)

FIGURE
2



#7165
4/26/2021



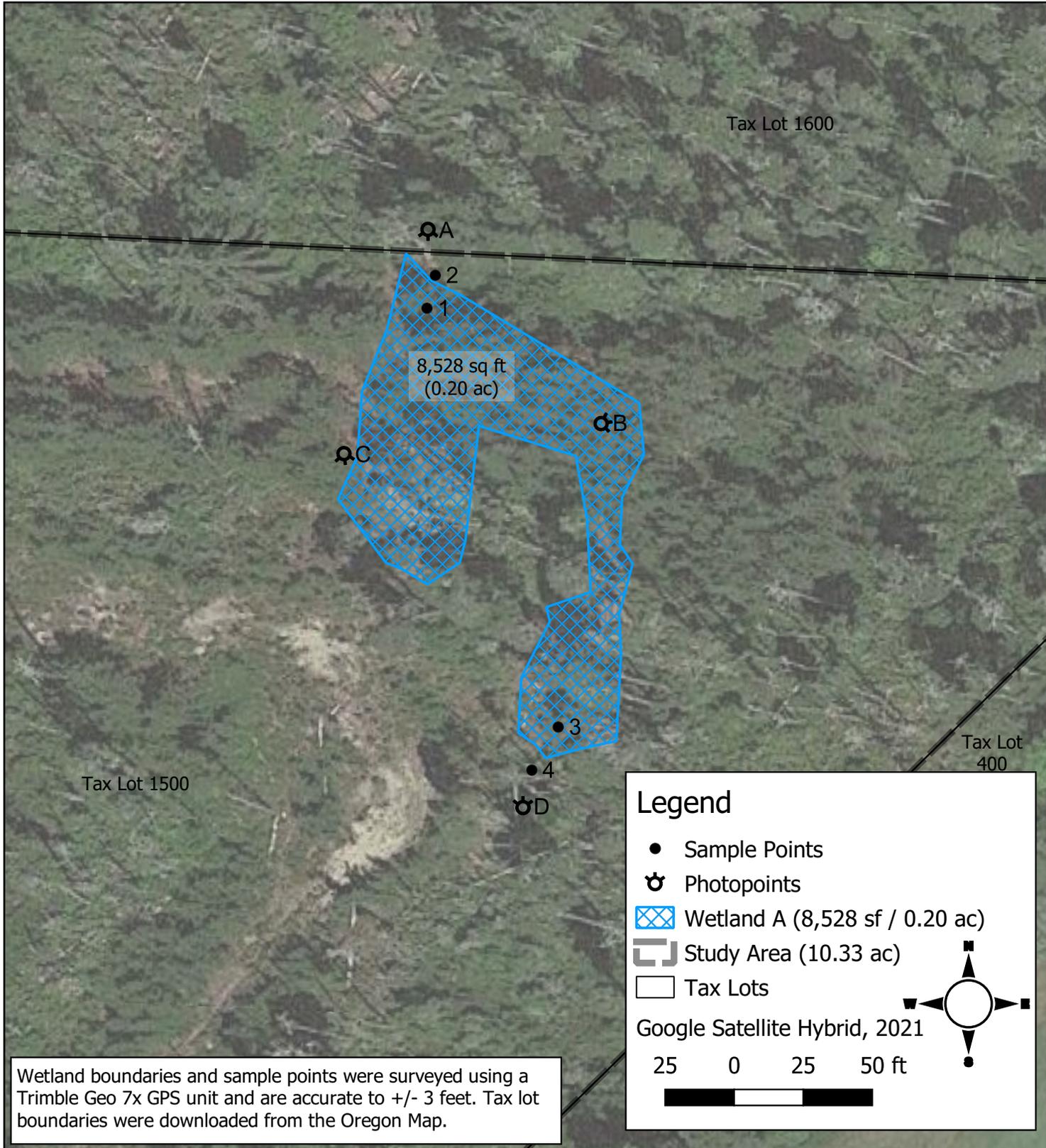
Pacific Habitat Services, Inc.
9450 SW Commerce Circle, Suite 180
Wilsonville, OR 97070

DSL WD # 2021-0235
Approval Issued 9/17/2021
Approval Expires 9/17/2026

Wetland Delineation Overview
Proposed Fairway Estates - Florence, OR

FIGURE

6



#7165
4/22/2021



Pacific Habitat Services, Inc.
9450 SW Commerce Circle, Suite 180
Wilsonville, OR 97070

DSL WD # 2021-0235
Approval Issued 9/17/2021
Approval Expires 9/17/2026

Wetland Delineation
Proposed Fairway Estates - Florence, OR

FIGURE
6A



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, PORTLAND DISTRICT
EUGENE FIELD OFFICE
211 E 7TH AVENUE, SUITE 105
EUGENE, OR 97401-2763

Exhibit M2

June 9, 2022

Regulatory Branch
Corps No. NWP-2021-455

Mr. Michael Pearson
Pacific Golf Course Communities, LLC
P.O. Box 3094
Florence, Oregon 97439
Jmichael313@gmail.com

Dear Mr. Pearson:

The U.S. Army Corps of Engineers (Corps) received your request for an Approved Jurisdictional Determination (AJD) of the aquatic resources, including wetlands, within the review area on the property located at east of Rhododendron Drive and north of Royal St. George Drive in Florence, Lane County, Oregon at Latitude/Longitude: 44.005823°, -124.117772 °. Other aquatic resources, including wetlands, that may occur on this property or on adjacent properties outside the review area are not the subject of this determination.

The Corps has determined Wetland A in the review area is not a water of the U.S. The enclosed *Approved Jurisdictional Determination Form* (Enclosure 1) provides the size, criteria and rationale for jurisdiction for all aquatic resources within the review area. The perimeter of the review area and the boundaries of the delineated waters of the U.S. subject to this AJD are identified on the enclosed drawings (Enclosure 2). A copy of the AJD Form can also be found on our website (<https://www.nwp.usace.army.mil/Missions/Regulatory/Determinations/>).

If you object to the enclosed AJD, you may request an administrative appeal under 33 CFR Part 331 as described in the enclosed *Notification of Administrative Appeal Options and Process and Request for Appeal (RFA)* form (Enclosure 3). To appeal this AJD, you must submit a completed *RFA* form to the Corps Northwestern Division (NWD) office at the address listed on the form. In order for the request for appeal to be accepted, the Corps must determine that the form is complete, that the request meets the criteria for appeal under 33 CFR § 331.5, and the form must be received by the NWD office within 60 days from the date on the form. It is not necessary to submit the form to the NWD office if you do not object to the enclosed AJD.

The delineation included herein has been conducted to identify the location and extent of the aquatic resource boundaries and/or the jurisdictional status of aquatic resources for purposes of the Clean Water Act for the particular site identified in this

request. This delineation and/or jurisdictional determination may not be valid for the Wetland Conservation Provisions of the Food Security Act of 1985, as amended. If you or your tenant are U.S. Department of Agriculture (USDA) program participants, or anticipate participation in USDA programs, you should discuss the applicability of a certified wetland determination with the local USDA service center, prior to starting work.

This AJD is valid for a period of five years from the date of this letter unless new information warrants revisions of the determination.

We would like to hear about your experience working with the Portland District, Regulatory Branch. Please complete a customer service survey form available on our website (<https://regulatory.ops.usace.army.mil/customer-service-survey/>).

If you have any questions regarding our Regulatory Program or permit requirements for work in waters of the U.S., please contact Jason Pietroski by telephone at (503) 530-0118 or by email at Jason.P.Pietroski@usace.army.mil.

Sincerely,

For: William D. Abadie
Chief, Regulatory Branch

Enclosures

cc with drawings:

Pacific Habitat Services, Inc. (Joe Thompson, jt@pacifichabitat.com)

Oregon Department of State Lands (Charles Redon, charles.redon@dsl.oregon.gov)

Oregon Department of Environmental Quality (401applications@deq.oregon.gov)

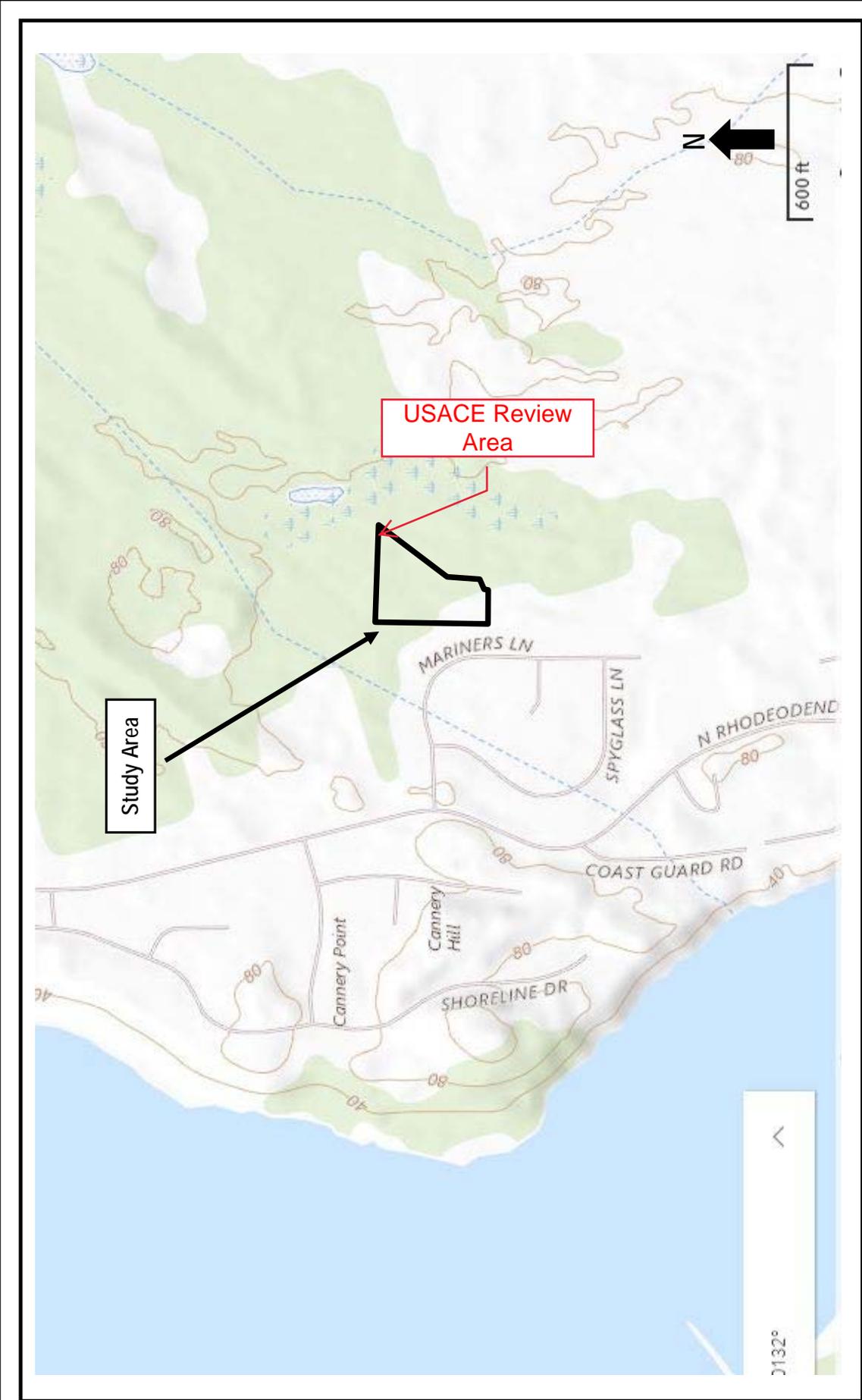


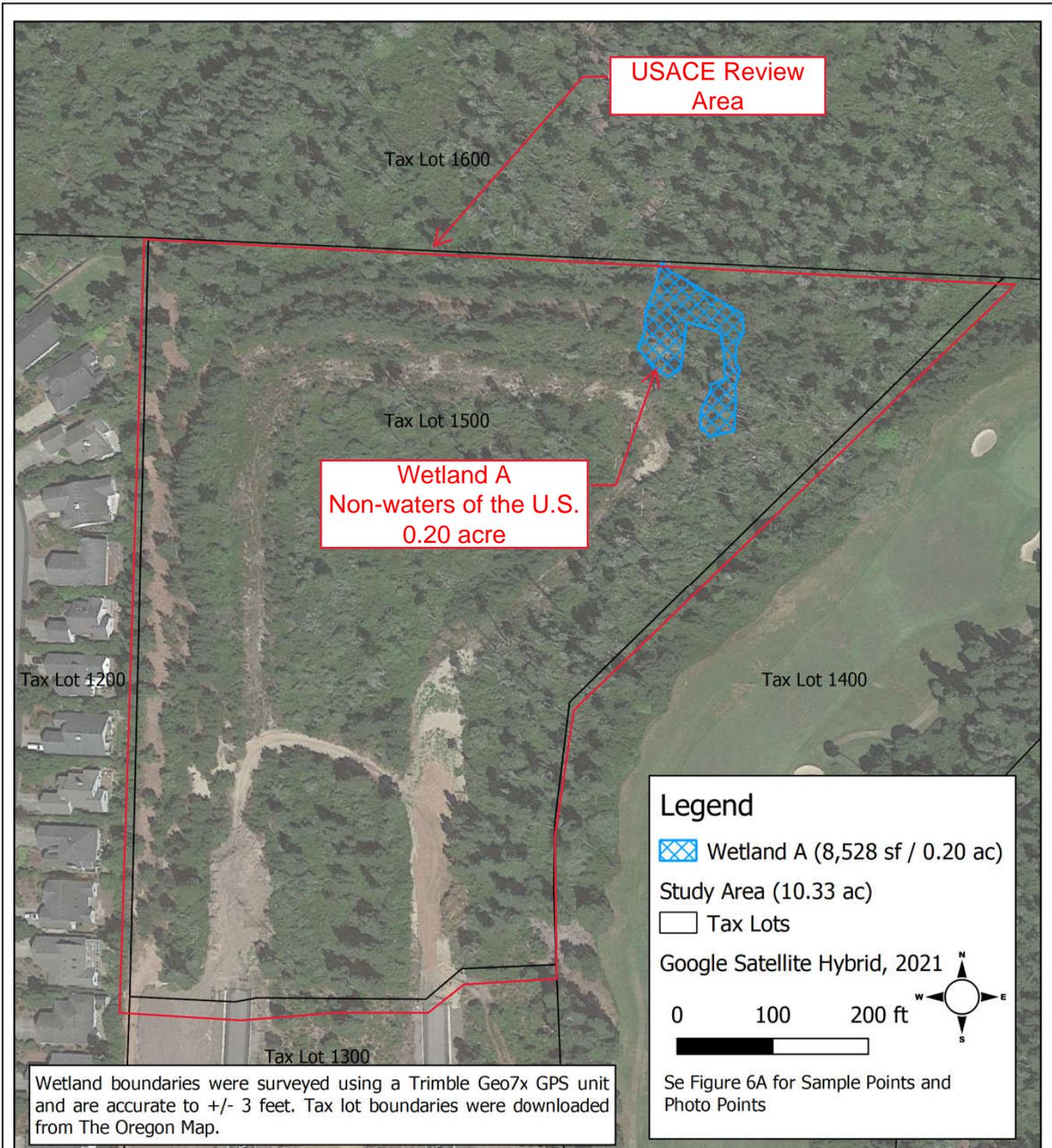
FIGURE
1

General Location and Topography
Proposed Fairway Estates Development - Florence, Oregon
United States Geological Survey (USGS) Mercer Lake, Oregon 7.5 quadrangle, 2020
(viewer.nationalmap.gov/basic)

Project #7165
3/10/2021



Pacific Habitat Services, Inc.
9450 SW Commerce Circle, Suite 180
Wilsonville, OR 97070



#7165
4/26/2021



Pacific Habitat Services, Inc.
9450 SW Commerce Circle, Suite 180
Wilsonville, OR 97070

Wetland Delineation Overview
Proposed Fairway Estates - Florence, OR

FIGURE

6

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 8 June 2022

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: CENWP-ODG, Pacific Golf Course Communities, LLC - Fairway Estates, NWP-2021-455

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Oregon County/parish/borough: Lane City: Florence

Center coordinates of site (lat/long in degree decimal format): Lat. 44.005823° N, Long. -124.117772° W.

Universal Transverse Mercator:

Name of nearest waterbody: Siuslaw River

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows:

Name of watershed or Hydrologic Unit Code (HUC): 171002070200 - Bernhardt Creek-Siuslaw River

- Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
 Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

- Office (Desk) Determination. Date: 22 March 2022
 Field Determination. Date(s):

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

- Waters subject to the ebb and flow of the tide.
 Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are no** "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

- TNWs, including territorial seas
 Wetlands adjacent to TNWs
 Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs
 Non-RPWs that flow directly or indirectly into TNWs
 Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
 Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
 Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
 Impoundments of jurisdictional waters
 Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: linear feet: width (ft) and/or acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known): .

2. Non-regulated waters/wetlands (check if applicable):³

- Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
Explain: Wetland A is a depressionnal palustrine emergent wetland located in the northern portion of the review area. Wetland A is situated approximately three to six feet lower in elevation compared to the remainder of the review area. The primary hydrology source for Wetland A is precipitation. The closest surface drainage feature is a linear unnamed tributary to the

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Siuslaw River located approximately 550 feet to the northwest of the review area. Soils in the review area are sandy, well drained soils that demonstrated a sandy redox at sample points and the entire review area is mapped as hydric soils by the Natural Resource Conservation Service (NRCS) soil survey. The review area is in an "Area of Minimal Flood Hazard" according to the Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (NFHL) and there is no evidence of a surface connection between Wetland A and the unnamed tributary to the Siuslaw River due to rises in topography between the two features. There is no evidence that Wetland A would support interstate commerce. The Corps has determined that Wetland A is an isolated water.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW

Identify TNW: .

Summarize rationale supporting determination: .

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is “adjacent”: .

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are “relatively permanent waters” (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: **Pick List**
Drainage area: **Pick List**
Average annual rainfall: inches
Average annual snowfall: inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

- Tributary flows directly into TNW.
- Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **Pick List** river miles from TNW.
Project waters are **Pick List** river miles from RPW.
Project waters are **Pick List** aerial (straight) miles from TNW.
Project waters are **Pick List** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: .

Identify flow route to TNW⁵: .
Tributary stream order, if known: .

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

(b) General Tributary Characteristics (check all that apply):

- Tributary is:** Natural
 Artificial (man-made). Explain: _____
 Manipulated (man-altered). Explain: _____

Tributary properties with respect to top of bank (estimate):

Average width: _____ feet
Average depth: _____ feet
Average side slopes: **Pick List**.

Primary tributary substrate composition (check all that apply):

- | | | |
|--|--|-----------------------------------|
| <input type="checkbox"/> Silts | <input type="checkbox"/> Sands | <input type="checkbox"/> Concrete |
| <input type="checkbox"/> Cobbles | <input type="checkbox"/> Gravel | <input type="checkbox"/> Muck |
| <input type="checkbox"/> Bedrock | <input type="checkbox"/> Vegetation. Type/% cover: _____ | |
| <input type="checkbox"/> Other. Explain: _____ | | |

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: _____

Presence of run/riffle/pool complexes. Explain: _____

Tributary geometry: **Pick List**

Tributary gradient (approximate average slope): _____ %

(c) Flow:

Tributary provides for: **Pick List**

Estimate average number of flow events in review area/year: **Pick List**

Describe flow regime: _____

Other information on duration and volume: _____

Surface flow is: **Pick List**. Characteristics: _____

Subsurface flow: **Pick List**. Explain findings: _____

Dye (or other) test performed: _____

Tributary has (check all that apply):

- | | |
|---|---|
| <input type="checkbox"/> Bed and banks | |
| <input type="checkbox"/> OHWM ⁶ (check all indicators that apply): | |
| <input type="checkbox"/> clear, natural line impressed on the bank | <input type="checkbox"/> the presence of litter and debris |
| <input type="checkbox"/> changes in the character of soil | <input type="checkbox"/> destruction of terrestrial vegetation |
| <input type="checkbox"/> shelving | <input type="checkbox"/> the presence of wrack line |
| <input type="checkbox"/> vegetation matted down, bent, or absent | <input type="checkbox"/> sediment sorting |
| <input type="checkbox"/> leaf litter disturbed or washed away | <input type="checkbox"/> scour |
| <input type="checkbox"/> sediment deposition | <input type="checkbox"/> multiple observed or predicted flow events |
| <input type="checkbox"/> water staining | <input type="checkbox"/> abrupt change in plant community |
| <input type="checkbox"/> other (list): _____ | |
| <input type="checkbox"/> Discontinuous OHWM. ⁷ Explain: _____ | |

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- | | |
|--|--|
| <input type="checkbox"/> High Tide Line indicated by: | <input type="checkbox"/> Mean High Water Mark indicated by: |
| <input type="checkbox"/> oil or scum line along shore objects | <input type="checkbox"/> survey to available datum; |
| <input type="checkbox"/> fine shell or debris deposits (foreshore) | <input type="checkbox"/> physical markings; |
| <input type="checkbox"/> physical markings/characteristics | <input type="checkbox"/> vegetation lines/changes in vegetation types. |
| <input type="checkbox"/> tidal gauges | |
| <input type="checkbox"/> other (list): _____ | |

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: _____

Identify specific pollutants, if known: _____

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

(iv) **Biological Characteristics. Channel supports (check all that apply):**

- Riparian corridor. Characteristics (type, average width):
- Wetland fringe. Characteristics:
- Habitat for:
 - Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings:

2. **Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: acres

Wetland type. Explain:

Wetland quality. Explain:

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain:

Surface flow is: **Pick List**

Characteristics:

Subsurface flow: **Pick List**. Explain findings:

Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain:

Ecological connection. Explain:

Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

Project waters are **Pick List** aerial (straight) miles from TNW.

Flow is from: **Pick List**.

Estimate approximate location of wetland as within the **Pick List** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:

Identify specific pollutants, if known:

(iii) **Biological Characteristics. Wetland supports (check all that apply):**

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. Explain:
- Habitat for:
 - Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings:

3. **Characteristics of all wetlands adjacent to the tributary (if any)**

All wetland(s) being considered in the cumulative analysis: **Pick List**

Approximately () acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N) Size (in acres) Directly abuts? (Y/N) Size (in acres)

Summarize overall biological, chemical and physical functions being performed: .

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .
3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
 TNWs: linear feet width (ft), Or, acres.
 Wetlands adjacent to TNWs: acres.
2. **RPWs that flow directly or indirectly into TNWs.**
 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
 Tributaries of TNW where tributaries have continuous flow “seasonally” (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.
- Identify type(s) of waters: .

3. Non-RPWs⁸ that flow directly or indirectly into TNWs.

- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.
- Identify type(s) of waters: .

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
- Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .
- Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.

- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.

- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. Impoundments of jurisdictional waters.⁹

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from "waters of the U.S.," or
- Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
- Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):¹⁰

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain: .
- Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

⁸See Footnote # 3.

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.
Identify type(s) of waters: .
- Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in “*SWANCC*,” the review area would have been regulated based solely on the “Migratory Bird Rule” (MBR).
- Waters do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction. Explain: .
- Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: Wetland A – 0.20 acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands:

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Delineation report completed by Pacific Habitat Services, Inc. dated 21 April 2021.
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: .
- Corps navigable waters’ study: .
- U.S. Geological Survey Hydrologic Atlas: Accessed via USACE eGIS 22 March 2022.
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: Mercer Lake, OR (1984, 2011, 2020, accessed USGS Topview by the Corps on 22 March 2022.
- USDA Natural Resources Conservation Service Soil Survey. Citation: provided with requestor delineation report.
- National wetlands inventory map(s). Cite name: provided with requestor delineation report.
- State/Local wetland inventory map(s): provided with requestor delineation report.
- FEMA/FIRM maps: 41039C0938G, accessed 22 March 2022.
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): Provided in requestor delineation report, Google Earth Pro aerial imagery (5 May 1994, 7 August 2000, 23 June 2006, 17 July 2015, 29 April 2019(accessed 22 March 2022.
or Other (Name & Date): ground-level photographs provided with requestor delineation report.
- Previous determination(s). File no. and date of response letter: .
- Applicable/supporting case law: .
- Applicable/supporting scientific literature: .
- Other information (please specify): USGS Stream Stats report retrieved 22 March 2022, Oregon Department of Geology and Mineral Industries (DOGAMI) LiDAR accessed 22 March 2022.

B. ADDITIONAL COMMENTS TO SUPPORT JD:

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Pacific Gold Course Communities, LLC		File Number: NWP-2021-455	Date: 6/9/2022
Attached is:			See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)		A
	PROFFERED PERMIT (Standard Permit or Letter of permission)		B
	PERMIT DENIAL		C
X	APPROVED JURISDICTIONAL DETERMINATION		D
	PRELIMINARY JURISDICTIONAL DETERMINATION		E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found in Corps regulations at 33 CFR Part 331, or at <http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/FederalRegulation.aspx>

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:
William D. Abadie, Chief Regulatory Branch
U.S. Army Corps of Engineers, Portland District Office
PO Box 2946
Portland, OR 97208-2946
Telephone: (503)808-4373
Email: William.D.Abadie@usace.army.mil

If you only have questions regarding the appeal process you may also contact:
Melinda M. Larsen, Regulatory Appeals Review Officer
U.S. Army Corps of Engineers, Northwestern Division
1201 NE Lloyd Blvd., Suite 400
Portland, OR 97232
Telephone: (503) 808-3888
Email: Melinda.M.Larsen@usace.army.mil

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

Signature of appellant or agent.

Date: _____

Telephone number: _____

**Wetland Delineation
for the Fairway Estates Development
in Florence, Oregon**
(Township 18 South, Range 12 West, Section 15, Tax Lot 1500)

Prepared for

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Prepared by

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PHS Project Number: 7165

April 21, 2021



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I. INTRODUCTION

Pacific Habitat Services, Inc. (PHS) conducted a wetland delineation for the Fairway Estates development in Florence, Oregon (Township 18 South, Range 12 West, Section 15, Tax lot 1500). This report presents the results of PHS's wetland delineation within the study area. Figures, including a map depicting the location of wetlands within the study area, are located in Appendix A. Data sheets documenting on-site conditions are in Appendix B. Ground-level photos of the site are located in Appendix C. A discussion of the wetland delineation methodology, provided for the client, is in Appendix D.

The study area has been previously delineated, and a concurrence issued (WD# 06-0072). As the delineation is greater than five years old, and has expired, a new wetland delineation and report are required. In addition to Tax Lot 1500, the previous delineation included a larger study area with three additional tax lots: 1300, 100 and 200, which also included three wetlands that are not located within the study area of this delineation.

II. RESULTS AND DISCUSSION

A. Landscape Setting and Land Use

The approximately 10.33-acre study area is located east of Rhododendron Drive, and north of Royal St. George Drive, and consists of tax lot 1500 in Florence, Oregon. The site is bounded to the east by the Sand Pines golf course, to the south and west by existing single-family homes, and to the north by open space. Land use in the vicinity of the study area includes single-family residential, commercial, and open space.

The study area consists of gently rolling topography. Elevations on site range from 68 to 84 feet NAVD. The site consists of scrub-shrub/forested open space. A rough road has been cut around the perimeter of the study area, however it is not paved, and vegetation is starting to reclaim the road. Dominant species within the study area include shore pine (*Pinus contorta*, FAC), Salal (*Gaultheria shallon*, FACU), and evergreen huckleberry (*Vaccinium ovatum*, FACU).

B. Site Alterations

The Google Earth historical photos of the study area from 1994 through 2019 shows little change on the site. The rough-cut road was in place by 1994, with two roundabout stubs that provided access to the western and central portions of the site. The road appears to have been extended through the eastern portion of the site between 2012 and 2015. Portions of the study area have been recently brushed and cleared of vegetation.

Between 2006 and 2011, roads were constructed for a subdivision to the south of the study area; however, they were not paved until after August of 2016. These activities do not appear to have affected the study area.

No recent fill material or deposits were observed within the study area.

C. Precipitation Data and Analysis

The study area was delineated on February 8, 2021; precipitation data for the months preceding this period is summarized below.

Table 1 compares the most recent monthly precipitation amounts recorded near Florence (at the Honeyman State Park, OR station, approximately 5.5 miles north of the study area¹) to the average monthly precipitation recorded in Honeyman State Park as well as to the normal precipitation range as identified in the Natural Resource Conservation Service's (NRCS) WETS climate table for the Honeyman State Park, OR station. These data show that when rainfall amounts have varied most significantly from the mean, the amounts may also have fallen outside the normal range of variability for this area. For this period, November and December 2020 were within the normal range of variation and January 2021 was above the normal range of variation.

Table 1: Comparison of average and observed monthly precipitation in Florence, prior to the February 8, 2021 delineation fieldwork.

Month	Average Precipitation ²	30% Chance Will Have		Observed Precipitation ³	Percent of Normal
		Less Than Average ²	More Than Average ²		
November	10.36	7.63	12.17	9.11	88%
December	11.68	8.37	13.8	9.45	81%
January**	10.13	7.03	12.05	12.57	124%

1. Closest station with complete WETS tables; WETS tables for Florence are missing data as of the writing of this report.

2. Source: NRCS WETS Table for Honeyman State Park OR (<http://agacis.rcc-acis.org>); date range 1971-2020

3. Source: NRCS monthly precipitation data (<http://agacis.rcc-acis.org>)

*----Monthly rainfall was below the 'normal' range

**-----Monthly rainfall was above the 'normal' range

Total observed precipitation for the water year up to month prior to the field work (October 1, 2020 through January 31, 2021) was 33.36 inches, which was approximately 89 percent of the normal for those months. Table 2 shows daily precipitation totals for the two weeks prior to and the day of the fieldwork that was conducted on February 8, 2021.

Table 2: Daily precipitation totals for two weeks prior to and including the day of fieldwork (February 8, 2021).

Date	Precip. (in.)	Date	Precip. (in.)	Date	Precip. (in.)
25-Jan	0.62	30-Jan	0.51	4- Feb	0.2
26-Jan	0.25	31- Jan	0.87	5- Feb	0.77
27-Jan	0.71	1- Feb	1.72	6- Feb	0.09
28-Jan	0.1	2- Feb	0.32	7-Feb	0.15
29-Jan	0.02	3- Feb	0.57	8-Feb	0.02

The precipitation fluctuations preceding the delineation are not expected to have affected the wetland boundary because the delineation generally relied on the presence of hydric soil indicators and topography to define the wetland/upland boundary. The wetland appears to be the result of a shallow groundwater table, and is the result of its position in the landscape rather than the result of precipitation.

D. Methods

PHS delineated the limits of the wetland on the site 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*. PHS conducted the wetland delineation within the study area on February 8, 2021.

The entire study area was investigated for the presence of wetlands or other waters. One wetland was delineated within the study area. Wetland A was delineated based on topographic changes and changes from observed hydric soils to soils where no hydric indicators were observed. The wetland’s geomorphic position, as well as the presence of slough sedge (*Carex obnupta*, OBL), was also used to determine the wetland boundaries.

The vegetation throughout the project area generally consists of scrub-shrub or trees that have been recently brushed and cleared. PHS did not take additional data in areas that are topographically higher than the wetland (other than data needed to verify the wetland/upland boundary). The upland areas do not exhibit surface indicators of wetlands (i.e. ponded surface water, geomorphic position, or stunted/stressed vegetation, FACW or wetter vegetation, etc.). Data point 4 is representative of upland areas within the study area.

E. Description of all Wetlands and Other Non-Wetland Waters

Wetland A

Wetland A is located in the northern portion of the study area. The wetland is approximately 8,528 square feet (0.20 acres) in size. The Cowardin classification is palustrine, forested, emergent, seasonally flooded (PFO/EMC); the Hydrogeomorphic (HGM) classification is Depressional.

Dominant vegetation within Wetland A includes shore pine, wax myrtle (*Morella californica*, FACW), and slough sedge. Soils within Wetland A meet the hydric soil criteria for sandy redox (S5). Wetland A did not exhibit surface saturation, a high water table, and/or saturation within the upper 12 inches of the soil profile at the time of the delineation; however, stunted/stressed vegetation, sparsely vegetated concave surface, the FAC-neutral test, and the wetlands geomorphic position were used to satisfy hydrologic criteria.

F. Deviation from Local or National Wetland Inventories

The Local Wetland Inventory (LWI) maps a “probable wetland” within the study area. This is consistent the PHS’ delineation of Wetland A.

G. Mapping Method

PHS flagged the limits of the wetlands within the study area with blue pin flags; lime green tape was used for sample point locations. Wetlands and sample points were then surveyed by PHS using a Trimble Geo7x GPS unit with submeter accuracy. Tax lot boundaries were downloaded from the Oregon Map.

H. Additional Information

None.

I. Results and Conclusions

PHS delineated Wetland A within the study area. The total area of wetland within the study area boundary is 8,528 square feet (0.20 acres). Wetland A’s Cowardin and HGM classes are noted in Section E.

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

Adamus, P.R. and D. Field. 2001 *Guidebook for Hydrogeomorphic (HGM)-based Assessment of Oregon Wetland and Riparian Sites. Willamette Valley Ecoregion, Riverine Impounding and Slopes/Flats Subclasses*. Oregon Division of State Lands, Salem, OR.

GoogleEarth Map. 2020 aerial photograph.

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http://wetland-plants.usace.army.mil/nwpl_static/v34/home/home.html#

Munsell Color, 2009. *Munsell Soil Color Charts*. Gretag-Macbeth, New Windsor, New York.

NRCS WETS table for Honeyman State Park, OR. <http://agacis.rcc-acis.org/?fips=41039>

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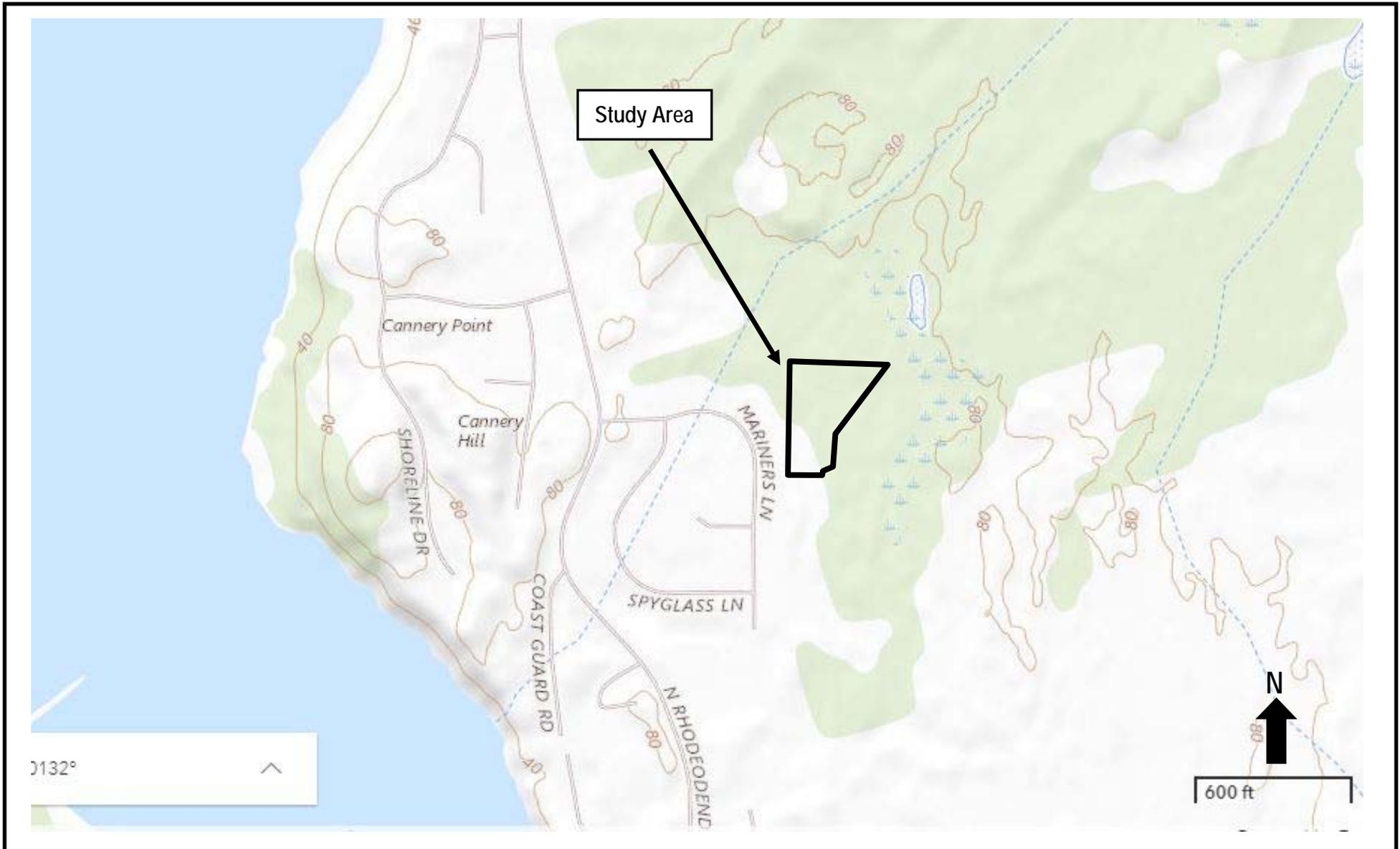
USDA, Web Soil Mapper, 2021. *Soil Survey of Lane County, Oregon*.
<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>

US Geologic Survey, 2020. *7.5-minute topographic map, Mercer Lake, Oregon quadrangle*.
<https://viewer.nationalmap.gov/basic/>

Appendix A

Figures





Project #7165
3/10/2021



Pacific Habitat Services, Inc.
9450 SW Commerce Circle, Suite 180
Wilsonville, OR 97070

General Location and Topography
Proposed Fairway Estates Development - Florence, Oregon
United States Geological Survey (USGS) Mercer Lake, Oregon 7.5 quadrangle, 2020
(viewer.nationalmap.gov/basic)

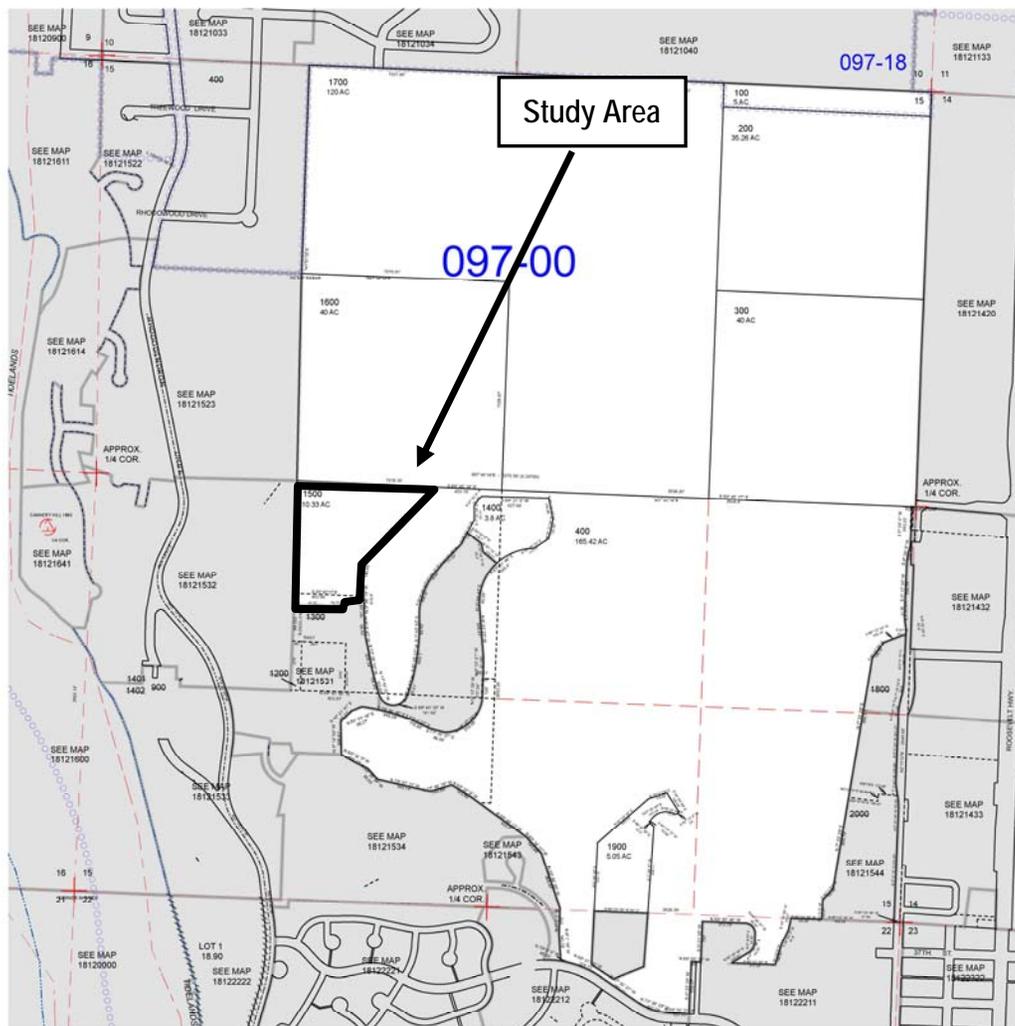
FIGURE
1

FOR ASSESSMENT AND TAXATION ONLY

SECTION 15 T.18S. R.12W. W.M.
Lane County
1" = 400'

18121500
FLORENCE

LGATSKP - 2018-12-10 11:15



- CANCELLED
- 900
 - 1401
 - 1402
 - 2000
 - 1800
 - 1800
 - 2000
 - 1300
 - 1300



805 ft

FLORENCE
18121500

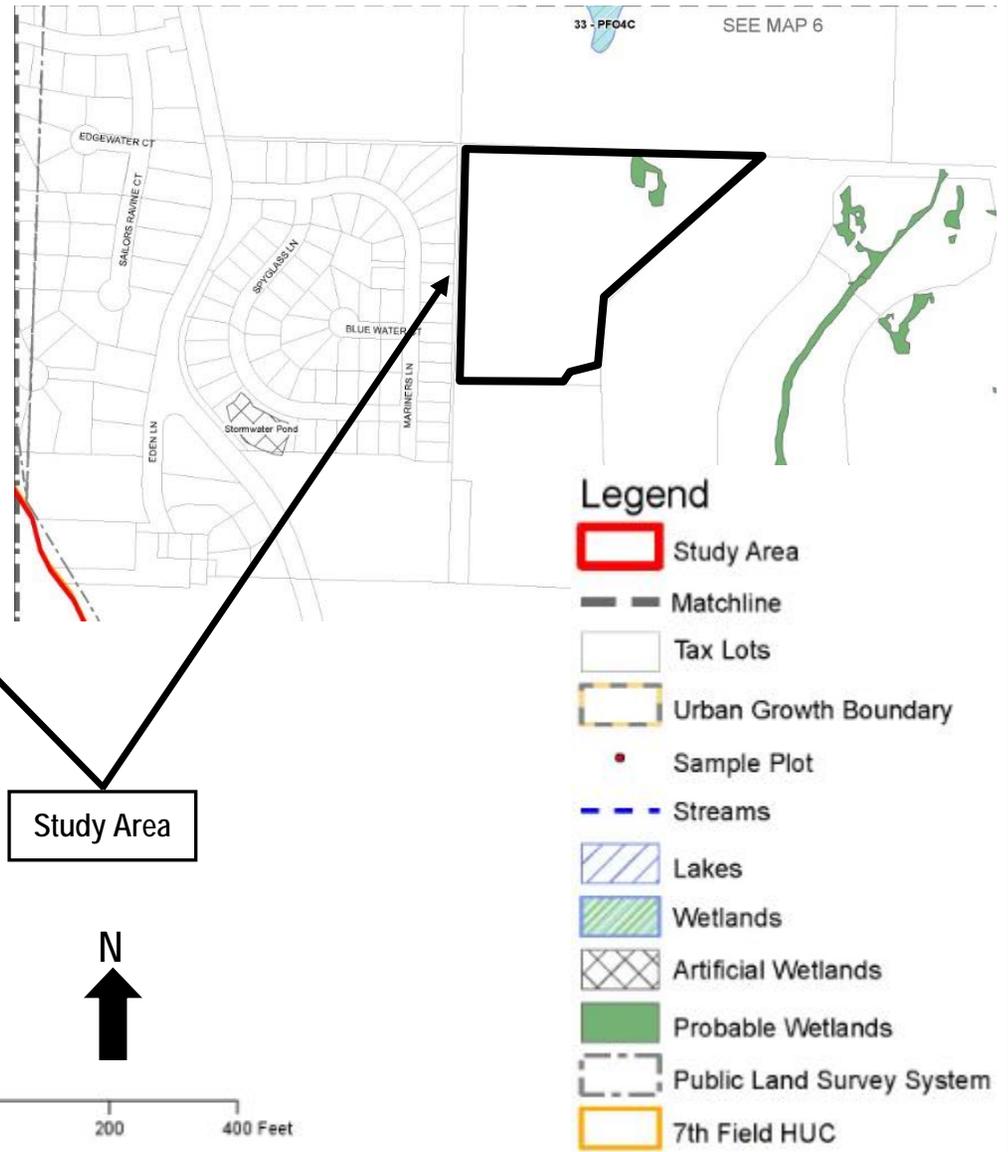
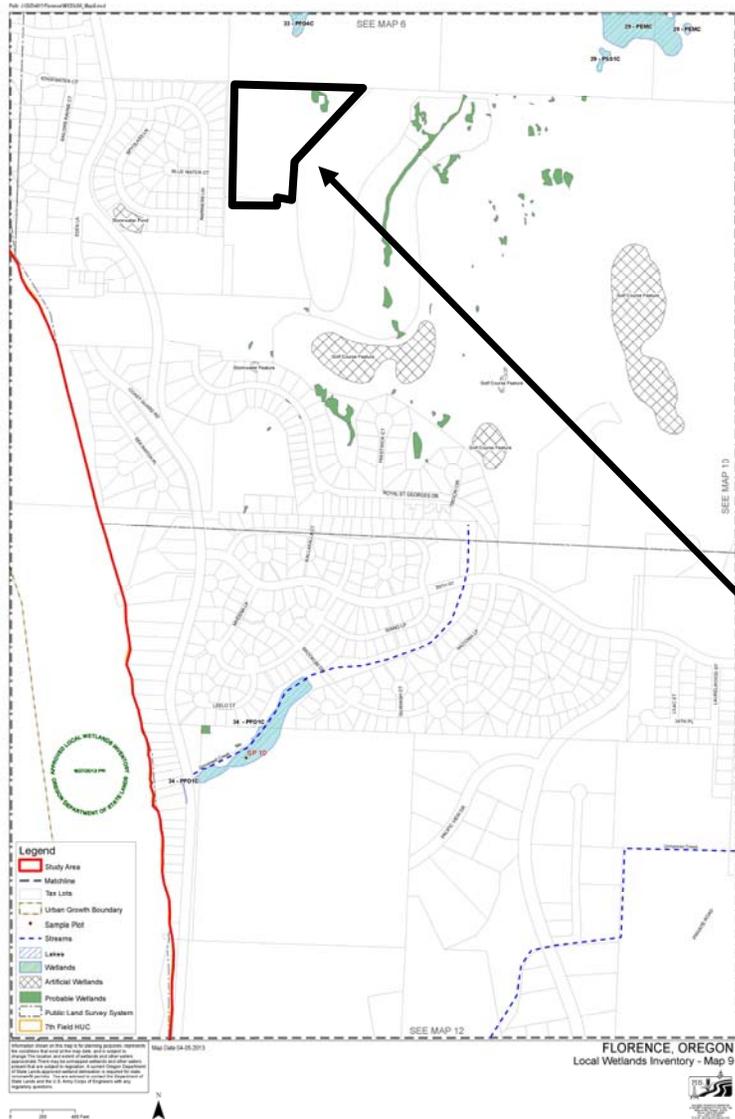
Project #7165
3/10/2021



Pacific Habitat Services, Inc.
9450 SW Commerce Circle, Suite 180
Wilsonville, OR 97070

Tax Lot Map
Proposed Fairway Estates Development - Florence, Oregon
The Oregon Map (ormap.net)

FIGURE
2



Study Area



Project #7165
3/10/2021



Pacific Habitat Services, Inc.
9450 SW Commerce Circle, Suite 180
Wilsonville, OR 97070

Local Wetlands Inventory
Proposed Fairway Estates Development - Florence, Oregon
Pacific Habitat Services, Inc., 2013

FIGURE
3



Study Area

Soils Legend
 140 - Yaquina loamy fine sand, Hydric

N
 805 ft

Project #7165
 3/10/2021



Pacific Habitat Services, Inc.
 9450 SW Commerce Circle, Suite 180
 Wilsonville, OR 97070

Soils
 Proposed Fairway Estates Development - Florence, Oregon
 Natural Resources Conservation Services, Web Soil Survey, 2020
 (websoilsurvey.sc.egov.usda.gov)

FIGURE
 4



Project #7165
3/10/2021

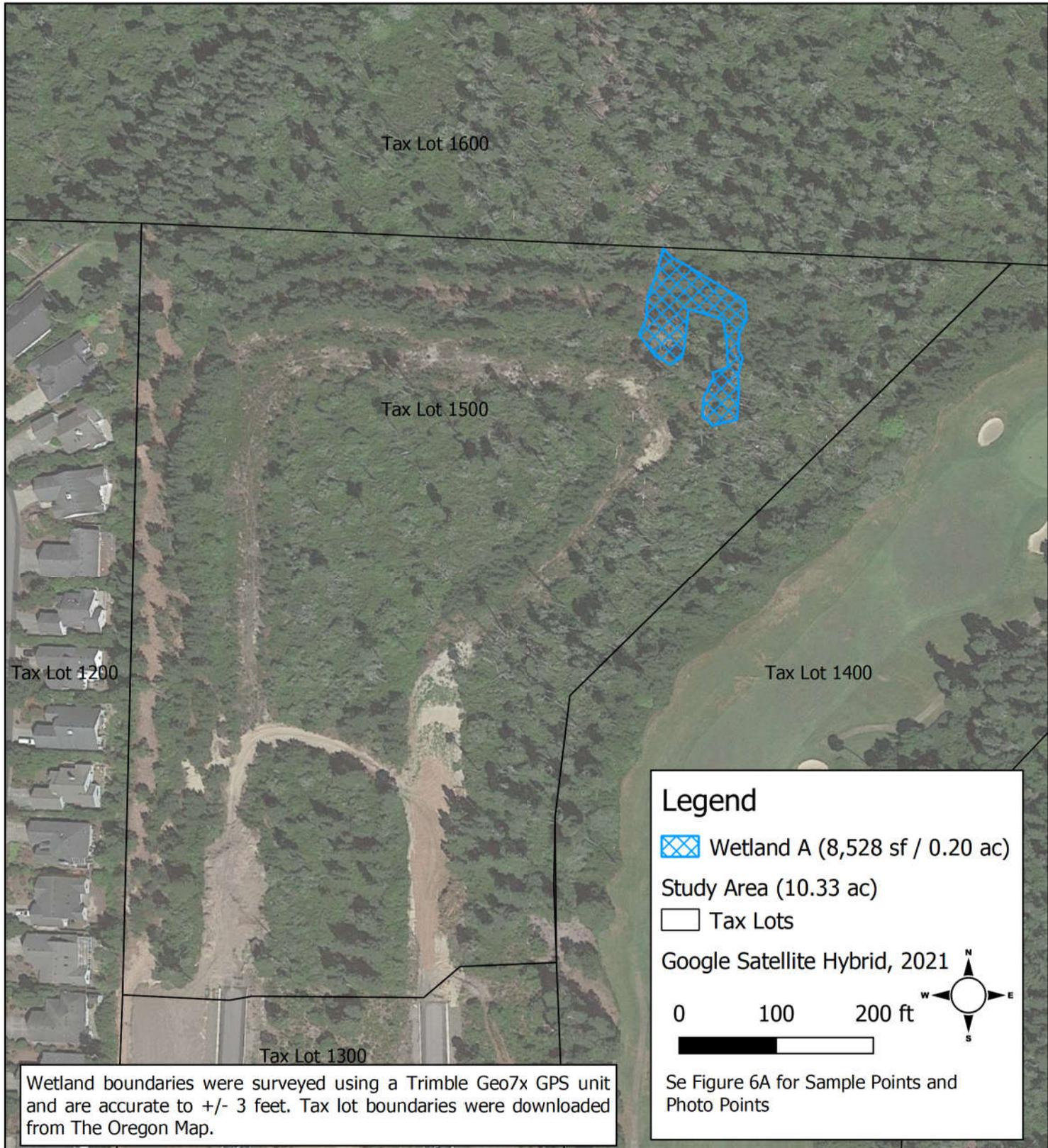


Pacific Habitat Services, Inc.
9450 SW Commerce Circle, Suite 180
Wilsonville, OR 97070

Aerial Photo
Proposed Fairway Estates Development - Florence, Oregon
GoogleEarth, 2020

FIGURE

5



#7165
4/26/2021

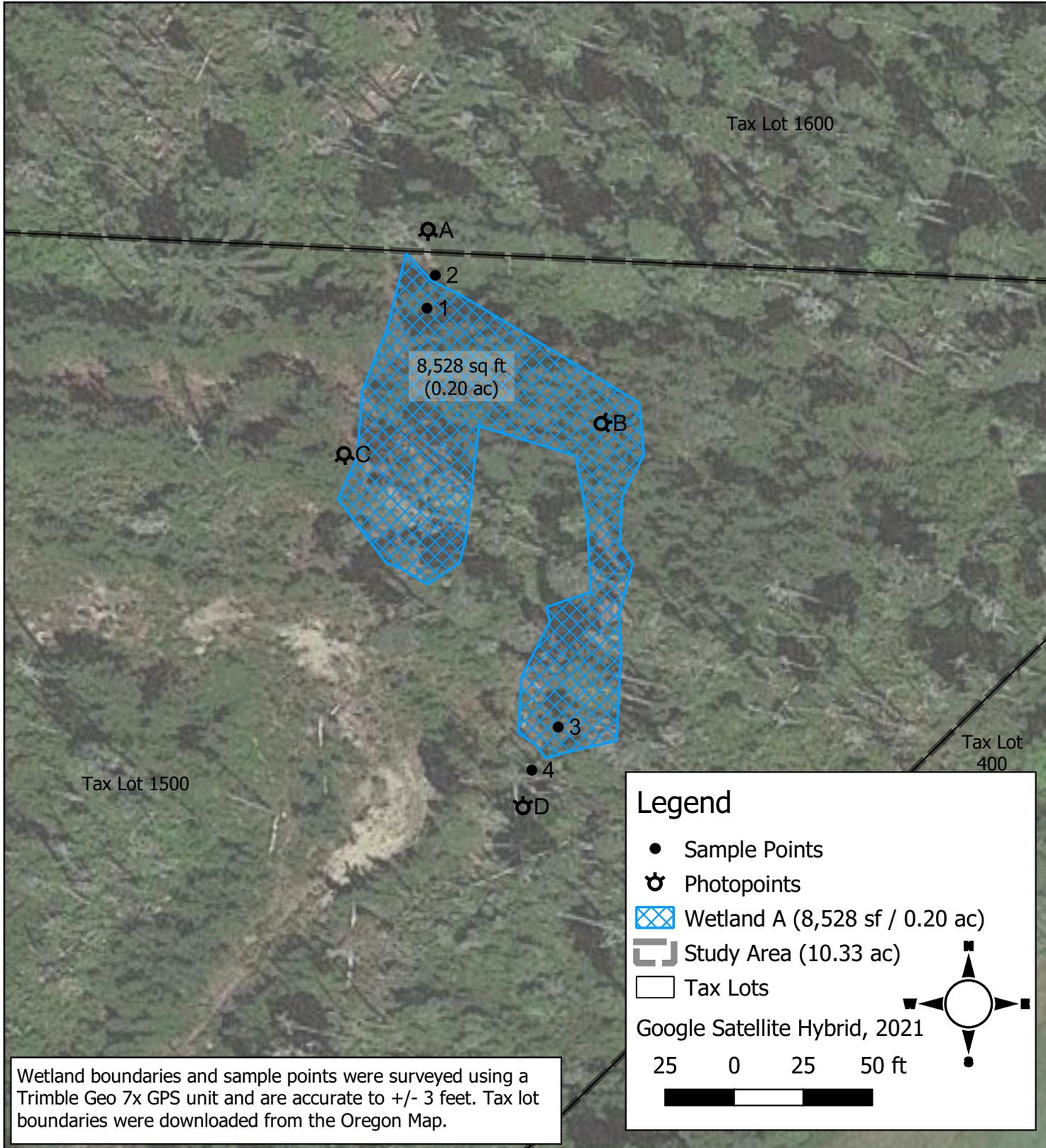


Pacific Habitat Services, Inc.
9450 SW Commerce Circle, Suite 180
Wilsonville, OR 97070

Wetland Delineation Overview
Proposed Fairway Estates - Florence, OR

FIGURE

6



Appendix B

Wetland Determination Data Sheets



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

Project/Site: Fairway Estates City/County: Florence/Lane Sampling Date: 2/8/2021
 Applicant/Owner: Pacific Golf Communities, LLC State: OR Sampling Point: 1
 Investigator(s): JT Section, Township, Range: Section 15, Township 18S, Range 12 West
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0
 Subregion (LRR): LRR A Lat: 44.0064 Long: -124.1169 Datum: WGS84
 Soil Map Unit Name: Yaquina loamy fine sand NWI Classification: PFOC
 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 <u>X</u>	No _____	Is Sampled Area within a Wetland?	Yes <u>X</u>	No _____
Hydric Soil Present?	Yes <u>X</u>	No _____			
Wetland Hydrology Present?	Yes <u>X</u>	No _____			

Remarks:

VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
Tree Stratum (plot size: <u>30</u>)				Number of Dominant Species	
1 <u>Pinus contorta</u>	<u>20</u>	<u>X</u>	<u>FAC</u>	That are OBL, FACW, or FAC:	<u>2</u> (A)
2 _____				Total Number of Dominant Species Across All Strata:	<u>2</u> (B)
3 _____				Percent of Dominant Species	
4 _____				That are OBL, FACW, or FAC:	<u>100%</u> (A/B)
	<u>20</u>	= Total Cover		Prevalence Index Worksheet:	
Sapling/Shrub Stratum (plot size: _____)				Total % Cover of _____ Multiply by: _____	
1 _____				OBL Species	x 1 = <u>0</u>
2 _____				FACW species	x 2 = <u>0</u>
3 _____				FAC Species	x 3 = <u>0</u>
4 _____				FACU Species	x 4 = <u>0</u>
5 _____				UPL Species	x 5 = <u>0</u>
	<u>0</u>	= Total Cover		Column Totals	<u>0</u> (A) <u>0</u> (B)
Herb Stratum (plot size: <u>5</u>)				Prevalence Index =B/A = <u>#DIV/0!</u>	
1 <u>Carex obnupta</u>	<u>25</u>	<u>X</u>	<u>OBL</u>	Hydrophytic Vegetation Indicators:	
2 _____				1- Rapid Test for Hydrophytic Vegetation	
3 _____				<u>X</u> 2- Dominance Test is >50%	
4 _____				3-Prevalence Index is ≤ 3.0 ¹	
5 _____				4-Morphological Adaptations ¹ (provide supporting data in Remarks or on a separate sheet)	
6 _____				5- Wetland Non-Vascular Plants ¹	
7 _____				Problematic Hydrophytic Vegetation ¹ (Explain)	
8 _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
	<u>25</u>	= Total Cover		Hydrophytic Vegetation Present?	
Woody Vine Stratum (plot size: _____)				Yes <u>X</u> No _____	
1 _____					
2 _____					
	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>75</u>					

Remarks:

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		
0-5	2.5Y 4/2	100					Fine Sand	
5-12	2.5Y 6/2	40	10YR 4/6	60	C	M	Fine Sand	Diffuse/Many

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

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

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input checked="" type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

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

Restrictive Layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

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) (MLRA1, 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 checked="" 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 Plowed Soils (C6)	<input checked="" 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 checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): >12
 Saturation Present? (includes capillary fringe) Yes No Depth (inches): >12

Wetland Hydrology Present?
 Yes No

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

Remarks:

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

Project/Site: Fairway Estates City/County: Florence/Lane Sampling Date: 2/8/2021
 Applicant/Owner: Pacific Golf Communities, LLC State: OR Sampling Point: 2
 Investigator(s): JT Section, Township, Range: Section 15, Township 18S, Range 12 West
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): None Slope (%): 5
 Subregion (LRR): LRR A Lat: 44.0064 Long: -124.1169 Datum: WGS84
 Soil Map Unit Name: Yaquina loamy fine sand NWI Classification: PFOC
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (if no, explain in Remarks)
 Are vegetation X Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) N
 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 <u>X</u>	No _____	Is Sampled Area within a Wetland?	Yes _____	No <u>X</u>
Hydric Soil Present?	Yes _____	No <u>X</u>			
Wetland Hydrology Present?	Yes _____	No <u>X</u>			

Remarks:
Shrub vegetation layer was recently removed and herbaceous layer is covered in wood chips.

VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
Tree Stratum (plot size: <u>30</u>)				Number of Dominant Species	
1 <u>Pinus contorta</u>	<u>80</u>	<u>X</u>	<u>FAC</u>	That are OBL, FACW, or FAC: <u>1</u> (A)	
2 _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>1</u> (B)	
3 _____	_____	_____	_____	Percent of Dominant Species	
4 _____	_____	_____	_____	That are OBL, FACW, or FAC: <u>100%</u> (A/B)	
	<u>80</u>	= Total Cover		Prevalence Index Worksheet:	
Sapling/Shrub Stratum (plot size: _____)				Total % Cover of _____ Multiply by: _____	
1 _____	_____	_____	_____	OBL Species _____ x 1 = <u>0</u>	
2 _____	_____	_____	_____	FACW species _____ x 2 = <u>0</u>	
3 _____	_____	_____	_____	FAC Species _____ x 3 = <u>0</u>	
4 _____	_____	_____	_____	FACU Species _____ x 4 = <u>0</u>	
5 _____	_____	_____	_____	UPL Species _____ x 5 = <u>0</u>	
	<u>0</u>	= Total Cover		Column Totals <u>0</u> (A) <u>0</u> (B)	
Herb Stratum (plot size: _____)				Prevalence Index =B/A = <u>#DIV/0!</u>	
1 _____	_____	_____	_____	Hydrophytic Vegetation Indicators:	
2 _____	_____	_____	_____	_____ 1- Rapid Test for Hydrophytic Vegetation	
3 _____	_____	_____	_____	<u>X</u> 2- Dominance Test is >50%	
4 _____	_____	_____	_____	_____ 3-Prevalence Index is ≤ 3.0 ¹	
5 _____	_____	_____	_____	_____ 4-Morphological Adaptations ¹ (provide supporting data in Remarks or on a separate sheet)	
6 _____	_____	_____	_____	_____ 5- Wetland Non-Vascular Plants ¹	
7 _____	_____	_____	_____	_____ Problematic Hydrophytic Vegetation ¹ (Explain)	
8 _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
	<u>0</u>	= Total Cover		Hydrophytic Vegetation Present? Yes <u>X</u> No _____	
Woody Vine Stratum (plot size: _____)					
1 _____	_____	_____	_____		
2 _____	_____	_____	_____		
	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>100</u>					

Remarks:
Previous vegetation in the shrub layer was most likely Vaccinium ovatum (FACU) and Gaultheria shallon (FACU), based on remaining stems; however, since previous herbaceous vegetation is not known, wetland vegetation is assumed to have been present.

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		
0-16	10YR 4/2	100					Fine Sand	

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

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

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)		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) (MLRA1, 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 Plowed 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 X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): >16

Saturation Present? Yes _____ No X Depth (inches): >16

(includes capillary fringe)

Wetland Hydrology Present?
Yes _____ No X

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

Remarks: _____

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

Project/Site: Fairway Estates City/County: Florence/Lane Sampling Date: 2/8/2021
 Applicant/Owner: Pacific Golf Communities, LLC State: OR Sampling Point: 3
 Investigator(s): JT Section, Township, Range: Section 15, Township 18S, Range 12 West
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): None Slope (%): 3
 Subregion (LRR): LRR A Lat: 44.0059 Long: -124.1167 Datum: WGS84
 Soil Map Unit Name: Yaquina loamy fine sand NWI Classification: PFOC
 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 <u>X</u>	No _____	Is Sampled Area within a Wetland?	Yes <u>X</u>	No _____
Hydric Soil Present?	Yes <u>X</u>	No _____			
Wetland Hydrology Present?	Yes <u>X</u>	No _____			

Remarks:

VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
Tree Stratum (plot size: _____)				Number of Dominant Species	
1	_____	_____	_____	That are OBL, FACW, or FAC: <u>2</u> (A)	
2	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)	
3	_____	_____	_____	Percent of Dominant Species	
4	_____	_____	_____	That are OBL, FACW, or FAC: <u>100%</u> (A/B)	
5	_____	_____	_____	Prevalence Index Worksheet:	
		<u>0</u>	= Total Cover	Total % Cover of _____ Multiply by: _____	
Sapling/Shrub Stratum (plot size: <u>15</u>)				OBL Species _____ x 1 = <u>0</u>	
1	<u>5</u>	<u>X</u>	<u>FACW</u>	FACW species _____ x 2 = <u>0</u>	
2	<u>1</u>	_____	<u>FACU</u>	FAC Species _____ x 3 = <u>0</u>	
3	_____	_____	_____	FACU Species _____ x 4 = <u>0</u>	
4	_____	_____	_____	UPL Species _____ x 5 = <u>0</u>	
5	_____	_____	_____	Column Totals <u>0</u> (A) <u>0</u> (B)	
		<u>6</u>	= Total Cover	Prevalence Index =B/A = <u>#DIV/0!</u>	
Herb Stratum (plot size: <u>5</u>)				Hydrophytic Vegetation Indicators:	
1	<u>90</u>	<u>X</u>	<u>OBL</u>	1- Rapid Test for Hydrophytic Vegetation	
2	_____	_____	_____	<u>X</u> 2- Dominance Test is >50%	
3	_____	_____	_____	3-Prevalence Index is ≤ 3.0 ¹	
4	_____	_____	_____	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	_____	_____	_____	Hydrophytic Vegetation Present? Yes <u>X</u> No _____	
		<u>90</u>	= Total Cover		
Woody Vine Stratum (plot size: _____)					
1	_____	_____	_____		
2	_____	_____	_____		
		<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>10</u>					

Remarks:

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		
0-5	2.5Y 5/2	100					Fine Sand	
5-12	2.5Y 6/2	85	10YR 5/8	15	C	M	Fine Sand	Diffuse/Common

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

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

Indicators for Problematic Hydric Soils³:

<input checked="" type="checkbox"/> Histosol (A1)	<input checked="" type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

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

Restrictive Layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

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) (MLRA1, 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 checked="" 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 Plowed Soils (C6)	<input checked="" type="checkbox"/> Fac-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input checked="" 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 Depth (inches): _____
 Water Table Present? Yes No Depth (inches): >12
 Saturation Present? (includes capillary fringe) Yes No Depth (inches): >12

Wetland Hydrology Present?
 Yes No

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

Remarks:

Vaccinium ovatum is stressed.

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

Project/Site: Fairway Estates City/County: Florence/Lane Sampling Date: 2/8/2021
 Applicant/Owner: Pacific Golf Communities, LLC State: OR Sampling Point: 4
 Investigator(s): JT Section, Township, Range: Section 15, Township 18S, Range 12 West
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): None Slope (%): 3
 Subregion (LRR): LRR A Lat: 44.0059 Long: -124.1167 Datum: WGS84
 Soil Map Unit Name: Yaquina loamy fine sand NWI Classification: PFOC

Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (if no, explain in Remarks)
 Are vegetation X Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) N
 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 <u>X</u>	No _____	Is Sampled Area within a Wetland?	Yes _____	No <u>X</u>
Hydric Soil Present?	Yes _____	No <u>X</u>			
Wetland Hydrology Present?	Yes _____	No <u>X</u>			

Remarks:
Shrub layer has been removed. Herbaceous layer is covered in wood chips.

VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
Tree Stratum (plot size: _____)				Number of Dominant Species	
1	_____	_____	_____	That are OBL, FACW, or FAC: <u>0</u> (A)	
2	_____	_____	_____	Total Number of Dominant	
3	_____	_____	_____	Species Across All Strata: <u>0</u> (B)	
4	_____	_____	_____	Percent of Dominant Species	
	<u>0</u>	= Total Cover		That are OBL, FACW, or FAC: <u>0%</u> (A/B)	
Sapling/Shrub Stratum (plot size: _____)				Prevalence Index Worksheet:	
1	_____	_____	_____	Total % Cover of _____ Multiply by: _____	
2	_____	_____	_____	OBL Species _____ x 1 = <u>0</u>	
3	_____	_____	_____	FACW species _____ x 2 = <u>0</u>	
4	_____	_____	_____	FAC Species _____ x 3 = <u>0</u>	
5	_____	_____	_____	FACU Species _____ x 4 = <u>0</u>	
	<u>0</u>	= Total Cover		UPL Species _____ x 5 = <u>0</u>	
Herb Stratum (plot size: _____)				Column Totals <u>0</u> (A) <u>0</u> (B)	
1	_____	_____	_____	Prevalence Index =B/A = <u>#DIV/0!</u>	
2	_____	_____	_____	Hydrophytic Vegetation Indicators:	
3	_____	_____	_____	_____ 1- Rapid Test for Hydrophytic Vegetation	
4	_____	_____	_____	_____ 2- Dominance Test is >50%	
5	_____	_____	_____	_____ 3-Prevalence Index is ≤ 3.0 ¹	
6	_____	_____	_____	_____ 4-Morphological Adaptations ¹ (provide supporting data in Remarks or on a separate sheet)	
7	_____	_____	_____	_____ 5- Wetland Non-Vascular Plants ¹	
8	_____	_____	_____	<u>X</u> Problematic Hydrophytic Vegetation ¹ (Explain)	
	<u>0</u>	= Total Cover		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
Woody Vine Stratum (plot size: _____)				Hydrophytic Vegetation Present?	
1	_____	_____	_____	Yes <u>X</u> No _____	
2	_____	_____	_____		
	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>0</u>					

Remarks:
Previous vegetation in the shrub layer was most likely Vaccinium ovatum (FACU) and Gaultheria shallon (FACU), based on remaining stems; however, since previous herbaceous vegetation is not known, wetland vegetation is assumed to have been present.

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	10YR 4/2	100					Fine Sand	

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

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

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)		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) (MLRA1, 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 Plowed 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 X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): >12

Saturation Present? Yes _____ No X Depth (inches): >12

(includes capillary fringe)

Wetland Hydrology Present?
Yes _____ No X

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

Remarks: _____

Appendix C

Site Photos





Photo A:

Looking south at Sample Points (SP) 1 and 2. The vegetation at SP 2 is cuttings from clearing the adjacent uplands and mostly consists of black huckleberry (*Vaccinium ovatum*, FACU) and salal (*Gaultheria shallon*, FACU).

Photo taken on February 8, 2021

Photo B:

Looking northeast at the northeastern boundary of Wetland A.

Photo taken on February 28, 2021



Project #7165

2/8/2021



Pacific Habitat Services, Inc.
9450 SW Commerce Circle, Suite 180
Wilsonville, OR 97070

Photo documentation
Proposed Fairway Estates
Florence, Oregon



Photo C:

Looking south at the southwestern boundary of Wetland A.

Photo taken on February 8, 2021

Photo D:

Looking north at Sample Points 3 (wetland) and 4 (upland).

Photo taken on February 8, 2021



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Appendix D

Wetland Definitions and Methodology



WATERS OF THE STATE AND WETLAND DEFINITION AND CRITERIA

Regulatory Jurisdiction

Wetlands and water resources in Oregon are regulated by the Oregon Department of State Lands (DSL) under the Removal-Fill Law (ORS 196.800-196.990) and by the U.S. Army Corps of Engineers (COE) through Section 404 of the Clean Water Act.

The primary source documents for wetland delineations within Oregon is the *Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)* (U.S. Army Corps of Engineers, 2010), which are required by both DSL and COE.

Waters of This State and Wetland Definition

Waters of This State are defined as “all natural waterways, tidal and non-tidal bays, intermittent streams, constantly flowing streams, lakes, wetlands, that portion of the Pacific Ocean that is in the boundaries of this state, all other navigable and non-navigable bodies of water in this state and those portions of the ocean shore, as defined in ORS 390.605, where removal or fill activities are regulated under a state-assumed permit program as provided in 33 U.S.C. 1344(g) of the Federal Water Pollution Control Act, as amended.” (DSL 2014)

Wetlands are defined as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (DSL 2014).

Wetland Criteria

Based on the above definition, three major factors characterize a wetland: hydrology, substrate, and biota.

Wetland Hydrology

Wetland hydrology is related to duration of saturation, frequency of saturation, and critical depth of saturation. The 1987 manual defines wetland hydrology as inundation or saturation within a major portion of the root zone (usually above 12 inches), typically for at least 12.5% of the growing season. The wetland hydrology criterion can be met, however, if saturation within the major portion of the root zone is present for only 5% of the growing season, depending on other evidence.

The growing season is defined as the portion of the year when soil temperatures at 12.0 inches below the soil surface are higher than biological zero (41 degrees Fahrenheit, 5 degrees Celsius), but also allows approximation from frost free days, based on air temperature. The growing season for any given site or location is determined from US Natural Resources Conservation Service, (formerly Soil Conservation Service) data and information.

Wetland hydrologic indicators include the following: visual observation of inundation or saturation, watermarks, drift lines, sediment deposits, and/or oxidized rhizospheres with living roots. Oxidized rhizospheres are defined as yellowish-red zones around the roots and rhizomes of some plants that grow in frequently saturated soils. Other indicators of hydrology, including algal mats or crust, iron deposits, surface soil cracks, sparsely vegetated concave surface, salt crust, aquatic invertebrates, hydrogen sulfide odor, reduced iron, iron reduction in tilled soils, and stunted or stressed plants can also be used to determine the presence of wetland hydrology.

Wetland Substrate (Soils)

Most wetlands are characterized by hydric soils. Hydric soils are those that are ponded, flooded, or saturated for long enough during the growing season to develop anaerobic conditions. Periodic saturation of soils causes alternation of reduced and oxidized conditions, which leads to the formation of redoximorphic features (gleying and mottling). Mineral hydric soils will be either gleyed or will have bright mottles and/or low matrix chroma. The redoximorphic feature known as gley is a result of greatly reduced soil conditions, which result in a characteristic grayish, bluish or greenish soil color. The term mottling is used to describe areas of contrasting color within a soil matrix. The soil matrix is the portion of the soil layer that has the predominant color. Soils that have brightly colored mottles and a low matrix chroma are indicative of a fluctuating water table.

Hydric soil indicators include organic content of greater than 50% by volume, and/or presence of redoximorphic features and dark soil matrix, as determined by the use of a Munsell Soil Color Chart. This chart establishes the chroma, value and hue of soils based on comparison with color chips. Mineral hydric soil must meet one of the 16 definitions for hydric soil indicators, or be classified as a “problem soil” in the Regional Supplement.

Wetland Biota (Vegetation)

Wetland biota is defined as hydrophytic vegetation. A hydrophyte is a plant species that is capable of growing in substrates that are periodically deficient in oxygen as a result of saturated soil conditions. The U.S. Fish and Wildlife Service, in the *National List of Plant Species that Occur in Wetlands*, has established five basic groups of vegetation based on their frequency of occurrence in wetlands. These categories, referred to as the "wetland indicator status", are as follows: obligate wetland plants (OBL), facultative wetland (FACW), facultative (FAC), facultative upland (FACU), and obligate upland (UPL). Table 1 gives a definition of the plant indicator codes.

Table 1. Description of Wetland Plant Indicator Status Codes

Indicator Code	Status
OBL	Obligate wetland. Plants that always occur in standing water or in saturated soils.
FACW	Facultative wetland. Plants that nearly always occur in areas of prolonged flooding or require standing water or saturated soils but may, on rare occasions, occur in non-wetlands.
FAC	Facultative. Plants that occur in a variety of habitats, including wetland and mesic to xeric non-wetland habitats but commonly occur in standing water or saturated soils.
FACU	Facultative upland. Plants that typically occur in xeric or mesic non-wetland habitats but may frequently occur in standing water or saturated soils.
UPL	Obligate upland. Plants that rarely occur in water or saturated soils.

Observations of hydrology, soils, and vegetation, were made using the "Routine On-site" delineation method as defined in the 1987 manual and the Regional Supplement for areas that were not currently in agricultural production. One-foot diameter soil pits were excavated to 20 inches and soil profiles were examined for hydric soil and wetland hydrology field indicators. In addition, a visual absolute-cover estimate of the dominant species of the plant community was performed using soil pit locations as a center of reference. Dominant plant species are based on estimates of absolute cover for herbaceous, and shrub species within a 5-foot radius of the sample point, and basal area cover for tree and woody vine species within a 30-foot radius of the sample point. Plant species in each vegetative layer, which are estimated at less than 20% of the total cover, are not considered to be dominant. The wetland indicator status is then used to determine if there is an overall dominance (greater than 50%) of wetland or upland plant species. If less than 50% of the dominant species are hydrophytic, then the prevalence index may be used to determine if the subdominant species are hydrophytic. If the prevalence index is less than or equal to 3, hydrophytic vegetation criterion is met.

During data collection, the soil profiles were examined for hydric soil and wetland hydrology field indicators. Plant species and cover were recorded. Data was recorded on standard data sheets, which contain the information specified in the 1987 Corps Manual and the Regional Supplement.