

CRITICAL AREAS REPORT & MITIGATION PLAN

Vineyard Vista Subdivision (2022-039-PAC)

Tax Parcels 63472945 & 258903000

Northeast North Fork Avenue

La Center, WA 98629



Prepared by:

James Barnes

Cascadia Ecological Services, Inc.

14205 NW 56th Avenue

Vancouver, WA 98685

jim@cascadia-inc.com

(360) 601-8631

Applicant:

Lincoln Wolverton

Chinookan, LLC

P.O. Box 886

La Center, WA 98629

lincolnwolverton@hotmail.com

(360) 606-8986

Date: April 3, 2024



Executive Summary

This report details the results of a critical areas assessment conducted by Cascadia Ecological Services, Inc. (CES) on behalf of the applicant, Chinookan, LLC, for Clark County tax parcels 63472945 & 258903000. This document identifies the extent of critical areas identified within or in the immediate vicinity of the study area, as defined and regulated by Chapter 18.300 of the City of La Center Municipal Code (City of La Center, 2023) and proposes mitigation for critical area impacts.

The applicant is proposing a 84-lot subdivision on the 29.53-acre site. The site currently contains a home with a detached shop and carport, a former winery, and a well and septic system. The site is zoned LDR-7.5 with a UH-10 overlay and the comprehensive plan designation for the site is Urban Residential (UR).

The property is located along the eastern side of Northeast North Fork Avenue at the northern City limits. It is surrounded by other parcels zoned LDR-7.5 (low density residential) to the west and south and Forest 40 District (FR-40) to the north and east in unincorporated Clark County and outside of the City's urban growth area. The parcels to the south are developed with single-family residences in the Southview Heights subdivisions. The parcels abutting the site's eastern and northern boundaries are undeveloped grass and forest land. The parcels to the west, across Northeast North Fork Avenue is actively farmed. Southview Heights Park Mount Zion Cemetery, Holley Park, La Center Community Library and La Center Elementary and High Schools are located within one mile of the proposed development. La Center Middle School is just over one mile from the site.

No wetlands were observed on the property during the site visit conducted by CES in 2018 and again in May 2023. The property consists of upland grassland, vineyards, and forestland. A forested ravine is present in the northeast part of the study area and a rock cobble dry streambed was located at its base. The width of the stream channel is between one and two feet on average. The seasonal stream is a tributary to Breeze Creek which is off-site to the east. Based on the requirements of LMC Table 18.300.090(2)(f) – Riparian Areas, the stream would be classified as Type Ns, high mass wasting potential (seasonal stream with a defined channel). The resulting riparian ecosystem area buffer requirement per the code is 75 feet.

The project area also contains numerous Oregon white oak (*Quercus garryana*) trees, the locations of which have been surveyed. Two oaks which meet the WDFW the definition of priority habitat and species are proposed to be removed. These oaks will be mitigated on-site by way of mitigation within proposed open space tracts B, C, and D.

No other sensitive plant, fish, or wildlife species are currently known to occur within the confines of the study area. With the mitigation measures proposed, there be no net loss of habitat functions to critical areas on the property.

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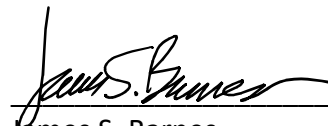
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Acronyms and Abbreviations

Applicant	Lincoln Wolverton
CES	Cascadia Ecological Services, Inc.
DNR	Department of Natural Resources
HUC	Hydrologic Unit Code
LCCAO	La Center Critical Areas Ordinance
OHWM	Ordinary High Water Mark
USFWS	U.S. Fish and Wildlife Service
WDFW	Washington Department of Fish and Wildlife
WRIA	Water Resource Inventory Area

Statement of Qualifications

Cascadia Ecological Services, Inc. (CES) is a multi-disciplined environmental consulting company based in Vancouver, Washington. CES was established in 2001 and specializes in wetland delineation, habitat assessment, permitting, and mitigation. This critical areas report and mitigation plan was completed by James Barnes, president and owner of CES. The information contained herein documents the investigation, best professional judgment, and recommendation of CES. All assumptions made and relied upon are complete and accurate.



James S. Barnes

President

Cascadia Ecological Services, Inc.

Chapter 1. Introduction

The Applicant contracted with CES to complete a critical areas report and mitigation plan for the proposed Vineyard Vista residential subdivision on tax parcels 63472945 & 258903000 located at Northeast North Fork Avenue in La Center, Washington.

The purpose of the report is to identify and describe regulated critical areas, and sensitive plant, fish, and wildlife species within the confines or immediate vicinity of the study area. This report facilitates the applicant's efforts to:

1. Avoid or minimize impacts to critical areas during the project design process.
2. Document critical area boundary determinations for review and verification by the City of La Center.
3. Provide early indications of sensitive species within the study area.
4. Provide background information for critical areas mitigation.

This report is anticipated to support permits locally through the City of La Center.

Chapter 2. Project Information

2.1 Location

Site Location: The study area is located at Northeast North Fork Avenue in La Center, Washington (Figure 1 of 5).

Study area: 28.75 acres

Tax Parcels: 63472945 & 258903000

County: Clark

Section, Township and Range: NE 1/4, S03, T4N, R1E of the Willamette Meridian

Latitude/Longitude: 45.8748 N. / -122.6629 W

WRIA: 27 - Lewis watershed

HUC: 17080005 – Lower Cowlitz

2.2 Purpose and Description

The project will develop a 84-lot subdivision on the 29.53-acre site to provide needed housing units for the growing area of La Center.

2.3 Existing Site Conditions

The study area consists of two parcels which total 28.75 acres in size. Approximately 13 acres of the site extending to the north and east of this area consists of fallow grape vineyards and grassland mixed with extensive thickets of Himalayan blackberries. The remainder of the site in the northeast quadrant and southeast corner is dominated by mature upland forest. A strip of forest also extends along the south property boundary separating the site from the Southview

Chapter 3. Observed Critical Areas

3.1 Wetlands

The presence of critical areas was assessed by traversing the property on foot. Observation of vegetation, hydrology, and soils in conjunction with data from National Wetland Inventory maps of the U.S. Fish and Wildlife Service (USFWS, 2023), the USDA NRCS Web Soil Survey (USDA, 2023), and aerial photos were used to determine the presence of wetlands or streams.

The presence or non-presence of wetlands were determined by using the Routine Determination Methodology of the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (USACE, 2010). Observed dominant vegetation on the site is listed in Appendix C Table 1.

The NRCS Web Soil Survey indicates the following soil types on the property:

- Hesson clay loam, 0 to 8 percent slopes (HcB)
- Hesson clay loam, 8 to 20 percent slopes (HcD)
- Hesson gravelly clay loam, 8 to 20 percent slopes (HgD)
- Hillsboro silt loam, 3 to 8 percent slopes (HoB)
- Olequa silty clay loam, heavy variant, 20 to 45 percent slopes (OhF)

The Hesson series consists of very deep, well drained soils that formed in old, mixed alluvium. Hesson soils are on high terraces and terrace escarpments and have slopes of 0 to 55 percent.

The Hillsboro series consists of deep, well drained soils that formed in mixed alluvium. Hillsboro soils are on terraces and have slopes of 0 to 20 percent.

The Olequa series consists of very deep, well drained soils formed in mixed alluvium. Olequa soils are on high terraces and have slopes of 0 to 65 percent.

During the site visit, no areas that meet the three criteria (hydrophytic vegetation, hydric soils, and hydrology) required to make a wetland determination were observed.

3.2 Fish and Wildlife Habitat Conservation Areas

Per the LCMC Chapter 18.300.090 (2), identified sensitive fish and wildlife habitat conservation areas shall be preserved or adverse impacts mitigated. Fish and wildlife habitat conservation areas identified on the project area that are regulated under this section include riparian habitat and Priority Habitat Species (PHS) Areas.

The Clark County GIS shows two mapped DNR water features on the project area as shown on Figure 3. The west feature was not found to exist on site and is likely a mapping error based on

mapped site topographic contours. The DNR Type Ns mapped stream in the northeast quadrant of the site was observed to be accurate. This stream is within a forested ravine in the northeast part of the study area. During the 2018 site visit, the streambed consisted of dry rock cobble. The width of the stream channel is between one and two feet on average. The stream is a tributary to Breeze Creek which is off-site to the east. Because this stream is seasonal, it would require a 75-foot riparian ecosystem area buffer (Type Ns, high mass wasting potential - seasonal stream with a defined channel) per LCMC Table 18.300.090(2)(f). This buffer will also be referenced as “stream buffer” throughout the remainder of this report.

LCMC Chapter 18.300.090 (2)(iv) lists Priority Habitat Species (PHS) Areas as areas with which state-listed monitor or candidate species or federally listed candidate species have a primary association, as specified in Washington Department of Fish and Wildlife Policies 4802 and 4803, and which if altered may reduce the likelihood that the species will maintain and reproduce over the long term.

The property contains numerous oak trees of various sizes which have been surveyed and are shown on Figure 4. WDFW defines oak woodlands as follows: In non-urbanized areas west of the Cascades, priority oak habitat is stands 0.4 ha (1 acre) in size; in urban or urbanizing areas, single oaks, or stands of oaks <0.4 ha (1 ac), may also be considered priority habitat n found to be particularly valuable to fish and wildlife (e.g. they contain many cavities, have a large diameter at breast height (dbh), are used by priority species, or have a large canopy). Two oaks identified as trees #1 and #2 and are to be removed adjacent to lots 56, 68, and 69. The oaks cannot be avoided due to grading that is required in order to make these lots level for development.

The condition of the trees are detailed in the arborists report (Arborscape, 2024) in Appendix D. In general, Tree #1 is described as being healthy with a suppressed and unbalanced canopy due to its location within a forest dominated by mature Douglas for trees. Tree #2 contains areas of significant die back and deadwood throughout the canopy. The tree also has multiple co-dominant stems that are prone to failure due to weaker attachments to the main trunk.

Chapter 3. Avoidance and Minimization Narrative

The proposed project has implemented a series of strategic steps to mitigate the impact to riparian ecosystem buffer and Oregon White Oaks on the property during our project. The overall goal of the project is to strike a balance between achieving the development objectives while ensuring no net loss of the sensitive critical areas on the property.

The unique topography of the parcel, characterized by extreme slopes and drainages in three directions, presented significant challenges for stormwater management. The project geotechnical engineer has determined that the soils are not practical or advisable for stormwater facilities anywhere along the south or southeastern slopes where said slope could causes issues to neighboring properties or within the development itself. Therefore, all

stormwater except for a small percentage must be drained to the stormwater facilities shown on the project plans.

The balance between effective stormwater management and preserving the integrity of the critical areas on the property has been at the forefront of the project's preliminary engineering efforts. Extensive measures have been taken to minimize tree removal within the stream buffer while addressing the necessity of directing stormwater to the lowest point, as depicted on the plans. However, due to the proximity of this low point to the draw draining eastward through the stream, the implementation of a 14-foot high berm has become essential to meet City code-mandated water volume requirements. This necessary berm introduces unavoidable grading into the stream buffer. The steepness of the berm grade has been maximized to the extent practicable to ensure its integrity while minimizing encroachment into the stream buffer.

Multiple design iterations of the interior roads have resulted in a plan which meets both circulation and other City codes, while also trying to minimize the impact to the stream buffer and to existing Oregon white oaks on the site.

The challenging topography of the site, marked by contradictory contouring, necessitates extensive cut and fill operations, resulting in the removal of a significant portion of trees. While efforts have been made to retain trees in the stream and Oregon white oaks as per the plan, the expertise of the project arborist has highlighted potential hazards. The arborist has indicated that the removal of the majority of trees on the property could lead to hazardous conditions, specifically "windthrow," endangering the remaining trees. Hence, the project proposes to remove a few additional trees along the southern and northern part of the stream buffer to protect the future homes along the perimeter.

The proposed extensive cut and fill operations on the site, while impacting a significant portion of the landscape, have been carefully designed to minimize impacts on the stream buffer. Notably, the grade changes will be permanent, but no permanent impacts such as roads or lots are planned within the stream buffer. To address any residual impact, mitigation is proposed in this plan, ensuring that the integrity of the stream buffer is preserved while meeting the site's development needs.

In recognition of the need to balance the project's development goals with preservation of the critical areas on-site, a comprehensive mitigation strategy has been formulated. This plan is designed to address any residual impact resulting from the proposed extensive cut and fill operations, ensuring that there is no net loss of the stream buffer habitat functions.

Despite extensive efforts to design and redesign the plat layout to minimize impact on the oaks, it is proposed that two trees be removed. This decision, driven by careful considerations outlined above, reflects the project's commitment to responsible development while acknowledging the ecological significance of the Oregon white oak population.

Lastly, prior to addressing the presence of Oregon white oaks and the stream buffer setback requirements, the initial lot count was 101. In light of the ecological significance of these features, the lot count has been significantly reduced to 84.

Chapter 4. Mitigation Measures

4.1 Riparian Buffer Width Reduction

LCMC Chapter 18.300.090 (2)(l) allows allow the reduction of Np and Ns stream buffers by no more than 50 percent of the required buffer width if the area proposed for buffer reduction:

- (i) Is currently adversely impacted by development such as roads, parking areas, buildings, or public facilities; or
- (ii) Has primarily nonnative vegetation, such as grass pasture; and
- (iii) The proposed reduction will not significantly reduce the water quality and habitat functions of the buffer;
- (iv) When buffer reduction is allowed, the applicant shall provide the city with a vegetative buffer enhancement plan for review and approval;
- (v) Stormwater facilities are not permitted in the remainder of buffers reduced by operation of this buffer reduction provision.

The project will require minor reductions to the outer portions of the Type Ns stream buffer in the area shown as “Tract B – Open Space” on Figure 4. These buffer reductions are required for a wood chip pedestrian path along the west and south side of Tract B. The reduction in buffer area of 1,834 ft² will be compensated by adding 2,767 ft² onto the existing buffer in Tract B. The areas of buffer reductions and addition are functionally equivalent as both consist of mature upland forest.

4.2 Oregon White Oak

The current site plan was developed to avoid impacts to the oaks throughout the majority of the project area. Surveyed oaks were set aside into open space tracts with the exception of two which are located along the east side of Lot 56 and the north side of lots 68 and 69. These oaks are 14, and 20 inches in diameter at breast height. Due to required grading on these lots to make them level for development of new houses, the oaks cannot be avoided.

The total oak canopy to be removed as a result of this project is 1,729 ft².

To mitigate for unavoidable impacts to Oregon white oaks on the project area, a mitigation strategy will be implemented in accordance with the current guidance from the WDFW.

The applicant proposes replacing the 1,729 ft² of impacted Oregon white oak canopy with 25,139 ft² (0.56 acres) of oak enhancement within the confines of the B, C, and D open space tracts as shown on Figure 5.

Mitigation ratios for this project are as follows:

a) $25,139 \text{ ft}^2 / 1,729 \text{ ft}^2 = 14.54$

The overall mitigation ratio for the canopy area of the two oaks proposed for removal is greater than 14:1.

Table 1. Plant specifications for the Oregon white oak mitigation area.

Common Name	Scientific Name	Plant Size	Required Number to be Planted
Oregon white oak	<i>Quercus garryana</i>	18"+ Bare Root	116*

*Oaks are to be planted at a spacing of 15' o.c. within the oak mitigation areas. The Applicant proposes to plant an additional 146 trees to mitigate the removal of other existing trees per LMC 18.350.050 within the Upland Forest Enhancement Areas as shown on Figure 5 (refer to 23035 Landscape Plans – L2 Park Plan Plant Schedule and Notes).

Planting the oak mitigation areas will achieve (1) a “no net loss” of on-site Oregon white oak habitat area and functions, (2) advance plant communities in progression of ecological succession toward stable climax community structure, and (3) increase habitat value and level of ecological functions.

4.3 Riparian Ecosystem Buffer

Due to the grading that will be required in portions of the outer riparian ecosystem buffer in order to construct the stormwater facility, a number of trees will be impacted. The trees which will be affected outside of the stormwater facility area have been determined to be susceptible to potential "windthrow" by the project arborist to houses that will be constructed on the adjacent lots.

The mitigation strategy for tree removal in the riparian ecosystem buffer is to create wildlife snags and downed logs rather than remove them from the buffer. Also, native trees will be planted within to buffer to increase wildlife habitat.

According to the best available science and the Washington Department of Fish and Wildlife, snags enhance local natural areas by attracting wildlife species that may not otherwise be found there. All trees of all sizes are potential snags. Unfortunately, many wildlife trees are cut down without much thought to their wildlife value or of the potential management options that can safely prolong the existence of the tree.

Large conifers such as cedar and fir, tend to rot more slowly than deciduous trees such as alder, birch, and cherry. However, large deciduous trees such as cottonwoods, big-leaf maples, and oaks can last many years as snags. Moreover, while alive, they tend to develop cavities in their live and dead branches and trunks (WDFW, 2023).

These habitat features provide food and shelter to more than 40 percent of wildlife species in Pacific Northwest forests. This coarse woody debris provides important structures for cavity-dependent birds and small mammals, food sources for woodpeckers and other foragers, and slowly release nutrients into the ecosystem with the help of decomposers.

Historically, undisturbed lowland westside forests in Oregon and Washington with healthy populations of snag-dependent wildlife species had an average of 10-18 snags per acre and 50-140 down logs per acre in varying states of decay and size. (Northwest Natural Resource Group, 2023). The forest type within the riparian ecosystem buffer on this property does contain some snags and downed logs, but since the tree stand is second growth, the number of these habitat features present are limited and therefore should be increased.

The project's critical areas plan developed by Wolfe Project Management (Sheet CA-1, Figures) shows a total of ten trees will need to be removed within the areas which must be graded to construct the stormwater facility and fill slopes along the interior road network adjacent to the buffer. These trees include red alder (*Alnus rubra*), big-leaf maple (*Acer macrophyllum*), Western hemlock (*Tsuga heterophylla*), and Western red cedar (*Thuja plicata*). These trees will be felled in place and left on the ground surface as downed wildlife logs.

Additionally, thirteen trees with diameters at breast height ranging from 10 to 30 inches, are located along the edges of the stream buffer and are considered to be susceptible to windthrow which may present a future falling hazard to residents and the new houses along the perimeter of the buffer. These trees will be left in place but topped at a height of 15 feet tall which will offer ideal hunting perches for raptors.

These trees will also function as resting and song perches for birds; and food storage for small mammals and birds. In addition to nesting, woodpeckers use large dead tree trunks as a way to announce their presence during courtship (Northwest Natural Resource Group, 2023).

The snags will be created by topping the trees at a height of 15 feet. They will then be girdled to kill them and prevent any future vertical growth. This method is accomplished by removing a single strip of bark 4 inches wide all the way around the circumference of the trunk, cutting down through the bark and cambium to the wood. Alternatively, 2 cuts 2 inches wide and six inches apart, completely circling the trunk and cutting through the bark and cambium can be made using a chainsaw. These topped trees will develop into den trees or snags and provide wildlife habitat. Because all of the proposed wildlife habitat snags and downed logs are at the outer perimeter of the buffer, there will be no effects to the shading of the seasonal stream or increased temperatures.

The riparian ecosystem buffer will be planted with the native tree species listed in Table 2 to enhance wildlife habitat functions.

Table 2. Plant specifications for the riparian ecosystem buffer.

Common Name	Scientific Name	Plant Size	Required Number to be Planted
Red alder	<i>Alnus rubra</i>	1-gallon container	220*
Western red cedar	<i>Thuja plicata</i>	1-gallon container	147*

*Tree plantings within the riparian ecosystem buffer are proposed to mitigate for tree impacts in the buffer (LMC 18.300.090) and impacted trees under the tree ordinance (LMC 18.350.050).

Given these mitigation measures, there be no net loss of habitat functions in the riparian ecosystem buffer.

Chapter 5. Conclusion

Based on observations taken during the field visit and review of the supporting documentation listed in this report, the study area contains habitat that would be regulated under Chapter 18.300 of the LCMC. The mitigation measures recommended will adequately compensate for critical areas impacts proposed by this project and will result in no net loss of area or function, including fish and wildlife habitat values, of the critical area.

This critical areas report and mitigation plan should be used at your own risk unless it has been reviewed and approved in writing by the City of La Center under their jurisdictional standards.

Chapter 6. References

- City of La Center. (2023, May 15). *Critical Areas Ordinance (Chapter 18.300)*. Retrieved from <https://www.codepublishing.com/WA/LaCenter/#!/LaCenter18/LaCenter18300.html#18.300.090>
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- WDFW. (2023, November 21). *Species and Habitats - Snags - The Wildlife Tree*. Retrieved from <https://wdfw.wa.gov/species-habitats/living/snags#creating-snags>
- WDNR. (2023, May 15). *Forest Practices Application Mapping Tool*. Retrieved from <https://fpamt.dnr.wa.gov/default.aspx>

Appendix A — Figures

Figure 1 of 5 – Vicinity Map

Figure 2 of 5 – Soils and Wetlands Inventory

Figure 3 of 5 – Priority Habitat and Species Group/Water Features

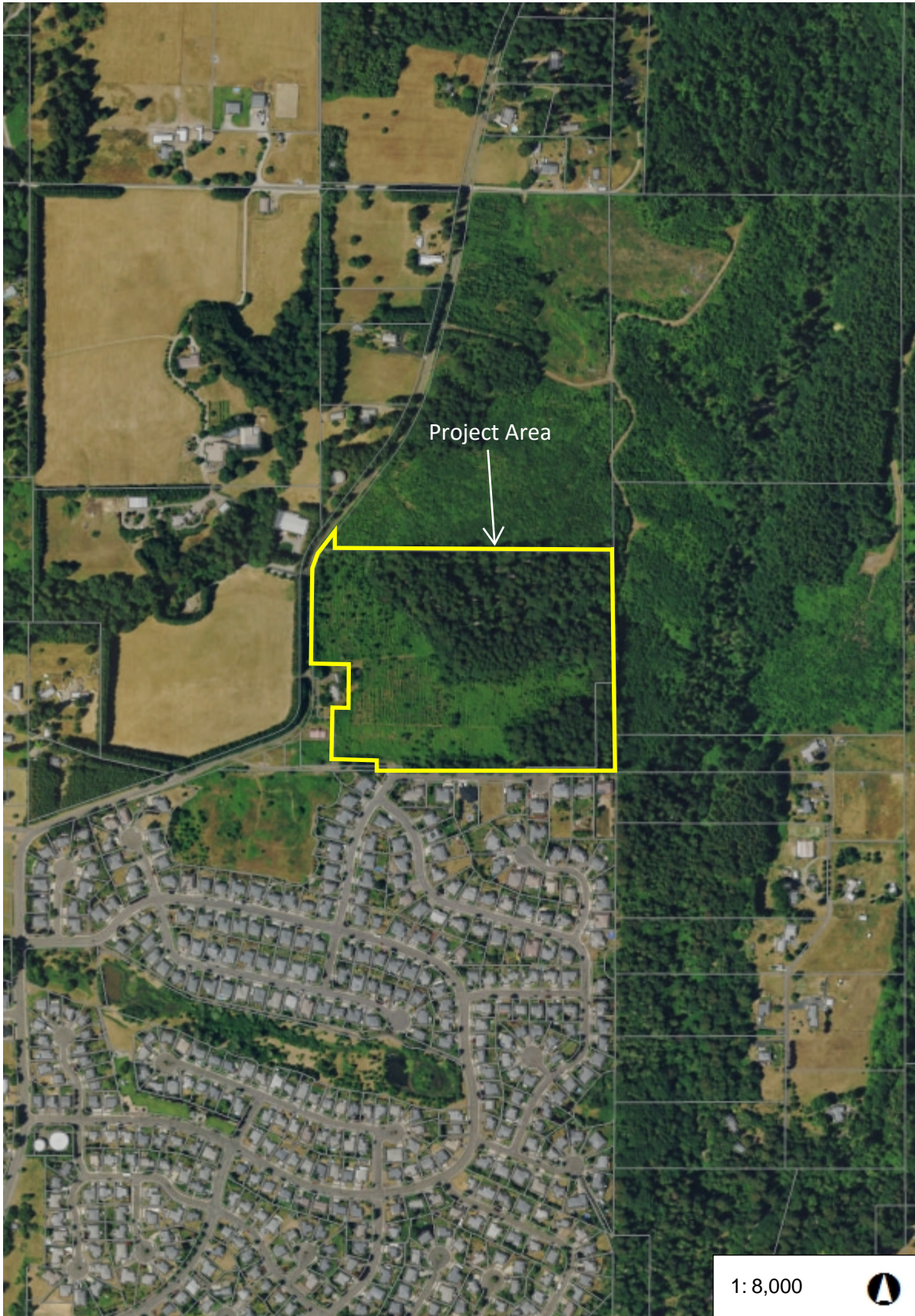
Figure 4 of 5 – Critical Areas Impacts

Figure 5 of 5 – Mitigation Planting Plan





Figure 1 of 5. Vicinity Map
 Critical Areas Report & Mitigation Plan
 Project: Vineyard Vista Subdivision

Date: 4/2/24



Legend

-  Building Footprints
-  Taxlots

Location:
 NE North Fork Ave.,
 La Center, WA 98629

Applicant:
 Chinookan, LLC
 P.O. Box 886
 La Center, WA 98629
 lincolnwolvertan@
 hotmail.com
 (360) 606-8986

Tax Parcels: 63472945 &
 258903000

Latitude = 45.8748
 Longitude = -122.6629

SECTION 1/4, S34, T5N, R1E
 of the Willamette Meridian

Notes:

1: 8,000

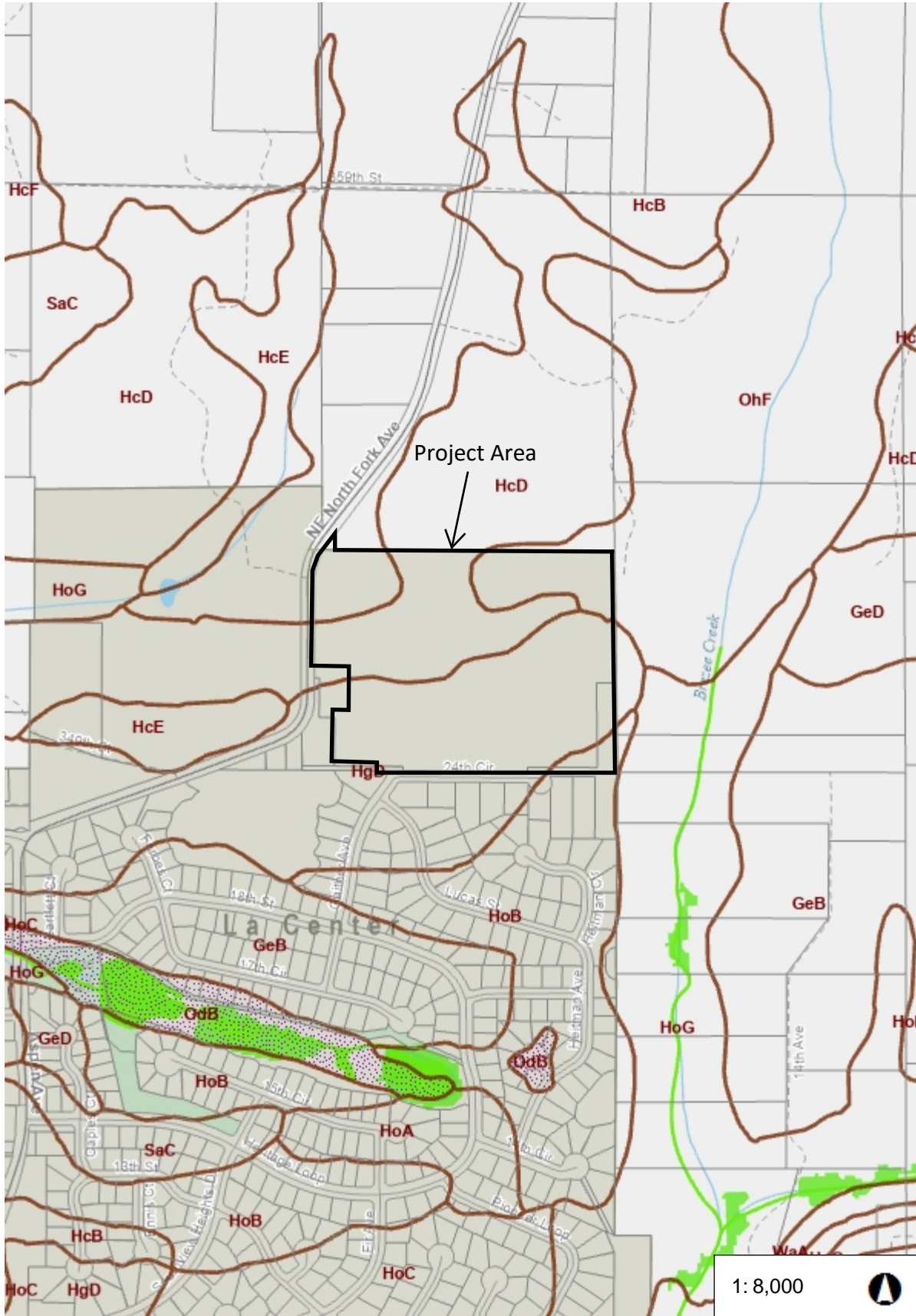


1,333.3 0 666.67 1,333.3Feet



Figure 2 of 5. Soils and Wetlands Inventory
 Critical Areas Report & Mitigation Plan
 Project: Vineyard Vista Subdivision

Date: 4/3/24



Legend

- Taxlots
- Soil Type
- Hydric Soils
- Potential Wetlands Presence
- NWI Wetland

Location:
 35011 NE North Fork Ave.,
 La Center, WA 98629

Applicant:
 Chinookan, LLC
 P.O. Box 886
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 hotmail.com
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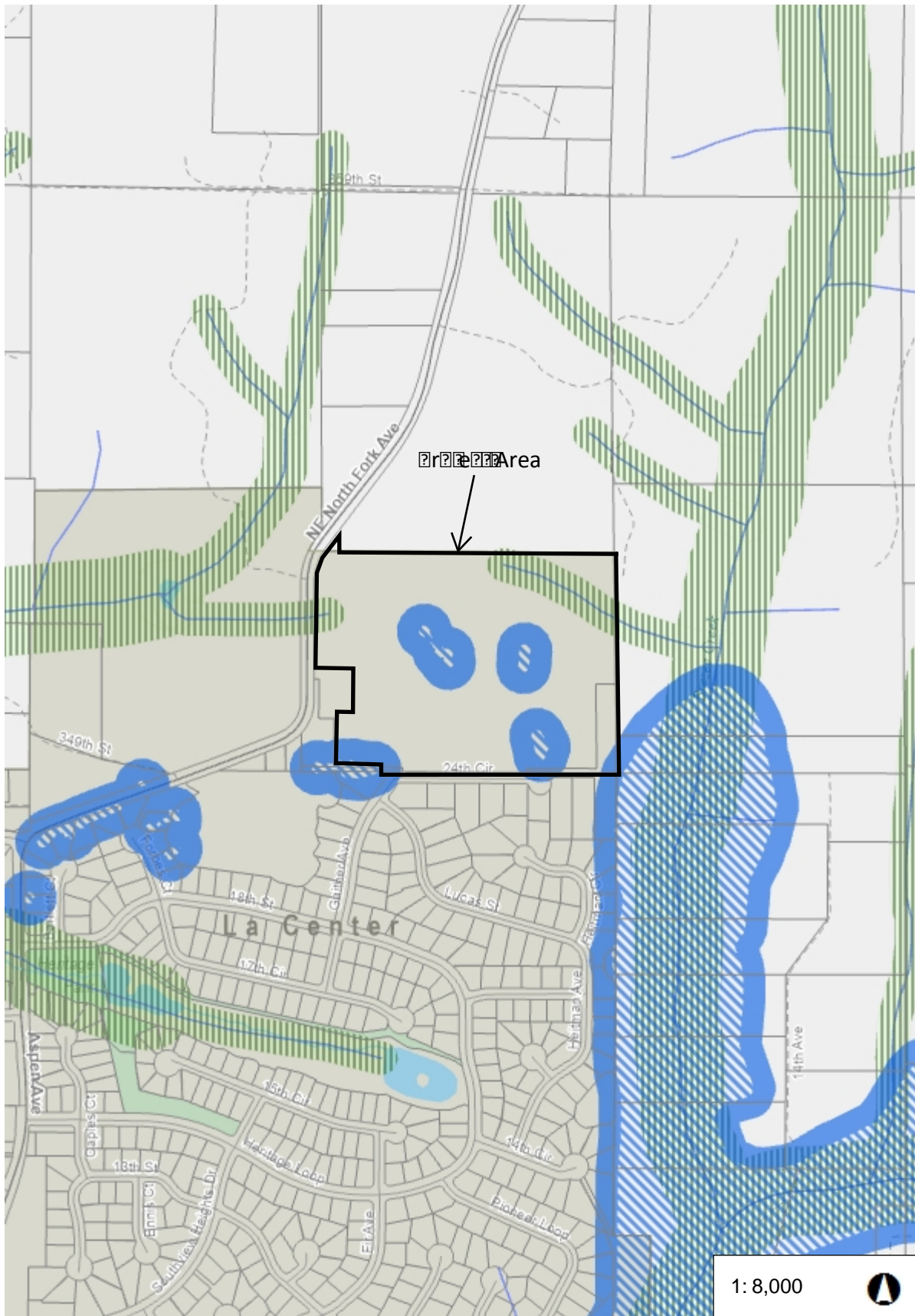


1,333.3 0 666.67 1,333.3Feet



Figure 3 of 5. Priority Habitat and Species Group/Water Features
 Critical Areas Report & Mitigation Plan
 Project: Vineyard Vista Subdivision

Date: 4/3/24



Legend

- Taxlots
- Species**
- Species Area
- Adjacent to Species Area
- Habitat**
- Habitat Area
- Adjacent to Habitat Area
- Riparian Habitat
- Stream - DNR
- Lake - DNR

Location:
 35011 NE North Fork Ave.,
 La Center, WA 98629

Applicant:
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Area 1/4, S34, T5N, R1E
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Notes:

1,333.3 0 666.67 1,333.3 Feet



Figure 4 of 5 - Critical Area Impacts
Critical Areas Report & Mitigation Plan

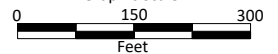
Project: Vineyard Vista Subdivision
 Tax Parcels: 63472945 & 258903000
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 Legal: NE 1/4,S34,T5N,R1E of the Willamette Meridian
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 County: Clark

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 14205 NW 56th Avenue, Vancouver, WA 98685
 (360) 601-8631
 www.cascadia-inc.com

Applicant:
 Lincoln Wolverton
 Chinookan, LLC
 P.O. Box 886
 La Center, WA 98629
 lincolnwolverton@hotmail.com
 (360) 606-8986



Graphic Scale



Date: 4/3/24

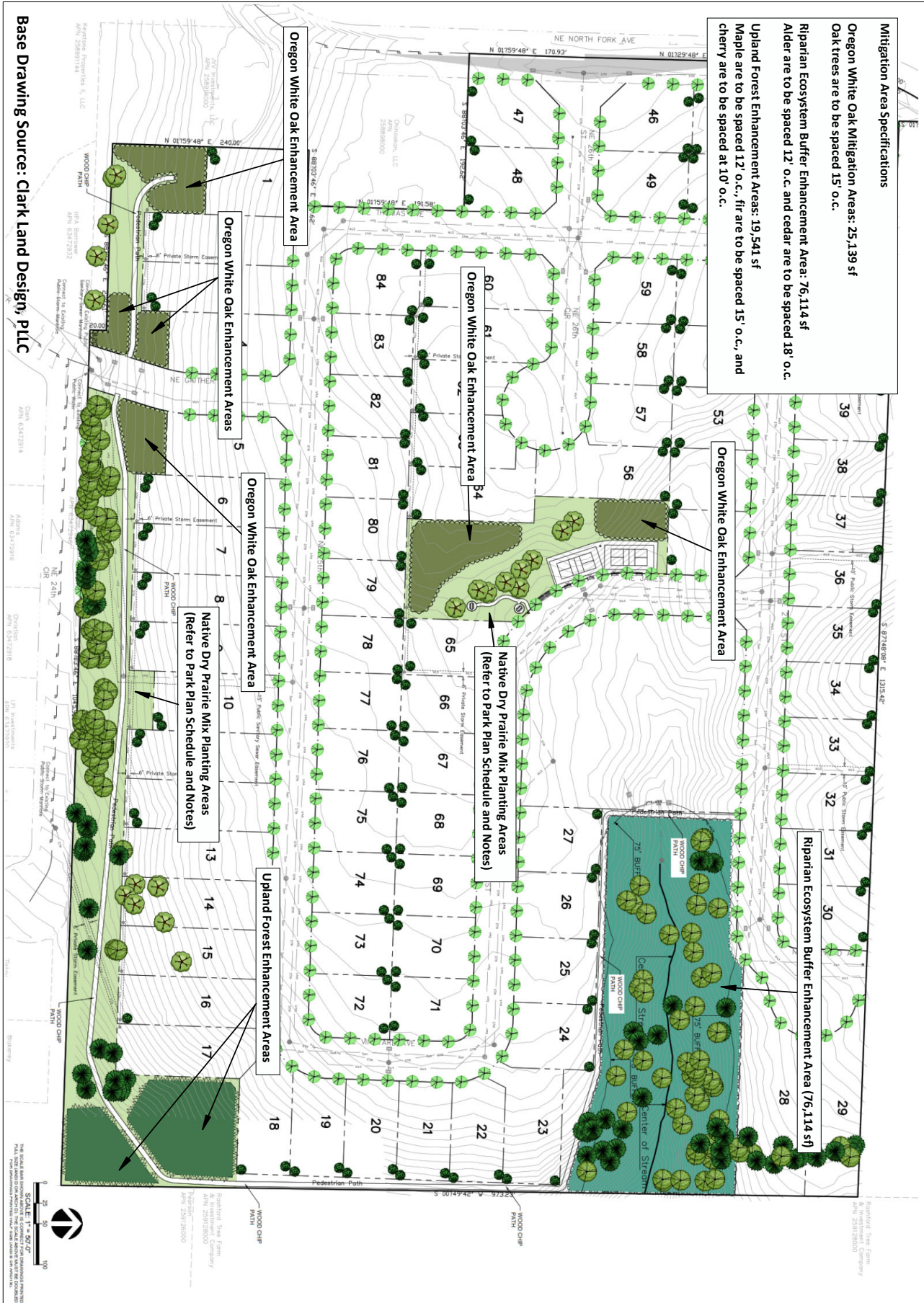


Mitigation Area Specifications

Oregon White Oak Mitigation Areas: 25,139 sf
Oak trees are to be spaced 15' o.c.

Riparian Ecosystem Buffer Enhancement Area: 76,114 sf
Alder are to be spaced 12' o.c. and cedar are to be spaced 18' o.c.

Upland Forest Enhancement Areas: 19,541 sf
Maple are to be spaced 12' o.c., fir are to be spaced 15' o.c., and cherry are to be spaced at 10' o.c.



Base Drawing Source: Clark Land Design, PLLC

Figure 5 of 5 - Mitigation Planting Plan
Critical Areas Report & Mitigation Plan

Project: Vineyard Vista Subdivision
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lincolnwolverton@hotmail.com
(360) 606-8986



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14205 NW 56th Avenue, Vancouver, WA 98685
(360) 501-8631
www.cascadia-inc.com

Date: 4/3/24

Appendix B — Site Photos



Photo 1. Typical mature forest in east portion of the property.



Photo 2. Southwest portion of the property facing towards NE North Fork Ave.

Appendix B – Site Photos (cont.)



Photo 3. Southwest portion of the property facing towards facing east.



Photo 4. Seasonal stream in northeast portion of the property.

Appendix B – Site Photos (cont.)



Photo 5. Fallow grape vineyards in central portion of the property.



Photo 6. Fruit orchard in the southwest part of the property.

Appendix C — Dominant Plant Species on Study Area

Appendix C Table 1. Dominant upland plant species occurring on the study area.

<i>Pseudotsuga menziesii</i>	Douglas fir	FACU
<i>Acer macrophyllum</i>	Big-leaf maple	FACU
<i>Acer circinatum</i>	Vine maple	FAC
<i>Prunus emarginata</i>	Bitter cherry	FACU
<i>Polystichum munitum</i>	Swordfern	FACU
<i>Ilex aquifolium</i>	English holly	FACU
<i>Oemlaria cerasiformis</i>	Indian plum	FACU
<i>Vicia sativa</i>	Common vetch	UPL
<i>Rubus armeniacus</i>	Himalayan blackberry	FAC
<i>Vitis</i> spp.	Grapes	UPL
<i>Leucanthemum vulgare</i>	Oxeye daisy	FACU
<i>Daucus carota</i>	Queen Anne’s lace	FACU
<i>Dactylis glomerata</i>	Orchardgrass	FACU
<i>Hypochaeris radicata</i>	Cat’s ear	FACU
<i>Cirsium arvense</i>	Canada thistle	FAC
<i>Festuca arundinacea</i>	Tall fescue	FAC
<i>Taraxacum officinale</i>	Common dandelion	FACU
<i>Vicia sativa</i>	Common vetch	UPL
<i>Leucanthemum vulgare</i>	Oxeye daisy	FACU

* Wetland Indicator Status (WIS):

- OBL = occurs in wetlands > 99% of time
- FACW = occurs in wetlands 67-99% of time
- FAC = occurs in wetlands 34-66% of time
- FACU = occurs in wetlands 1-33% of time
- UPL = occurs in uplands > 99% of time
- NI = indicator status not known in this region
- ~ = unsure as to FAC or FACU

Appendix D — Arborist Report



www.arborscapetreecare.com
11113 NE 95th street
Vancouver Wa 98662
866-944-8733 office
360-326-1789 fax
ARBORSCAPETREECARE@gmail.com
OR CCB# 173431
WA# ARBORLI062Q8

Date of Site visit: February 15, 2024

Contact:

Mason Wolfe – 360-907-9588

Location:

Vineyard Vista
2103 NE North Fork Ave
La Center WA 98629

Arborist Observations:

Regarding two Oregon white oaks on the property:

Tree #1 - 14" DBH

This Oregon white oak is generally healthy.

Its canopy has been suppressed by surrounding trees in the green space. The tree has developed a trunk lean as it has had to reach for sunlight as it competes with the surrounding trees (mainly larger Douglas firs). It has developed an unbalanced canopy with the majority of the branches growing in the direction of the lean.

The tree also has a co-dominate stem that emerges from approximately halfway up the trunk. Co-dominate stems tend to have poor longevity and are prone to splitting when under load (heavy canopy, heavy winds, or heavy ice.)

This oak will continue to have to reach and lean for light since the surrounding forest will continue growing and monopolizing the light due to them being taller than the oak. This could potentially lead to major failure where the oak heaves over due to its naturally unbalanced canopy and lean.

This oak is a good candidate for removal and replacement.

Would it be reasonable to talk about the existing firs (currently on the younger side) west that will in time create even more conflict for this OWO (and other OWO along this stretch) and would most likely significantly choke this and the other to point where it is very poor or even results in the death of the tree? If so, would you expand on this?



Tree #2: 21"DBH

This Oregon white oak is in poor health.

There is significant die back and deadwood throughout the canopy. The tree also has multiple co-dominant stems that are prone to failure due to weaker attachments to the main trunk.

This tree is a good candidate for removal and replacement.

Is it reasonable to assume this tree is dying and is not producing much canopy and could soon not produce any canopy? If so, would you expand on this?



Arborist: Channah Buttrell – ISA: PN-8266a