



605 NE 21ST AVE
PORTLAND, OREGON 97232
T 971.930.1700

Emily Ramos
Meadowlark Energy Storage, LLC

June 16, 2026

Subject: Preliminary Wetland Delineation Results for the Meadowlark Energy Storage Project in Sherwood and Washington County, Oregon

Dear Emily,

This letter briefly documents the findings from a May 2026 site visit to investigate wetland resources for the proposed Meadowlark Energy Storage project in Sherwood and unincorporated Washington County, Oregon. The wetland delineation encompassed a study area in portions of Tax Lots 1650, 1651, and 3500 on Township 2 South, Range 1 West, Section 29A. The study area totals approximately 1.3 acres and is centered on 45.372853, -122.83352.

Clean Water Services (CWS) completed a Sensitive Area Pre-Screening Site Assessment for the portion of the study area on Tax Lot 1650, within the City of Sherwood and CWS' jurisdiction. The Service Provider Letter (CWS File Number 26-001287, dated May 13, 2026) determined that there that the referenced project would not significantly impact the potentially sensitive area(s) found near the site.

Dudek biologist and professional wetland scientist Tony Vingiello surveyed the site on May 15, 2026. Mr. Vingiello recorded data at four sample plots within the study area and found no wetlands or waters to occur within the study area. Across the four sample plots, no indicators of hydric soil or wetland hydrology were present. Vegetation was generally facultative, meaning they have approximately equal odds of occurring within wetlands or uplands. Notably hydrophytic, or wetland-adapted, plant species were generally absent.

The study area consists of two distinct areas split by SW Langer Farms Parkway. The area northeast of the road is an occasionally mowed field that slopes downward to the northeast where it flattens to the floodplain associated with Rock Creek. Vegetation within this community included common Willamette Valley prairie and grassland species, predominantly native grasses and forbs. Tax Lot 3500 was previously a dense Himalayan blackberry (*Rubus armeniacus*) thicket, but it has been mowed and some native and non-native forb species were present among the recent growth of blackberry. On the border of Tax Lots 1651 and 3500, there are two groups of mature bitter cherry (*Prunus emarginata*) trees totaling approximately 25 plants within the study area. A tree survey would identify their precise location, number, diameter, health, and approximate height.

The area southwest of SW Langer Farms Parkway consists of low-growing herbaceous vegetation within disturbed, compacted soil with gravel inclusions. This flat area is adjacent to a substation, has been graded repeatedly, and is regularly mowed. This plant community did not meet any indicators for hydrophytic vegetation, indicating an upland community.

Attachment A, Appendix K

TO: EMILY RAMOS
SUBJECT: PRELIMINARY WETLAND DELINEATION RESULTS FOR THE MEADOWLARK ENERGY STORAGE PROJECT IN
SHERWOOD AND WASHINGTON COUNTY, OREGON

The findings from this site visit will be expanded and formalized in a wetland delineation report, as necessary. The wetland delineation report will be submitted to the Oregon Department of State Lands and the U.S. Army Corps of Engineers for concurrence and an Approved Jurisdictional Determination. Please contact me with any questions or concerns at avingiello@dudek.com or 503.705.8553.

Sincerely,



Tony Vingiello
Biologist, Professional Wetland Scientist

cc: *Tommy Nelson*
Brad Cole, Dudek

Delineation Report – No Wetlands or Other Waters for Small Sites



This form may be used to report on the results of an onsite delineation for study areas two acres or less that contain **no wetlands or other waters** such as streams, drainages, or ponds. See below for additional eligibility criteria.

A fully completed and signed report form and [applicable fees](#) are required before report review timelines are initiated by the Department of State Lands.

Make checks payable to the Oregon Department of State Lands. To pay fees by credit card, go [online](#). An electronic report submittal is preferred. A single PDF of the completed form and attachments may be e-mailed to: wetland.delineation@dsl.oregon.gov. For submittal of PDF files larger than 50MB, e-mail DSL instructions on how to access the file from your ftp or other file sharing website. For paper submittals and fee payments, submit to: **Oregon Department of State Lands, 775 Summer Street NE, Suite 100, Salem, OR 97301-1279.**

Directions: complete Sections 2 – 5 and submit with required attachments (Section 1).

Section 1. Eligibility and Requirements

Eligibility criteria:

- Study area is 2 acres or less.
- No wetlands or waters within the study area (including the ordinary high water line, highest measured tide, or pool elevation of a nearby water).
- No disturbance has occurred that may obscure wetland indicators or have affected the presence of wetlands or other waters.
- Not currently or recently managed as an agricultural site.
- The field investigation and form must be completed by a wetland professional.

Requirements:

- Wetland delineations must be conducted in accordance with the 1987 U.S. Army Corps of Engineers *Wetlands Delineation Manual*, including regional supplements and applicable guidance and any supporting technical guidance documents issued by the Department.
- Wetland determination data forms must be provided for all suspect areas, including but not limited to areas with mapped wetlands, hydric soils, wet signatures on aeriels, low areas, and other areas likely to be wetland.
- Wetland delineation map(s) must be at a scale suitable for the study area size and indicate the study area boundary in relation to the parcel boundaries. The map(s) must include numbered sample plots corresponding to data forms, areas of fill or grading or other major alterations, mapping method and estimated mapping precision statement (1 meter requirement) for the study area boundary and data plot points, a north arrow and scale bar, and photograph locations and direction of view.

Required Attachments (all attachments must be legible):

- Figure 1. Location Map (with outline of study area)
- Figure 2. Tax Lot Map (with outline of study area)
- Figure 3. Recent Aerial (with outline of study area)
- Figure 4. Wetland Delineation Map(s) (see requirements section)
- Figure 5. Ground level color photos
- Data Forms (meets data form requirements OAR141-090-0035(16))

Failure to meet eligibility criteria and/or requirements:

- Upon rejection of a report, an applicant, landowner, or agent may submit a new wetland delineation report, however new fees are required.

Section 2. Contact and Authorization Information☒ Applicant ☐ Owner Name, Firm and Address:

Meadowlark Energy Storage LLC, Attn: Emily Ramos
 412 West 15th Street, 15th Floor
 New York, NY
 10011

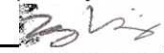
Business phone # (818) 391-7346
 Mobile phone # (optional)
 E-mail: eramos@usrenewablesllc.com

☒ Authorized Legal Agent, Name and Address (if different):

Tony Vingiello
 Dudek
 605 NE 21st Avenue, Suite 200
 Portland, OR 97232

Business phone # (503) 705-8553
 Mobile phone # (optional)
 E-mail: avingiello@dudek.com

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 delineation, after prior notification to the primary contact.

Typed/Printed Name: Tony VingielloSignature: 

Date: 07/14/2022

Special instructions regarding site access: Please contact agent before accessing

Section 3. Project and Site Information

Project Name: Meadowlark Energy Storage

Latitude: 45.372765

Longitude: -122.833925

Decimal Degree required. Provide centroid of site or start & end points of linear project

Proposed Use: Construct, own and operate an underground high voltage transmission line and 3 riser poles up to 55' in height, and connect a proposed access road to SW Langer Farms

Tax Map # 2S129A

Tax Lot(s) 1650, 1651, 3500

Tax Map #--

Tax Lot(s) --

Site Street Address (or other descriptive location):

south of Home Depot, 20260 SW Pacific Hwy

Township 2S

Range 1W

Section 29A

QQNE

City: Sherwood

County: Washington

Section 4. Additional Site Information (check applicable boxes)

☐ LWI or SWI shows wetlands or waters within the **study area**.
 Wetland LWI ID code(s) _____

☒ There are likely wetlands or waters within the **tax lot(s)**
 (outside the study area)

☐ There has been fill or grading activity within:

☐ **study area**. Approx. date(s) _____

☐ **tax lot(s)**. Approx. date(s) _____

☒ Previous DSL action on **tax lot(s)**

If known, previous DSL # 2023-0435

Section 5. Wetland Delineation Information

Primary Contact for delineation review and site access is

☒

Consultant

☐

Applicant/Owner

☒

Authorized Agent

Wetland Consultant Name, Firm and Address:

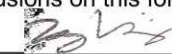
Tony Vingiello, PWS
 Dudek
 605 NE 21st Avenue, Suite 200
 Portland, OR 97232

Phone # (503) 705-8553

Mobile phone # (if applicable)

E-mail: avingiello@dudek.com

The information and conclusions on this form and in the attached documents are true and correct to the best of my knowledge.

Consultant Signature: 

Date: 07/14/2026

Disclaimer: This report documents the investigation, best professional judgment and conclusions of the investigator. 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.

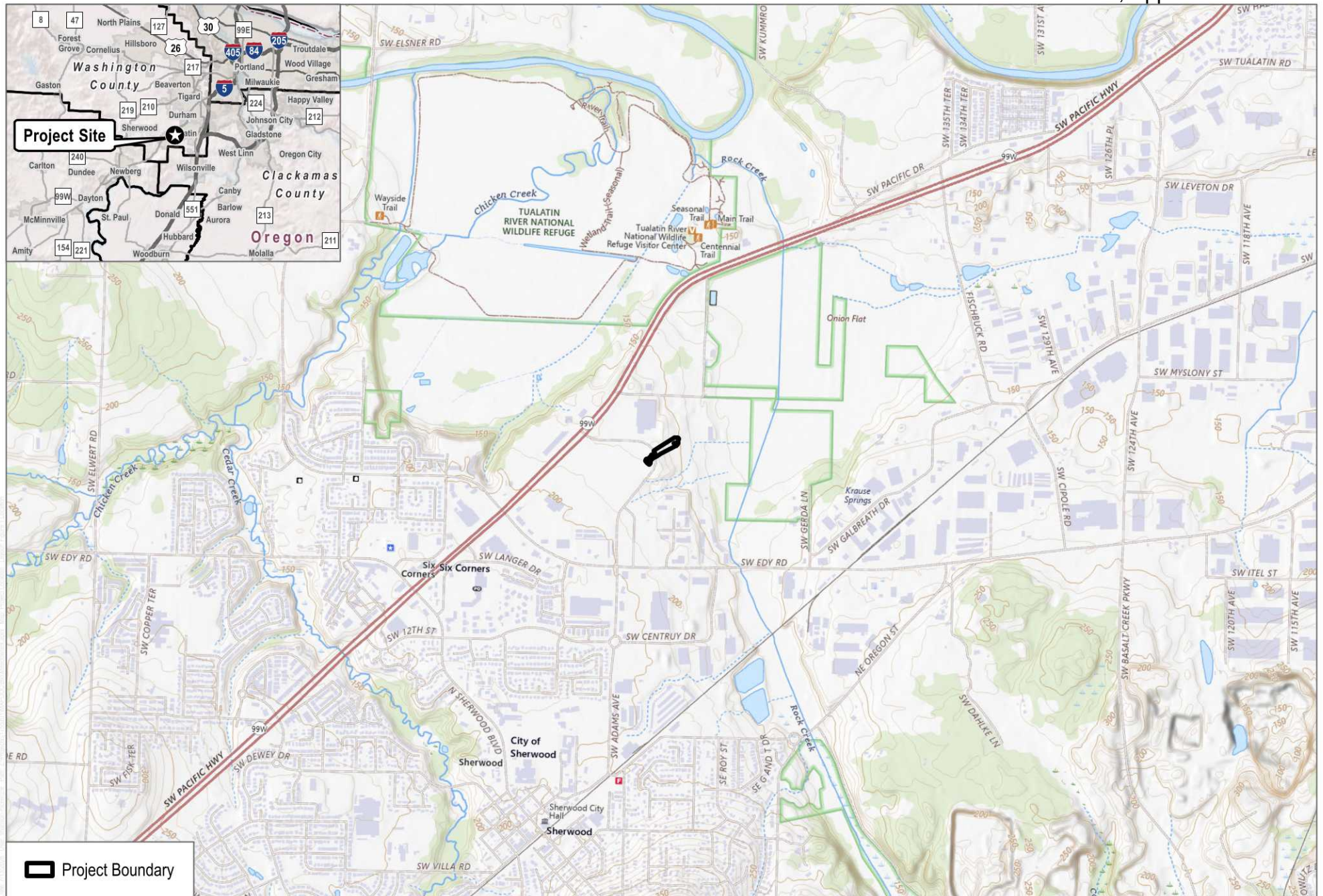
Section 6. For Office Use Only

DSL Reviewer: _____ Date Fee Paid ____/____/____

DSL WD # _____

Date Delineation Received: ____/____/____

DSL App.# _____



SOURCE: USGS National Map 2026

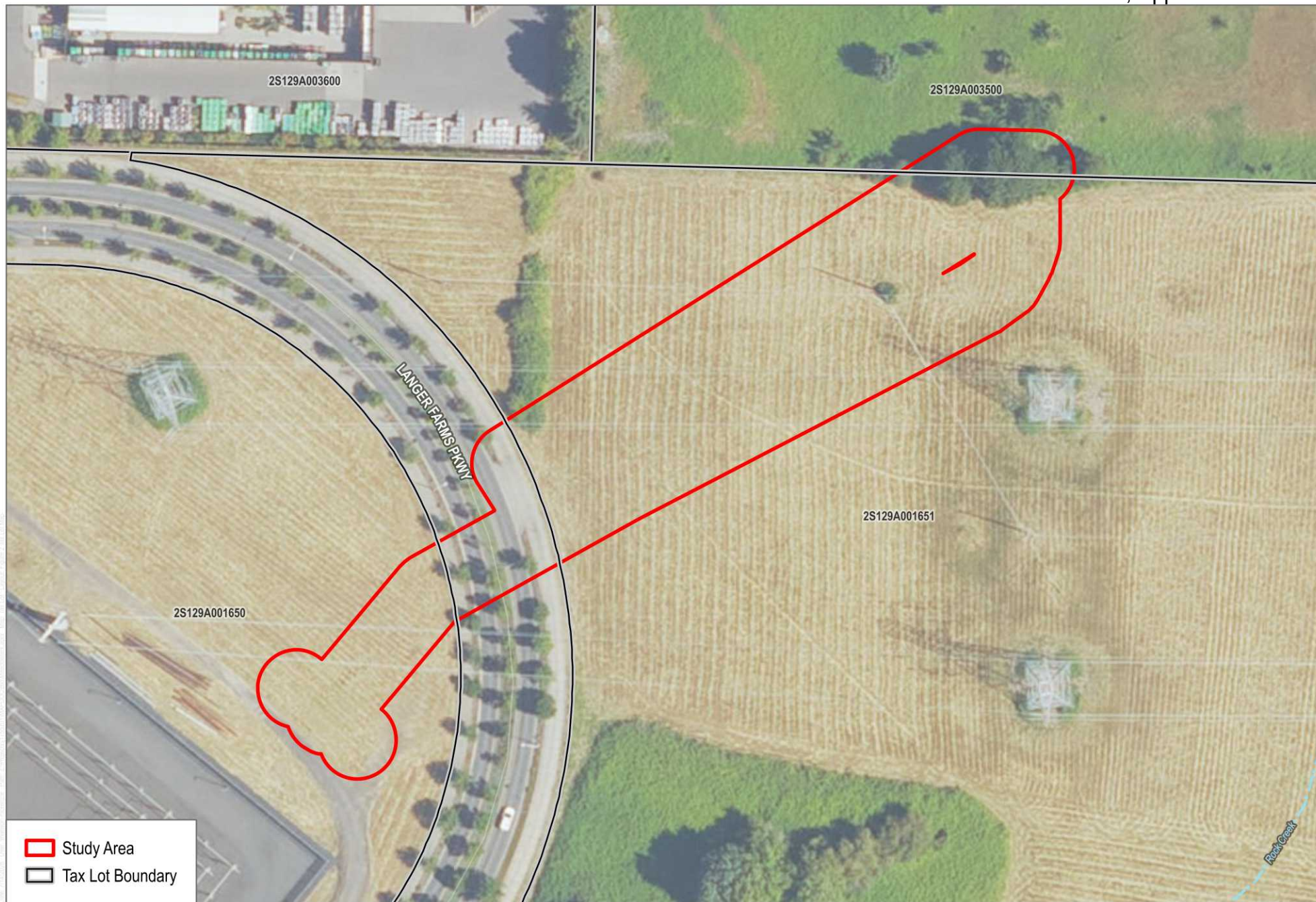
DUDEK



0 1,000 2,000 Feet

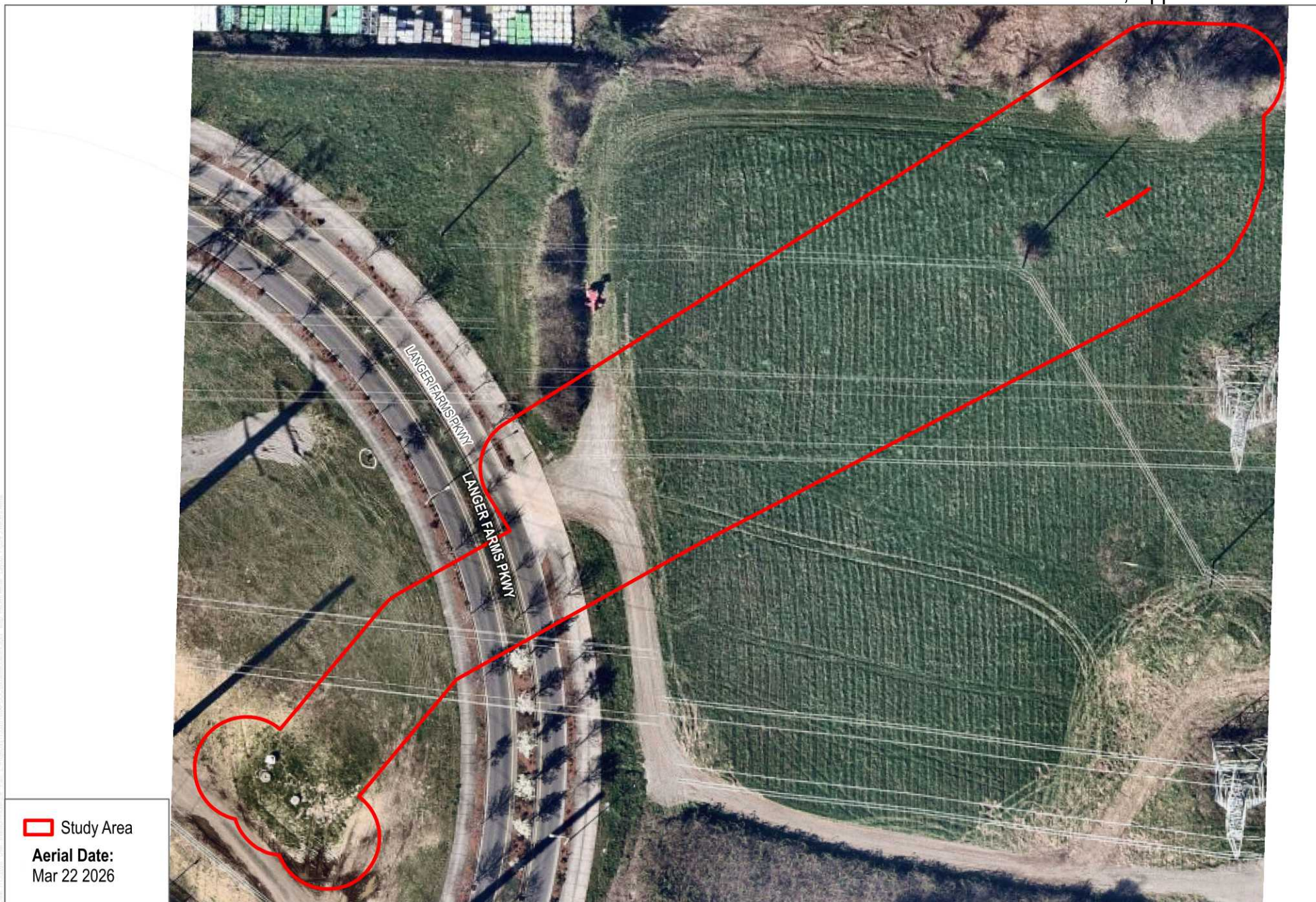
FIGURE 1

Location Map



SOURCE: OSIP 2024; Washington County 2026

FIGURE 2
Tax Lot Map

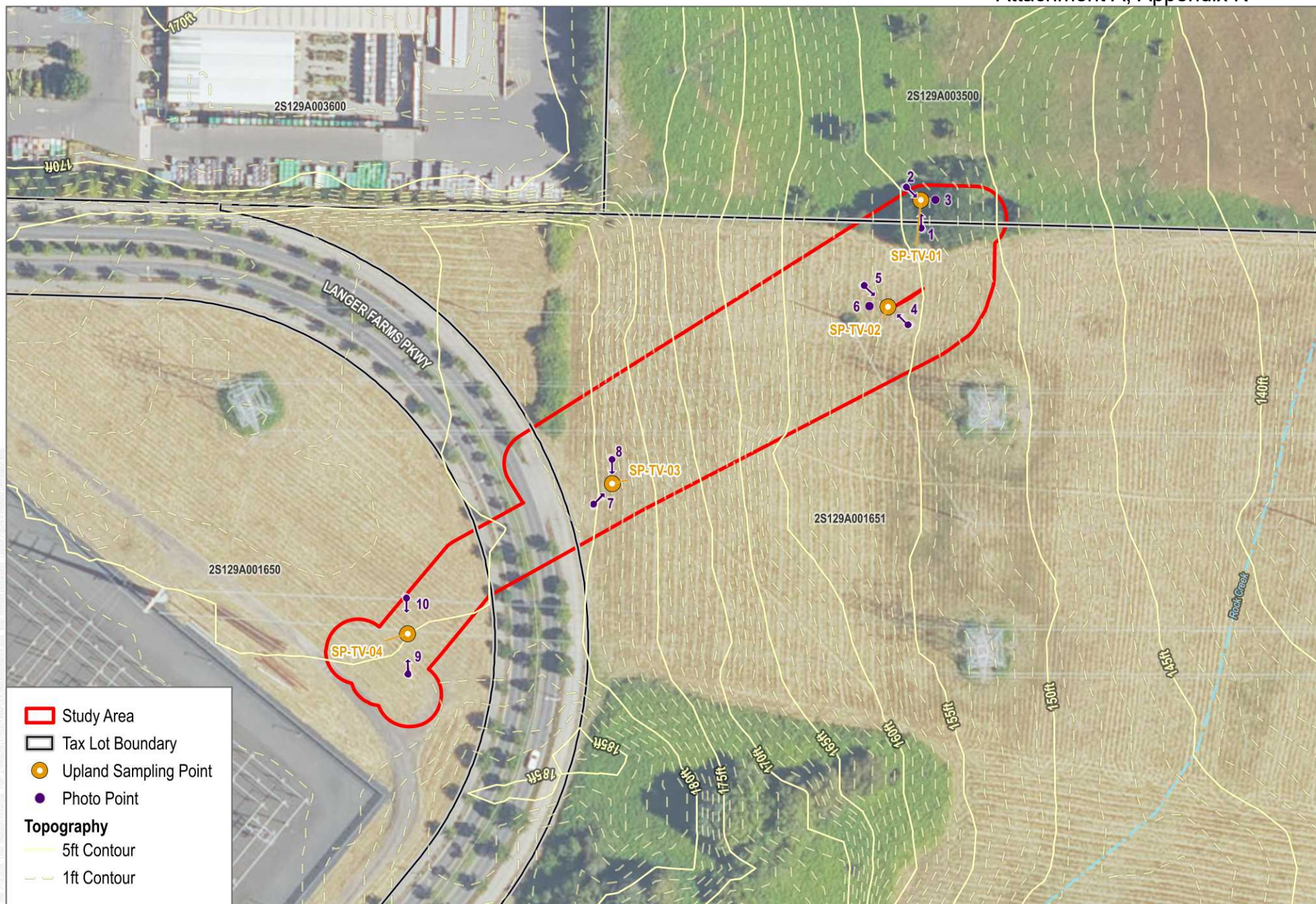


SOURCE: Nearmap 2026



FIGURE 3

Recent Aerial



SOURCE: OSIP 2024; Washington County 2026
1 inch equals 100 feet

DUDEK



0 50 100 Feet

FIGURE 4

Wetland Delineation Map

Meadowlark Energy Project Wetland Delineation Report

FIGURE 5 / GROUND LEVEL PHOTOGRAPHS



Photo 1. View facing north at plot SP-TV-01.

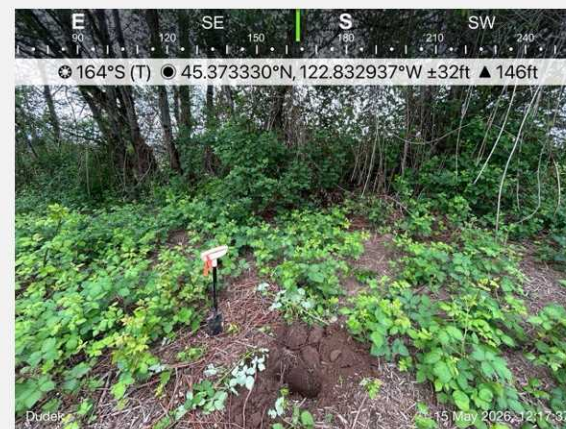


Photo 2. View facing north at plot SP-TV-01.



Photo 3. Soil at plot SP-TV-01.

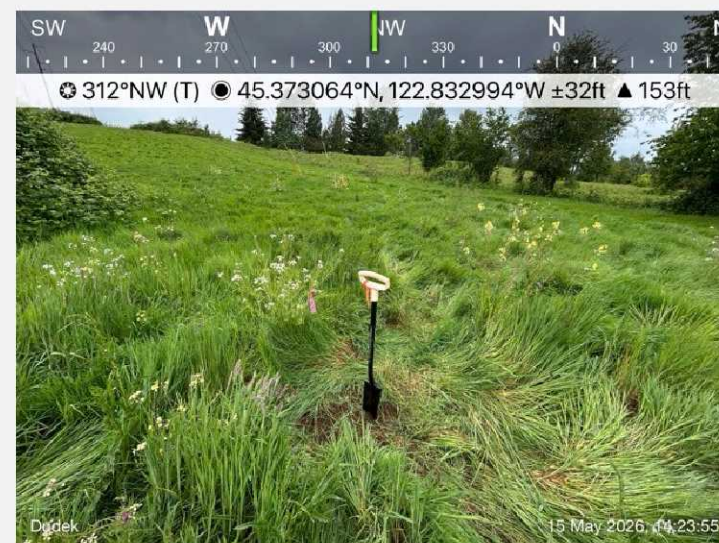


Photo 4. View facing northwest towards plot SP-TV-02.

FIGURE 5 / GROUND LEVEL PHOTOGRAPHS



Photo 5. View facing southeast towards plot SP-TV-02.



Photo 6. Soil at plot SP-TV-02.



Photo 7. View facing northeast towards plot SP-TV-03.



Photo 8. View facing south towards SP-TV-03.

FIGURE 5 / GROUND LEVEL PHOTOGRAPHS

**Photo 9.** View facing north at SP-TV-04.**Photo 10.** View facing south at SP-TV-04.

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

See ERDC/EL TR-10-03; the proponent agency is CECW-COR

Requirement Control Symbol EXEMPT:

(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Meadowlark - May 2026 City/County: Sherwood Sampling Date: 05/15/2026
 Applicant/Owner: Meadowlark Energy LLC State: OR Sampling Point: SP-TV-01
 Investigator(s): T. Vingiello Section, Township, Range: Sec 29A, T2S, R1W
 Landform (hillslope, terrace, etc): Hillslope Local relief (concave, convex, none): none Slope (%): 4
 Subregion (LRR): LRR A, MLRA 2 Lat: 45.373318 Long: -122.83292717 Datum: WSG-84
 Soil Map Unit Name: Quatama loam, 3 to 7 percent slopes (37B) NWI classification: None

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

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

Hydrophytic Vegetation Present? Yes No X
 Hydric Soil Present? Yes No X
 Wetland Hydrology Present? Yes No X

Is the Sampled Area
within a Wetland?

Yes No X

Remarks: Disturbed from blackberry clearing in 2025 on tax lot 1651 at plot and northward. Trees and saplings remain. On moderate slope, but flatter than 50' east and west of the plot.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)
 1. *Prunus avium* / Sweet cherry 35 Yes FACU
 2. _____
 3. _____
 4. _____
 35 = Total Cover

Sapling/Shrub Stratum (Plot size: 15-ft)
 1. *Rubus armeniacus* / Himalayan blackberry 75 Yes FAC
 2. *Corylus cornuta* / Beaked hazelnut 5 No FACU
 3. *Prunus avium* / Sweet cherry 3 No FACU
 4. _____
 5. _____
 83 = Total Cover

Herb Stratum (Plot size: 5-ft)
 1. _____
 2. _____
 3. _____
 4. _____
 5. _____
 6. _____
 7. _____
 8. _____
 9. _____
 10. _____
 11. _____
 0 = Total Cover

Woody Vine Stratum (Plot size: 30-ft)
 1. _____
 2. _____
 0 = Total Cover

% Bare Ground in Herb Stratum 100

Dominance Test worksheet:

Number of Dominant Species
 That Are OBL, FACW, or FAC: 1 (A)
 Total Number of Dominant
 Species Across All Strata: 2 (B)
 Percent of Dominant Species
 That Are OBL, FACW, or FAC: 50.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species 0	x 1 = 0
FACW species 0	x 2 = 0
FAC species 75	x 3 = 225
FACU species 43	x 4 = 172
UPL species 0	x 5 = 0
Column Totals: 118 (A)	397 (B)

Prevalence Index = B/A = 3.36

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation
 2 - Dominance Test is >50%
 3 - Prevalence Index ≤3.0'
 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 5 - Wetland Non-Vascular Plants¹
 Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic
Vegetation
Present?

Yes No X

Remarks:

Generally RUBARM monoculture to north with maple, pear, alder trees and saplings, sword fern, velvet grass with 5-20% cover on lot.

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		
0-2	10YR 3/3	100					Silt Loam	Disturbed, cleared
2-16	10YR 3/3	100					Silt Loam	Mod. compacted. RUBARM roots

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- | | |
|--|--|
| ☐ Histosol (A1) | ☐ Sandy Gleyed Matrix (S4) |
| ☐ Histic Epipedon (A2) | ☐ Sandy Redox (S5) |
| ☐ Black Histic (A3) | ☐ Stripped Matrix (S6) |
| ☐ Hydrogen Sulfide (A4) | ☐ Loamy Mucky Mineral (F1) (except MLRA 1) |
| ☐ 1 cm Muck (A9) (LRR D, G) | ☐ Loamy Gleyed Matrix (F2) |
| ☐ Depleted Below Dark Surface (A11) | ☐ Depleted Matrix (F3) |
| ☐ Thick Dark Surface (A12) | ☐ Redox Dark Surface (F6) |
| ☐ Iron Monosulfide (A18) | ☐ Depleted Dark Surface (F7) |
| ☐ Sandy Mucky Mineral (S1) | ☐ Redox Depressions (F8) |
| ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G) | |

Indicators for Problematic Hydric Soils³:

- ☐
- 2 cm Muck (A10)
- (LRR A, E)**
-
- ☐
- Iron-Manganese Masses (F12)
- (LRR D)**
-
- ☐
- Red Parent Material (F21)
-
- ☐
- Very Shallow Dark Surface (F22)
-
- ☐
- Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks: Disturbed to only top 2-3"

HYDROLOGY**Wetland Hydrology Indicators:**

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present?	Yes _____ No <u>X</u>	Depth (inches): _____
Water Table Present?	Yes _____ No <u>X</u>	Depth (inches): _____
Saturation Present?	Yes _____ No <u>X</u>	Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

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

Remarks: Continuous slope

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

See ERDC/EL TR-10-03; the proponent agency is CECW-COR

Requirement Control Symbol EXEMPT:

(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Meadowlark - May 2026 City/County: Sherwood Sampling Date: 05/15/2026
 Applicant/Owner: Meadowlark Energy LLC State: OR Sampling Point: SP-TV-02
 Investigator(s): T. Vingiello Section, Township, Range: Sec 29A, T2S, R1W
 Landform (hillslope, terrace, etc): Hillslope Local relief (concave, convex, none): none Slope (%): 2
 Subregion (LRR): LRR A, MLRA 2 Lat: 45.37306833 Long: -122.8330065 Datum: WSG-84
 Soil Map Unit Name: Quatama loam, 3 to 7 percent slopes (37B) NWI classification: None

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

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

Hydrophytic Vegetation Present?	Yes ☐ No ☒	Is the Sampled Area within a Wetland?	Yes ☐ No ☒
Hydric Soil Present?	Yes ☐ No ☒		
Wetland Hydrology Present?	Yes ☐ No ☒		

Remarks: Likely mowed within last year because vegetation surrounding transmission tower is taller. Lightly disturbed but still the normal condition.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
0 = Total Cover			

Sapling/Shrub Stratum (Plot size: 15-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Rubus armeniacus</i> / Himalayan blackberry	2	No	FAC
2. _____			
3. _____			
4. _____			
5. _____			
2 = Total Cover			

Herb Stratum (Plot size: 5-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Raphanus sp.</i> / Radish	35	Yes	NI
2. <i>Lolium rigidum</i> / Rigid italian rye grass	30	Yes	NI
3. <i>Poa palustris</i> / Fowl bluegrass, Fowl blue grass	20	No	FAC
4. <i>Bromus hordeaceus ssp. hordeaceus</i> / Soft brome	15	No	NI
5. <i>Holcus lanatus</i> / Common velvetgrass, Common velvet gras	10	No	FAC
6. <i>Vicia sativa</i> / Spring vetch	7	No	UPL
7. <i>Rumex acetosella</i> / Sheep sorrel	3	No	FAC
8. <i>Rumex crispus</i> / Curly dock	3	No	FAC
9. <i>Trifolium pratense</i> / Red clover	2	No	FACU
10. _____			
11. _____			
125 = Total Cover			

Woody Vine Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
0 = Total Cover			

% Bare Ground in Herb Stratum -25

Dominance Test worksheet:

Number of Dominant Species
 That Are OBL, FACW, or FAC: 0 (A)
 Total Number of Dominant
 Species Across All Strata: 2 (B)
 Percent of Dominant Species
 That Are OBL, FACW, or FAC: 0.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	0 x 1 = 0
FACW species	0 x 2 = 0
FAC species	35 x 3 = 105
FACU species	5 x 4 = 20
UPL species	87 x 5 = 435
Column Totals:	127 (A) 560 (B)

Prevalence Index = B/A = 4.41

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation
 2 - Dominance Test is >50%
 3 - Prevalence Index ≤3.0¹
 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 5 - Wetland Non-Vascular Plants¹
 Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic
Vegetation
Present?

Yes ☐ No ☒

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		
0-6	10YR 3/2	100					Silt Loam	Many roots
6-16	10YR 3/2						Silt Loam	No roots

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- | | |
|--|--|
| ☐ Histosol (A1) | ☐ Sandy Gleyed Matrix (S4) |
| ☐ Histic Epipedon (A2) | ☐ Sandy Redox (S5) |
| ☐ Black Histic (A3) | ☐ Stripped Matrix (S6) |
| ☐ Hydrogen Sulfide (A4) | ☐ Loamy Mucky Mineral (F1) (except MLRA 1) |
| ☐ 1 cm Muck (A9) (LRR D, G) | ☐ Loamy Gleyed Matrix (F2) |
| ☐ Depleted Below Dark Surface (A11) | ☐ Depleted Matrix (F3) |
| ☐ Thick Dark Surface (A12) | ☐ Redox Dark Surface (F6) |
| ☐ Iron Monosulfide (A18) | ☐ Depleted Dark Surface (F7) |
| ☐ Sandy Mucky Mineral (S1) | ☐ Redox Depressions (F8) |
| ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G) | |

Indicators for Problematic Hydric Soils³:

- ☐
- 2 cm Muck (A10)
- (LRR A, E)**
-
- ☐
- Iron-Manganese Masses (F12)
- (LRR D)**
-
- ☐
- Red Parent Material (F21)
-
- ☐
- Very Shallow Dark Surface (F22)
-
- ☐
- Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY**Wetland Hydrology Indicators:**

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present?	Yes _____ No <u> X </u>	Depth (inches): _____
Water Table Present?	Yes _____ No <u> X </u>	Depth (inches): _____
Saturation Present?	Yes _____ No <u> X </u>	Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

Requirement Control Symbol EXEMPT:

(Authority: AR 335-15, paragraph 5-2a)

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

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

Hydrophytic Vegetation Present?	Yes _____	No <u>X</u>	Is the 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: Likely mowed earlier this year. Gravel access rd 10' west					

Tree Stratum	(Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
		0	= Total Cover	

Sapling/Shrub Stratum	(Plot size: 15-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
		0	= Total Cover	

Herb Stratum	(Plot size: 5-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Poa palustris</i> / Fowl bluegrass, Fowl blue grass		30	Yes	FAC
2. <i>Rumex acetosella</i> / Sheep sorrel		30	Yes	FACU
3. <i>Bromus hordeaceus</i> ssp. <i>hordeaceus</i> / Soft brome		15	No	NI
4. <i>Plantago lanceolata</i> / Ribwort, English plantain		15	No	FACU
5. <i>Holcus lanatus</i> / Common velvetgrass, Common velvet gras		7	No	FAC
6. <i>Dactylis glomerata</i> / Orchardgrass		5	No	FACU
7. <i>Trifolium pratense</i> / Red clover		3	No	FACU
8. <i>Vicia sativa</i> / Spring vetch		3	No	UPL
9. <i>Trifolium pratense</i> / Red clover		2	No	FACU
10. <i>Daucus carota</i> / Carrot, Carrot, Queen anne's lace		2	No	FACU
11. <i>Bromus diandrus</i> / Rippgut brome, Rippgut grass		2	No	NI
		114	= Total Cover	

Woody Vine Stratum	(Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
		0	= Total Cover	

% Bare Ground in Herb Stratum -15

Dominance Test worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species 0	x 1 = 0
FACW species 0	x 2 = 0
FAC species 38	x 3 = 114
FACU species 57	x 4 = 228
UPL species 20	x 5 = 100
Column Totals: 115	(A) 442 (B)

Prevalence Index = B/A = 3.84

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index ≤3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

5 - Wetland Non-Vascular Plants¹

Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic Vegetation Present? Yes No X

Remarks:

SOIL

[illegible]

HYDROLOGY

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

U.S. Army Corps of Engineers

Attachment A, Appendix K
DMS Control #: 10000004, Exp: 09/30/2027

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

Requirement Control Symbol EXEMPT:

See ERDC/EL TR-10-03; the proponent agency is CECW-COR

(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Meadowlark - May 2026 City/County: Washington Co. Sampling Date: 05/15/2026
 Applicant/Owner: Meadowlark Energy LLC State: OR Sampling Point: SP-TV-04
 Investigator(s): T. Vingiello Section, Township, Range: Sec 29A, T2S, R1W
 Landform (hillslope, terrace, etc): Terrace Local relief (concave, convex, none): none Slope (%): 1
 Subregion (LRR): LRR A, MLRA 2 Lat: 45.372352 Long: -122.83443133 Datum: WSG-84
 Soil Map Unit Name: Hillsboro loam, 3 to 7 percent slopes (21B) NWI classification: None

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

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

Hydrophytic Vegetation Present? Yes No X
 Hydric Soil Present? Yes No X
 Wetland Hydrology Present? Yes No X

Is the Sampled Area
within a Wetland? Yes No X

Remarks: Heavily compacted soil and regularly mowed to approximately 6 inches. Plot is adjacent to substation access road with frequent heavy equipment in area.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30-ft)
 1. _____ Absolute % Cover Dominant Species? Indicator Status
 2. _____
 3. _____
 4. _____
 0 = Total Cover

Sapling/Shrub Stratum (Plot size: 15-ft)
 1. *Rubus armeniacus* / Himalayan blackberry 15 Yes FAC
 2. _____
 3. _____
 4. _____
 5. _____
 15 = Total Cover

Herb Stratum (Plot size: 5-ft)
 1. *Bromus sp.* / Brome 60 Yes NI
 2. *Aira caryophyllaea* / Silvery hairgrass, Silver hair grass 10 No FACU
 3. *Juncus bufonius* / Common toad rush, Toad rush 8 No FACW
 4. *Bromus hordeaceus ssp. hordeaceus* / Soft brome 8 No NI
 5. *Alopecurus pratensis* / Meadow foxtail 5 No FAC
 6. *Rumex acetosella* / Sheep sorrel 3 No FACU
 7. *Rumex crispus* / Curly dock 3 No FAC
 8. *Vicia sativa* / Spring vetch 2 No UPL
 9. _____
 10. _____
 11. _____
 99 = Total Cover

Woody Vine Stratum (Plot size: 30-ft)
 1. _____
 2. _____
 0 = Total Cover

% Bare Ground in Herb Stratum 1

Dominance Test worksheet:

Number of Dominant Species
 That Are OBL, FACW, or FAC: 1 (A)
 Total Number of Dominant
 Species Across All Strata: 2 (B)
 Percent of Dominant Species
 That Are OBL, FACW, or FAC: 50.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species 0	x 1 = 0
FACW species 8	x 2 = 16
FAC species 23	x 3 = 69
FACU species 13	x 4 = 52
UPL species 70	x 5 = 350
Column Totals: 114 (A)	487 (B)

Prevalence Index = B/A = 4.27

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index ≤3.0¹
- 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
- 5 - Wetland Non-Vascular Plants¹
- Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic
Vegetation
Present?

Yes No X

Remarks:
Mowed occasionally

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		
0-8	10YR 4/2	100					Silt Loam	
8-16	10YR 3/3	99	7.5YR 3/4	1	C	M	Silt Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- | | |
|--|--|
| ☐ Histosol (A1) | ☐ Sandy Gleyed Matrix (S4) |
| ☐ Histic Epipedon (A2) | ☐ Sandy Redox (S5) |
| ☐ Black Histic (A3) | ☐ Stripped Matrix (S6) |
| ☐ Hydrogen Sulfide (A4) | ☐ Loamy Mucky Mineral (F1) (except MLRA 1) |
| ☐ 1 cm Muck (A9) (LRR D, G) | ☐ Loamy Gleyed Matrix (F2) |
| ☐ Depleted Below Dark Surface (A11) | ☐ Depleted Matrix (F3) |
| ☐ Thick Dark Surface (A12) | ☐ Redox Dark Surface (F6) |
| ☐ Iron Monosulfide (A18) | ☐ Depleted Dark Surface (F7) |
| ☐ Sandy Mucky Mineral (S1) | ☐ Redox Depressions (F8) |
| ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G) | |

Indicators for Problematic Hydric Soils³:

- ☐
- 2 cm Muck (A10)
- (LRR A, E)**
-
- ☐
- Iron-Manganese Masses (F12)
- (LRR D)**
-
- ☐
- Red Parent Material (F21)
-
- ☐
- Very Shallow Dark Surface (F22)
-
- ☐
- Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY**Wetland Hydrology Indicators:**

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present?	Yes _____ No <u> X </u>	Depth (inches): _____
Water Table Present?	Yes _____ No <u> X </u>	Depth (inches): _____
Saturation Present?	Yes _____ No <u> X </u>	Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

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

Remarks: