

# CRITICAL AREAS REPORT

*Project:*

**Manning Meadows**

*Applicant:*

PLS Engineering  
604 W Evergreen Blvd  
Vancouver, WA 98660

*Prepared By:*



*Date:*

**July 10, 2025**

The information in this report was compiled to meet the requirements of the La Center Municipal Code (LCMC) Section 18.300.090.2 Fish and Wildlife Habitat Conservation Areas and Section 18.300.090.5 Wetlands. This report has been prepared under the supervision and direction of the undersigned, a qualified professional following LCMC 18.300.090.



Andrea W. Aberle  
Sr. Biologist  
AshEco Solutions, LLC

**SITE INFORMATION:**

Parcel No(s):	209048000
Acreage:	12 acres total
Local Jurisdiction:	City of La Center, Washington
Section/Township/Range:	NW ¼ S02, T4N, R1E
Site Address:	1819 NE 339 <sup>th</sup> Street La Center, WA 98629
Legal Landowner:	Kenneth & Debra Manning

## TABLE OF CONTENTS

INTRODUCTION .....	3
Project Description .....	3
Project Location and Background Information .....	3
EXISTING CONDITIONS .....	3
CRITICAL AREAS MAP RESEARCH .....	3
METHODOLOGY .....	4
WDFW Priority Oak Habitat .....	4
DOCUMENTED VEGETATION .....	4
CRITICAL AREA CONCLUSIONS .....	5
Oak Habitat .....	5
Conservation Measures .....	5
CONCLUSIONS .....	5
DISCLAIMER .....	5
REFERENCES .....	6

## TABLES

Table 1. Critical Areas Summary .....	5
---------------------------------------	---

## FIGURE SET

Figure 1 – Vicinity Map  
Figure 2 – Aerial Photo & Topo Map  
Figure 3 – Soil Survey & National Wetlands Inventory Map  
Figure 4 – Habitat Map  
Figure 5 - Existing Conditions Map  
Figure 6 – Proposed Site Plan  
Figure 7 – Retaining Wall Detail

## APPENDICES

Appendix A – Site Photos

## INTRODUCTION

### Project Description

AshEco Solutions, LLC (AES) was contracted by PLS Engineering to assess the critical areas located within the subject site located in La Center, Washington, Figure 1. This Critical Areas Report follows the La Center Municipal Code (LCMC) Chapter 18.300 Critical Areas. The proposed project consists of a residential subdivision and stormwater detention facility.

### Project Location and Background Information

The subject parcel is 12-acres in size, and addressed 1819 NE 339<sup>th</sup> Street, La Center, Washington. The site is under the jurisdiction of the City of La Center and is assigned parcel number 209048000. Site access from NE 339<sup>th</sup> Street currently exists via the driveway to the existing single-family residence. The site is bordered to the east and south by high-intensity residential development, large lot residential development to north and south, and by the La Center High School grounds to the west.

## EXISTING CONDITIONS

The site consists of open pasture and hay fields and one single-family residence and driveway that has existed since at least the 1950s, Figure 2. A few trees and shrubs are located adjacent to the single-family residence and along the property boundaries. The majority of the parcel consists of maintained mixed pasture grasses and herbs. The site has a moderately steep (5-15% slopes) southwest facing slope from about 282 feet in elevation in the northeast corner adjacent to NE339th Street to 190 feet in elevation at the southwest corner of the parcel adjacent to the La Center High School grounds.

One single Oregon white oak tree is located along the western parcel boundary. The oak tree is considered WDFW priority habitat. No other critical areas are mapped or were identified within the subject parcel. The proposed project has been designed to avoid impacts to the Oregon white oak tree.

## CRITICAL AREAS MAP RESEARCH

### Soil Survey

Soils within the subject site, as mapped by the NRCS USDA Soil Conservation Service, Soil Survey of Clark County (1974), Washington, are Gee silt loam, 0 to 8 percent slopes (GeB) and Gee silt loam, 8 to 20 percent slopes (GeD), Figure 3.

The Gee series consists of deep, moderately well drained, rolling and hilly soils on eroded terraces. These are medium-textured soils that formed in old alluvium deposited by the Columbia River. The slopes are mostly nearly level to gently rolling, but along streams and major drainageways they are strongly sloping to very steep. Nearly all the acreage, from Salmon Creek to Sara and north to the Lewis River, is in the western and northwestern parts of the county. The native vegetation is mixed stands of Douglas-fir, grand fir, western redcedar, Oregon white oak, and red alder. The understory is salal, Oregon grape, vine maple, and ferns. The annual precipitation is 40 to 50 inches.

Gee silt loam, 0 to 8 percent slopes (GeB) is the dominant soil on the terraces in the western part of the county. The slopes are moderate to short and are undulating. In a typical profile the surface layer is very dark grayish-brown silt loam about 9 inches thick. The subsurface layer is dark grayish-brown silt loam about 5 inches thick. Below this is mottled, dark grayish-brown and dark-brown silt loam about 8 inches thick. The next layer, to a depth of 72 inches, is firm, mottled, dark brown silty clay loam. Included in mapping were a few small areas where the A2 horizon is lacking and where the drainage is somewhat poor. Permeability is moderate in the surface layer and very slow in the lower part of the subsoil. The available water capacity is moderately high. Surface runoff is slow, and the erosion hazard is slight. The GeB soil type is not listed on the Washington State Hydric Soils List for Clark County (NRCS 2025).



Gee silt loam, 8 to 20 percent slopes (GeD) is similar to Gee silt loam, 0 to 8 percent slopes, except that the surface layer is 1 to 3 inches thinner. Sidehill seeps are common on these slopes in winter and spring. Surface runoff is medium, and the erosion hazard is moderate. The GeD soil type is not listed on the Washington State Hydric Soils List for Clark County (NRCS 2025).

Mapped hydric soils do not necessarily mean that the area is a wetland; hydrology and wetland vegetation must be present to classify an area as a wetland. The same is true for soils that are not mapped as hydric. Wetlands can be found in areas without mapped hydric soils. No wetlands were identified within the subject parcel.

### **WDFW Priority Oak Habitat**

The Clark County GIS and Washington Department of Fish and Wildlife (WDFW) maps the presence of one Oregon white oak trees along the western parcel boundary, Figure.

## **METHODOLOGY**

### **WDFW Priority Oak Habitat**

WDFW defines priority oak habitat as follows; (Oregon White Oak Woodlands) are “stands of oak or oak/conifer associations where canopy coverage of the oak component of the stand is 25%; or where total canopy coverage of the stand is <25%, but oak accounts for at least 50% of the canopy coverage. The latter is often referred to as oak savanna. In non-urbanized areas west of the Cascades, priority oak habitat consists of stands > 0.4 ha (1.0 ac) in size. East of the Cascades, priority oak habitat consists of stands > 2 ha (5 ac) in size. In urban or urbanizing areas, single oaks or stands < 0.4 ha (1 ac) may also be considered a priority when found to be particularly valuable to fish and wildlife (i.e., they contain many cavities, have a large diameter at breast height [dbh] (generally 20-inches dbh and greater), are used by priority species, or have a large canopy). Oak woodlands in western Washington may contain understory plants indicative of *Prairie*.” Oak habitat meeting the above definitions was identified within the limits of the proposed project onsite, Figure 4.

## **DOCUMENTED VEGETATION**

The majority of the property consists of an open grass field dominated by upland pasture grasses including Orchard grass (*Dactylis glomerata*, FACU), sweet vernal grass (*Anthoxanthum odoratum*, FACU), tall fescue (*Schedonorus arundinaceus*, FAC) and Oxeye daisy (*Leucanthemum vulgare*, FACU).

The single Oregon white oak (*Quercus garryana*, FACU) tree located at the west fence line is surrounded by an understory of Himalayan blackberry (*Rubus armeniacus*, FAC) and native shrubs including Douglas hawthorn (*Crataegus douglasii*, FAC), common snowberry (*Symphoricarpos albus*, FACU), beaked hazelnut (*Corylus cornuta*, FACU) and vine maple (*Acer circinatum*, FAC).

and scientific name of each vegetation species indicate the likelihood of the species to be found in wetlands. Listed from most-likely to least-likely to be found in wetlands, the indicator categories are:

- **OBL (obligate wetland)** – Occur almost always under natural conditions in wetlands.
- **FACW (facultative wetland)** – Usually occur in wetlands but occasionally found in non-wetlands.
- **FAC (facultative)** – Equally likely to occur in wetlands or non-wetlands.
- **FACU (facultative upland)** – Usually occur in non-wetlands but occasionally found in wetlands.
- **UPL (obligate upland)** – Occur almost always under natural conditions in non-wetlands.
- **NI (no indicator)** – Insufficient data to assign to an indicator category.

## CRITICAL AREA CONCLUSIONS

### Oak Habitat

CCGIS maps one Oregon white oak tree along the western parcel boundary, Figure 4. AES concurs with CCGIS mapping. Due to the subject parcel's location within an urban area the onsite oak habitat meets the definition of Priority Habitat by WDFW and is governed under CCC 40.440.

**Table 1. Critical Areas Summary.**

Critical Area	Buffer Width
Oregon white oak habitat	N/A (Dripline of the oak canopy = protected oak habitat)

### Conservation Measures

A retaining wall has been designed by the project engineer to hold the outer dripline limits of the onsite Oregon white oak tree. The dripline is considered the jurisdictional limit for this individual oak tree habitat. The wall is required due to the existing slope present onsite and the grading that is required to prepare the residential lots. The retaining wall will be three feet tall in the north and seven feet tall on the south end. The standard best management practices (BMPs) will be followed during construction of the tree to ensure the tree remains viable during and post construction activities.

Standard BMPs include the following measures:

1. Protective Barrier – Prior to development, land clearing or retaining wall installation, tree protection fencing is to be installed along the outer limits of the oak tree dripline and it is to remain in place until project completion.
2. Root protection - Cleanly sever any roots of the oak tree if encountered during construction of the retaining wall to minimize damage to the tree.
3. Avoid dripline - No fill or impervious surfaces are to encroach into the dripline (or critical root mass) of the oak tree.
4. Retain native vegetation - Retain any other native vegetation surrounding the oak tree within the dripline.

## CONCLUSIONS

The construction of this residential subdivision is located within the appropriate zoning as outlined by the City of LaCenter and will provide housing for the southwest Washington market where the market demand is high due to a lack of availability. The proposed project has avoided impacts to the onsite Oregon white oak habitat as it will be retained and preserved to allow for no loss of critical area functions or values. With issuance of project approvals, a conservation covenant will be recorded to protect the onsite jurisdictional critical area (oak habitat) in perpetuity.

## DISCLAIMER

This report documents the investigation, best professional judgment, and conclusions of the investigator. It is correct and complete to the best of our knowledge. It should be considered a preliminary mitigation plan and used at your own risk until it has been reviewed and approved in writing by the local agency with jurisdiction over the site. AES personnel base the above-listed conclusions on standard scientific methodology and best professional judgment.

## REFERENCES

La Center Municipal Code. 2024. Section 18.300.090(2) Fish and Wildlife Habitat Conservation Areas.

La Center Municipal Code. 2024. Section 18.300.090(5) Wetlands.

Clark County Geographic Information Systems. Available at: <http://gis.clark.wa.gov/mapsonline/> [Accessed July 2024].

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1. Online edition. Vicksburg, MS: U.S. Army Engineer Waterways Experiment Station.

Olson, P. & Stockdale, E. 2010. Washington State Department of Ecology: Determining the Ordinary High Water Mark on Streams in Washington State. Second Review Draft. Ecology Publication #08-06-001.

U.S. Department of Agriculture, Natural Resource Conservation Service (NRCS). 1972. Soil Survey of Clark County Area. Online document. Available at: <http://websoilsurvey.nrcs.usda.gov/app/>. [Accessed July 2024]

U. S. Fish & Wildlife Service. 2012. National Wetlands Inventory. Online document. Available at: <http://www.wetlandsfws.er.usgs.gov/NWI/index.html>. [Accessed July 2024].

Washington Department of Fish and Wildlife. PHS on the Web - WDFW. Available at: <https://geodataservices.wdfw.wa.gov/hp/phs/>. [Accessed July 2024].

Wakeley, J.S.; R.W. Lichvar; and C.V. Noble, eds. U.S. Army Corps of Engineers. 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0), ERDC/EL TR-10-3. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

Washington State Department of Ecology (WDOE). 1997. Washington State Wetlands Identification and Delineation Manual. Publication #96-94. Olympia, Washington.







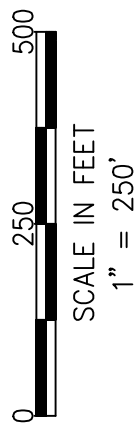





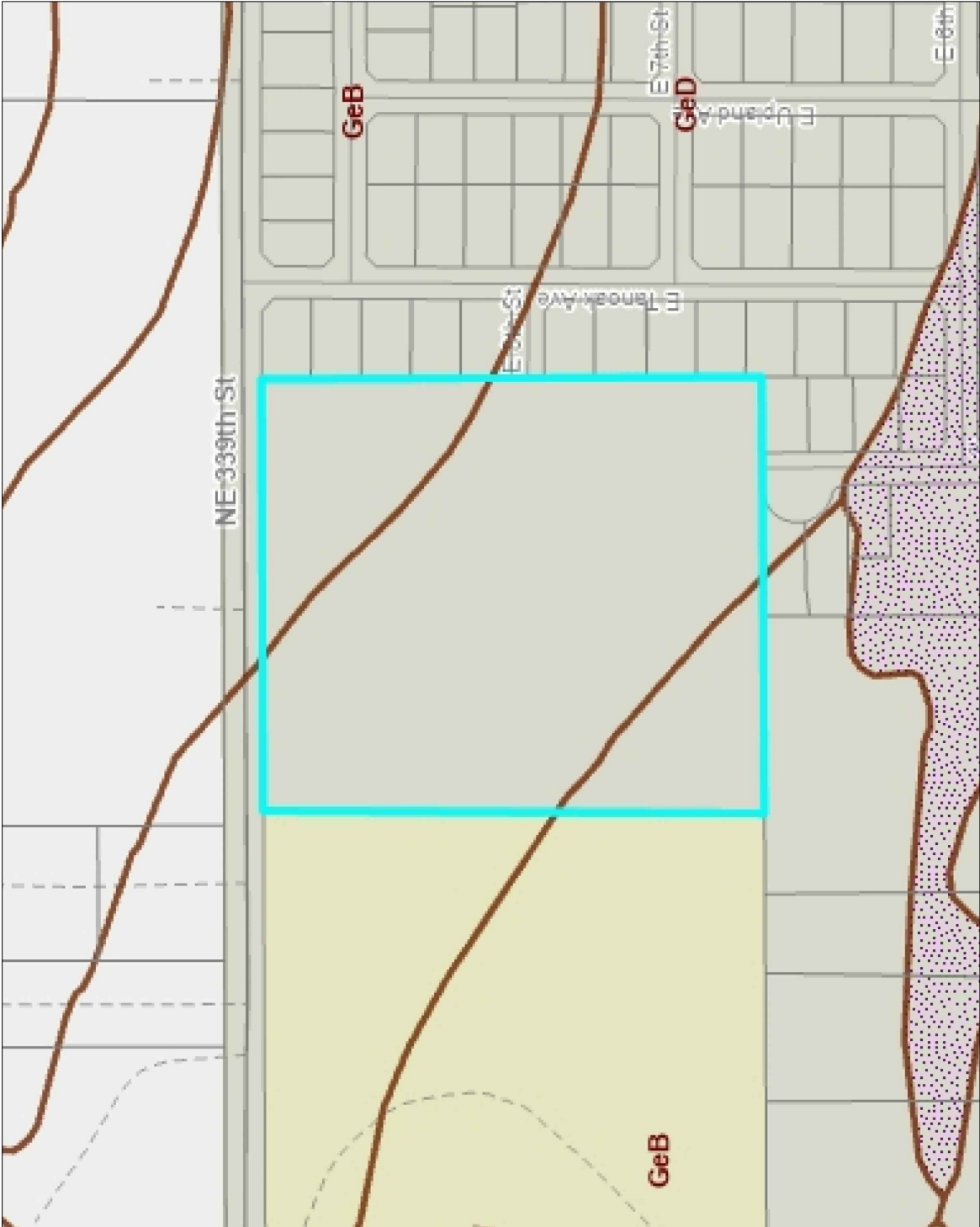


**Legend**

-  Taxlots
-  Contours Lines - 2 ft
-  Contour Lines - 10 ft
-  Contour Lines - 100 ft



	<p><b>PURPOSE:</b> XX Line 1 Line 2 <b>DATUM:</b> NAVD 88 <b>ADJACENT PROPERTY OWNERS:</b> Adj 1 Adj 2</p>	<p><b>AERIAL PHOTO &amp; TOPO MAP</b></p> <p><b>APPLICANT:</b> PLS - T. Johnson, K. Manning <b>PROJECT NAME:</b> Manning Meadows <b>PARCEL #:</b> 209048000 <b>SITE LOCATION ADDRESS:</b> 1819 NE 339th St</p>	<p><b>PROPOSED:</b></p> <p><b>IN:</b> La Center <b>NEAR:</b> XX <b>COUNTY:</b> Clark <b>FIGURE:</b> 2 <b>STATE:</b> WA <b>DATE:</b> 6-17-25</p>
---	--	--	---




**Legend**

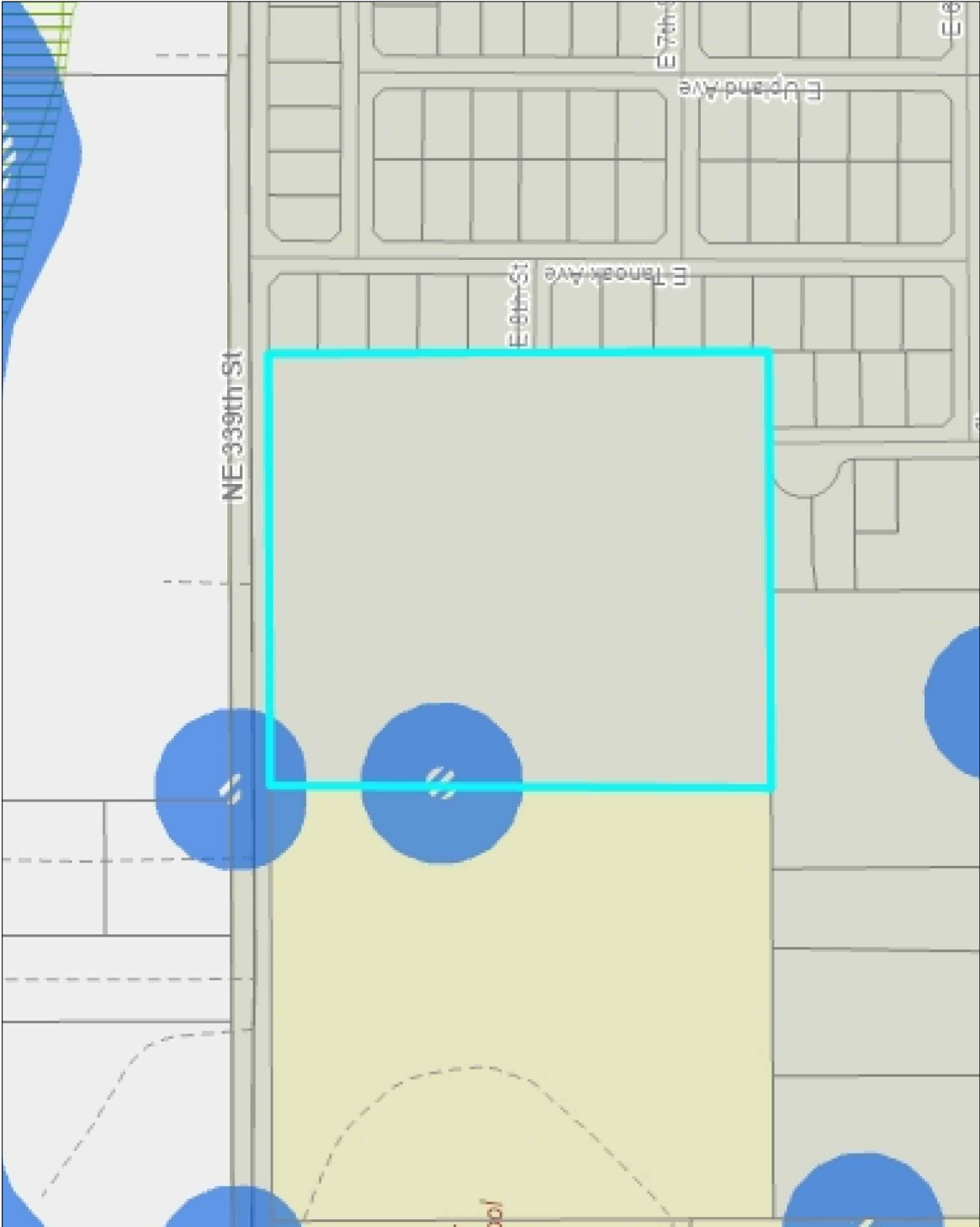
- Taxlots
- Soil Type
- Hydric Soils
- Potential Wetlands Presence
- Permitted Wetland
- NWI Wetland
- Stream
- Lake

GeB -  
GeD -



0 250 500  
SCALE IN FEET  
1" = 250'

	<b>PURPOSE: XX</b> Line 1 Line 2 <b>DATUM: NAVD 88</b> <b>ADJACENT PROPERTY OWNERS:</b> Adj 1 Adj 2		<b>SOIL SURVEY &amp; NATIONAL WETLANDS INVENTORY MAP</b> <b>APPLICANT:</b> PLS - T. Johnson, K. Manning <b>PROJECT NAME:</b> Manning Meadows <b>PARCEL #:</b> 209048000 <b>SITE LOCATION ADDRESS:</b> 1819 NE 339th St		<b>PROPOSED:</b>
	<b>IN:</b> La Center <b>NEAR:</b> XX <b>COUNTY:</b> Clark <b>FIGURE:</b> 3 <b>DATE:</b> 6-17-25 <b>STATE:</b> WA				



**Legend**

- Taxlots
- Species
- Species Area
- Adjacent to Species Area
- Habitat
- Habitat Area
- Adjacent to Habitat Area
- Riparian Habitat Site Class
- Stream
- Lake



0 250 500  
SCALE IN FEET  
1" = 250'



**PURPOSE: XX**

Line 1

Line 2

**DATUM: NAVD 88**

**ADJACENT PROPERTY OWNERS:**

Adj 1

Adj 2

**HABITAT MAP**

**APPLICANT:** PLS - T. Johnson, K. Manning

**PROJECT NAME:** Manning Meadows

**PARCEL #:** 209048000

**SITE LOCATION ADDRESS:**

1819 NE 339th St

**PROPOSED:**

IN: La Center

NEAR: XX

COUNTY: Clark

FIGURE: 4

DATE: 6-17-25

STATE: WA

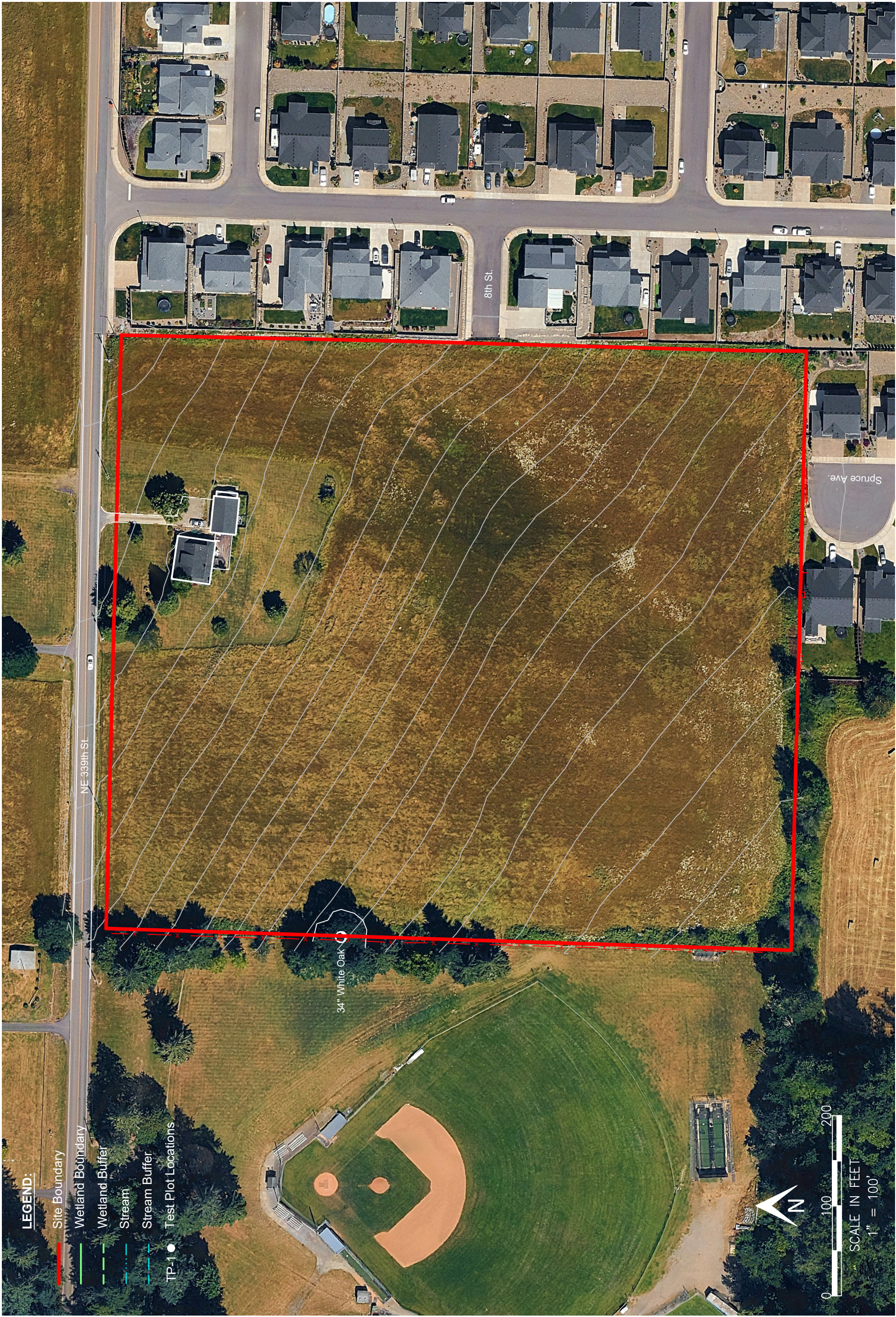




PURPOSE: XX  
Line 1  
Line 2  
DATUM: NAVD 88  
ADJ 1  
ADJ 2  
ADJACENT PROPERTY OWNERS:

EXISTING CONDITIONS MAP  
APPLICANT: PLS - T. Johnson, K. Manning  
PROJECT NAME: Manning Meadows  
PARCEL #: 209048000  
SITE LOCATION ADDRESS:  
1819 NE 339th St

IN: La Center  
NEAR: XX  
COUNTY: Clark  
STATE: WA  
FIGURE: 5  
DATE: 6-17-25



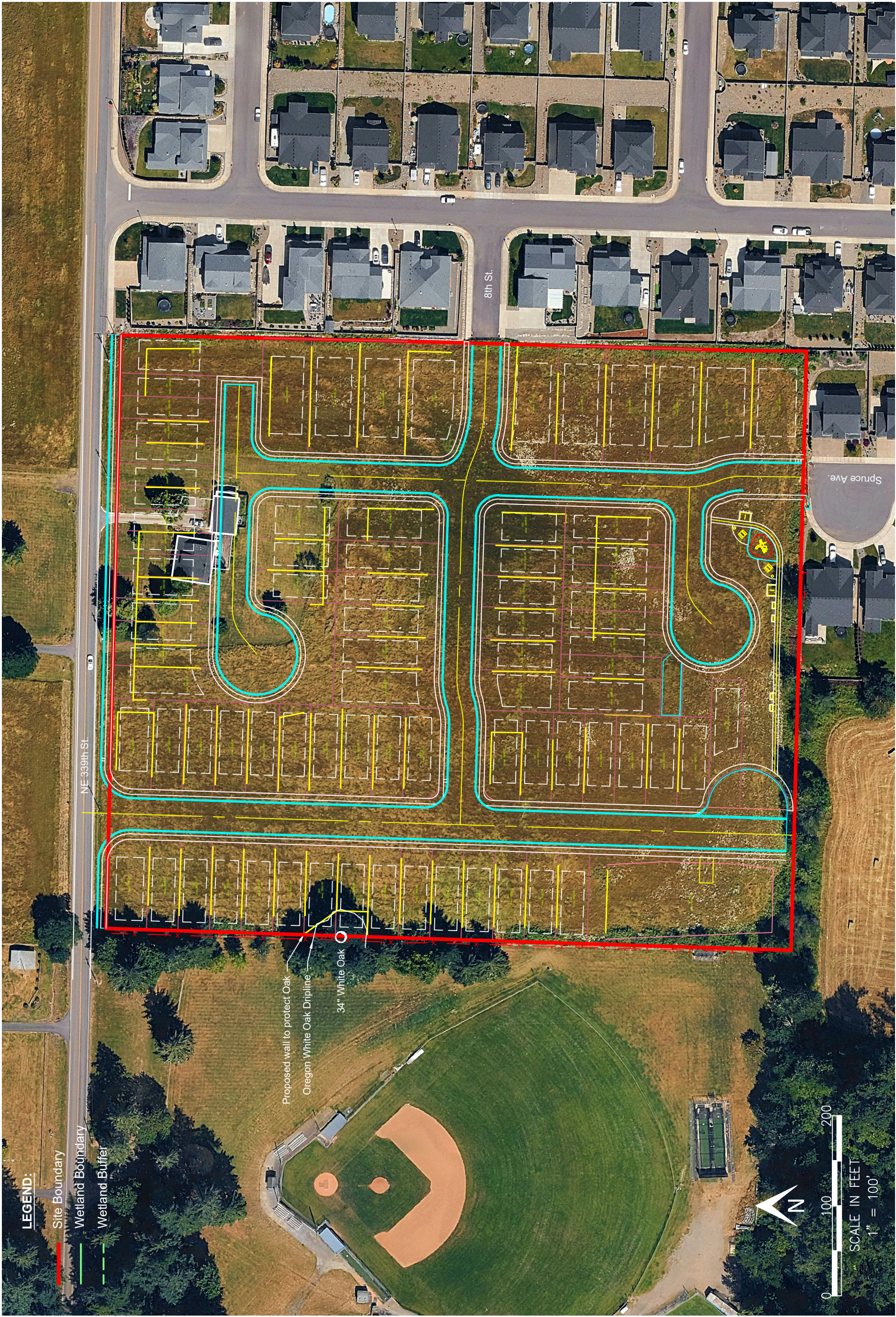




PURPOSE: XX  
Line 1  
Line 2  
DATE: NAVD 88  
ADJACENT PROPERTY OWNERS:


PROPOSED SITE PLAN  
APPLICANT: PLS - T. Johnson, K. Manning  
PROJECT NAME: Manning Meadows  
PARCEL #: 209048000  
SITE LOCATION ADDRESS:  
1819 NE 339th St

PROF  
IN: La Center  
NEAR: XX  
COUNTY: Clark  
FIGURE: 6  
DATE: 6-23-25  
STATE: WA





Revisions	
1	
2	
3	
4	
5	
6	



Project No. 38849

SCALE: H: 1" = 50'  
V: N/A

DESIGNED BY: VJP

DRAWN BY: MJB

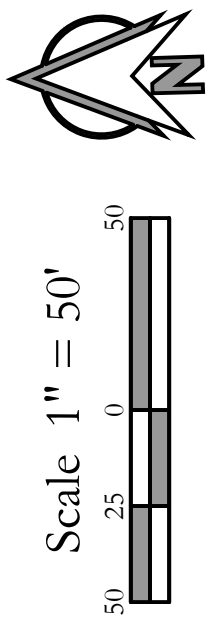
REVIEWED BY: TGI

--



FIGURE 7

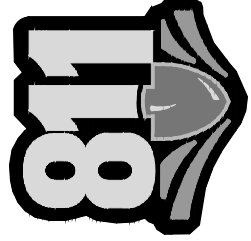
Retaining Wall Detail



Legend

Proposed Asphalt

Proposed Concrete



Know what's below.  
Call before you dig.

## **Appendix A**

### **Site Photos**



## Manning Meadows - Site Photos



**Photo 1.**

View northeast from the pasture toward the existing residence located in the northern portion of the parcel.



**Photo 2.**

View south/southeast over the open pasture that dominates the parcel.



**Photo 3.**

View east over the open pasture that dominates the parcel. The development located directly east of the subject parcel is visible in the top portion of the photo.



**Photo 4.**

View south down the west property line. The individual Oregon white oak tree to be retained by the project is visible in the center of photo.





**Photo 5.**

View south of the Oregon white oak tree to be retained by the project. The retaining wall will be constructed around the outer dripline of this tree in the area left of photo.



**Photo 6.**

View north over the eastern dripline of the Oregon white oak tree.

**Photo 7.**

View north over Oregon white oak tree trunk that is rooted directly east of the fenceline located along the western property boundary.



