

OAK TREE STATION

Parcel # 176162000

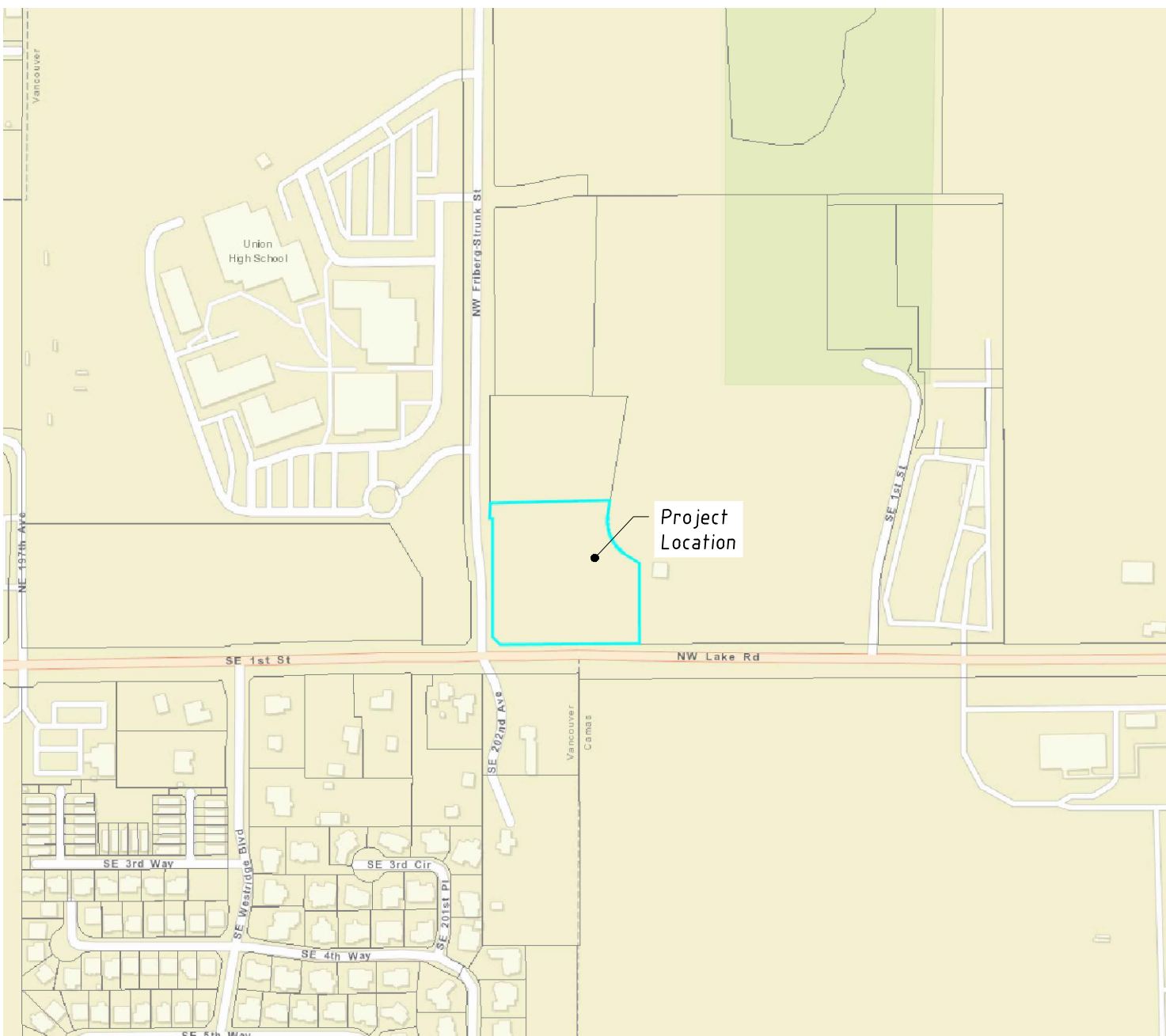
Situate in a portion of the SE $\frac{1}{4}$ of
Section 29, Township 2 North, Range
3 East, of the Willamette Meridian
City of Camas
County of Clark
State of Washington

P000

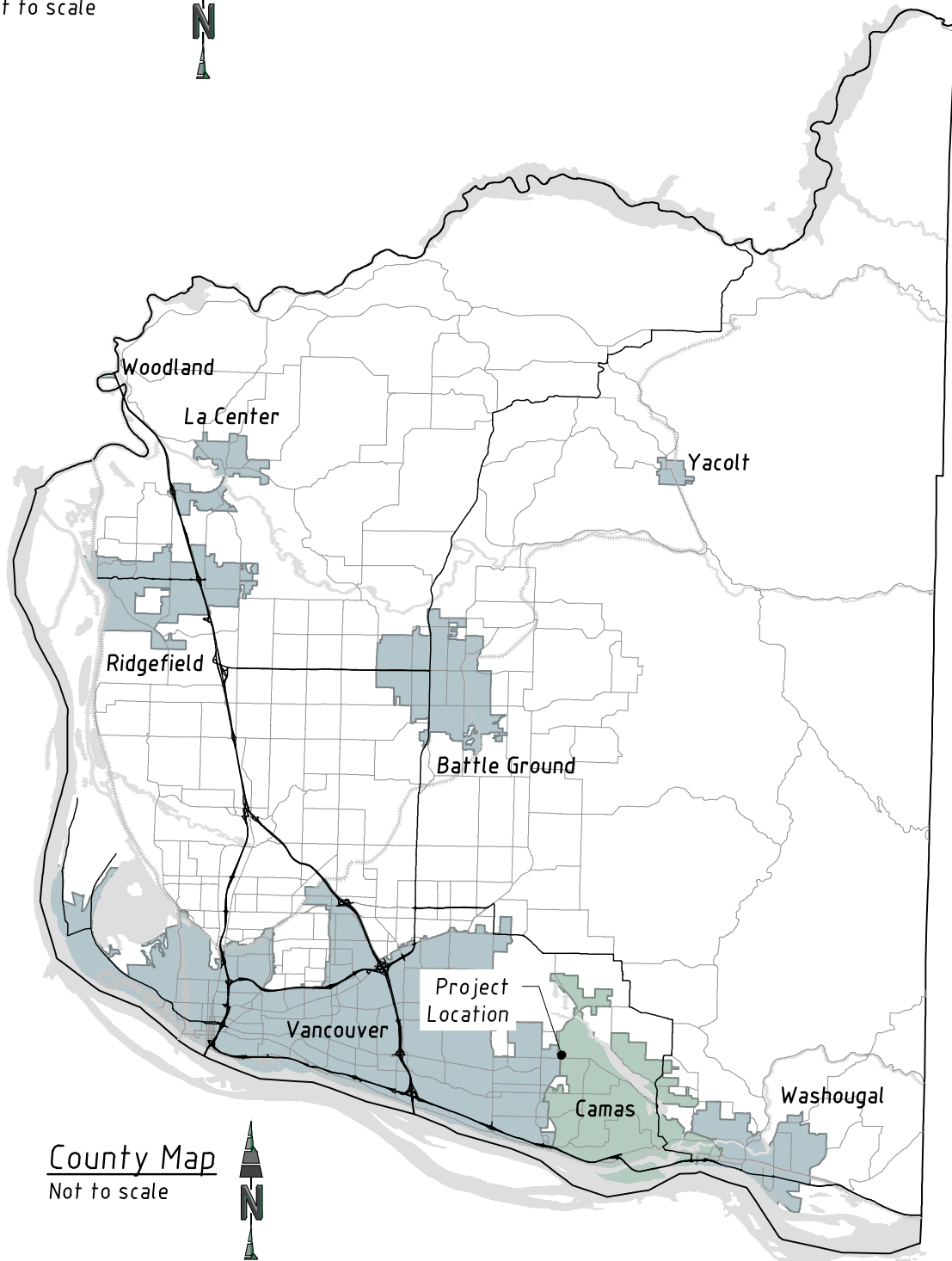
Project: 2021004SP
Date: 5/17/2022
Drafted: NVS
Designed: PCW
Page: 1 of 9

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Revisions:



Vicinity Map
Not to scale



County Map
Not to scale

Contact Information

Owner: Oak Tree Station LLC
3239 NW Hood Ct
Camas, WA 98607
Phone: RobKyne79@gmail.com
Email: RobKyne79@gmail.com

Engineer/
Applicant/
Contact: Engineering Northwest, PLLC
Paul Williams, P.E.
6168 NE Hwy 99 #103
Vancouver, WA 98665
Phone: 360-931-3122
Email: PaulWilliamsPE@gmail.com

Site Information

Address: No site address assigned
Abbrev. Desc.: #16 SEC 29 T2N R3EWM 3.95A
S-T-R: SE $\frac{1}{4}$ S29 T2N R3E W.M.
Parcel: 176162000
Area: 3.59 AC (156,287± SF)
Zone: CC

Sheet List

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| 4 | P030 | Preliminary Grading & Erosion Control |
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Boundary & Topography

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Site Map
Not to scale

Cover Sheet

Oak Tree Station



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(360) 931-3122

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Notes

- On or within 100 feet of the site, there are:
- 1) No known water courses.
 - 2) No known water bodies, areas prone to flooding, or wetlands.
 - 3) No designated shoreline areas.
 - 4) No wetlands are mapped or known to exist, therefore a wetlandland determination is not required.
 - 5) No unstable slopes or landslide areas.
 - 6) No significant wildlife habitat or vegetation, other than as shown hereon.
 - 7) No significant historic sites.
 - 8) No existing pedestrian facilities.
 - 9) No existing bicycle facilities.
 - 10) No transit routes (within 600 feet of the site).
 - 11) No streets providing access to the site in excess of 15% grade.
 - 12) A survey was conducted by the Department of Archeology and Historic Preservation recommending no further study is required.

Site Information and Environmental Constraints

As available from Clark County GIS

Zoning Designation - Codes	Community Commercial (CC)
Zoning Overlay(s)	none
Comprehensive Plan	COM
Comp. Plan Overlay(s)	none
Census Tract	406.08
Jurisdiction	Camas
Fire District	Camas
Park District	n/a
School District	Camas
Elementary	Grass Valley
Middle School	Skyridge Middle
High School	Camas
Sewer District	Camas
Sewer Board District	Camas
Water District	Camas
Neighborhood	n/a
Section-Township-Range	SE 1/4,S29,T2N,R3E
Urban Growth Area	Camas
C-Tran Benefit Area	Yes
School Impact Fee	Camas
Transportation Impact Fee	Camas
Transportation Analysis Zone	425
Waste Collection	Waste Connections
Service Provider	Thursdays
Garbage Collection Day	Thursdays
Last Street Sweeping	n/a
CPU Lighting Utility District	0
Burning Allowed	No
Increased Wildfire Danger Area	No
Public Health Food Inspector District	District 2
Public Health Food Plan Review Area	District B
Public Health WRAP Inspector District	District 1
Councilor District	4
Drainage District	none

Wetlands and Soil Types

Wetland Class:	PENC
Wetland Inventory: Info...	No Mapping Indicators
Flood Hazard Area: Info...	Outside Flood Area
Shoreline Designation:	none
Soil Types / Class:	Hydric / CwA Non-Hydric / DoB
Critical Aquifer Recharge Area:	Category 2 Recharge Areas
FEMA Map / FIRM Panel: Info...	53011C0530D
Watershed:	Lacamas Creek
Sub Watershed:	Dwyer Creek
Water Resource Inventory Area:	Name: SALMON-WASHOUGAL Sub-Basin: Burnt Bridge

Geological Hazards Info...

Slope Stability:	
Geological Hazard:	
NEHRP Class:	C
Liquefaction:	Very Low

Water Well Details

none

Septic Document Details

none

Cultural Resources

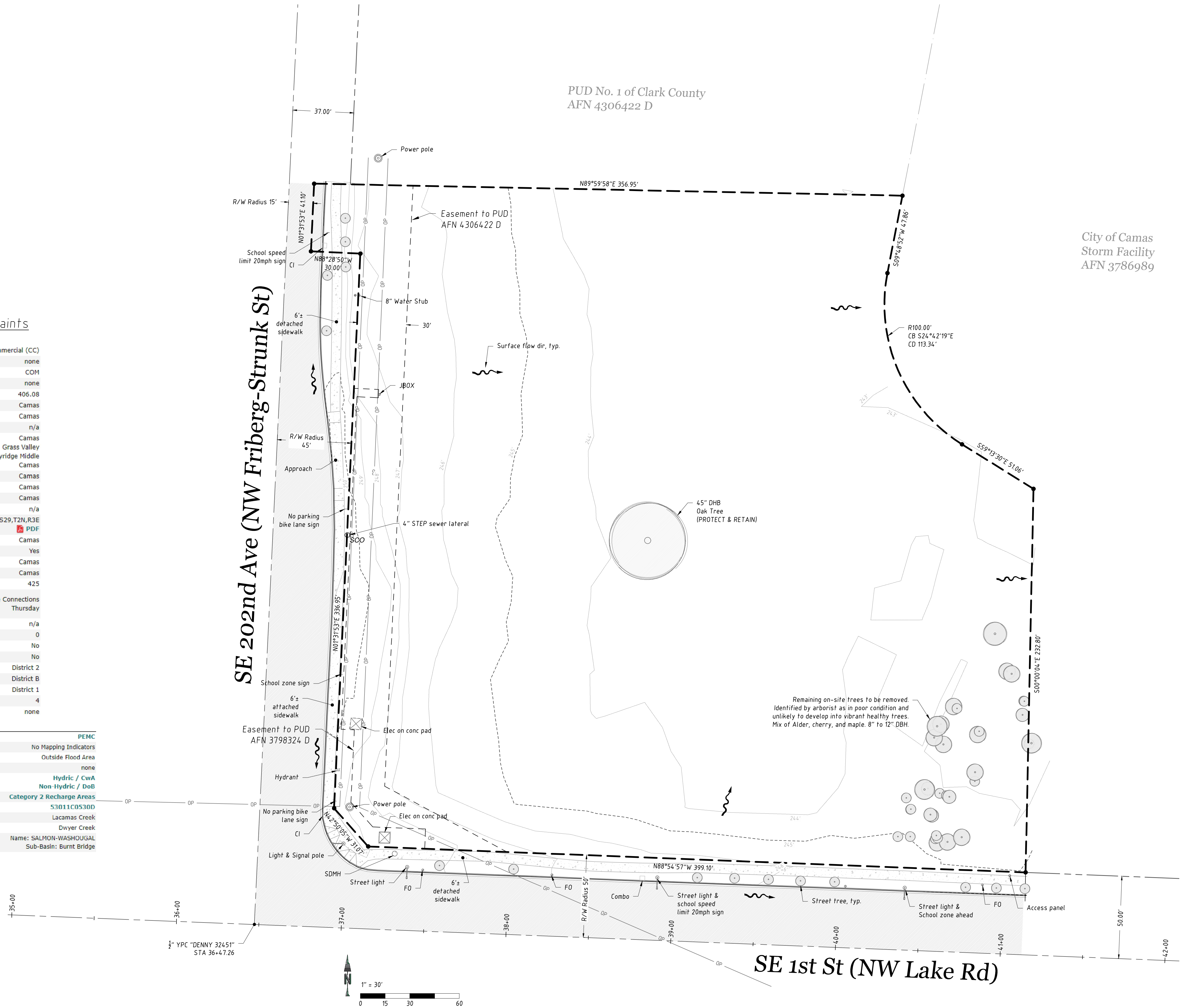
Archaeological Probability:	High
Archaeological Site Buffer:	Yes
Historic Site:	No Mapping Indicators

Habitat and Species Resources Info...

Habitat and Species Impacts: No Mapping Indicators

Development Moratorium Info...

none



P010

Project: 2021004SP
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Existing Conditions

Oak Tree Station



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P020

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Notes

- Existing use is vacant. Propose use is a commercial site plan with uses including a food court featuring the existing oak tree as a point of focus.
- A conditional use permit is required for food trucks/carts in the CC zone.
- 136 standard 9'x18' parking stalls are proposed, including six (6) ADA van-accessible stalls. The front of parking stalls either include a 2' overhang onto the adjacent sidewalk, without infringing upon required widths, or a curb stop 2' from the end of the stall. Ten (10) parallel 8'x22' stalls are also proposed for a total supply of 146 stalls.
- The drive-through coffee stand is designed with a queue length of 6 cars in both directions at 22' length each in a ten (10) foot drive-through aisle.

Development Standards (CC)

CMC 18.09.030 Table 1	Requirement	Proposed
Max density	n/a	n/a
Min lot area	none	156,287± SF
Min lot width	none	404.5'
Min lot depth	none	318.0'
Setbacks:		
Front	(1)	10'
Side	None	10'
Rear	None	10'
Lot Coverage	None	13%
Building Height	None	40'±

(1) Residential dwelling units shall satisfy the front setbacks of CMC 18.09.040 Table 2, based on comparable lot size.

CMC 18.13.020 Landscaping Regulations

A 5ft L2 buffer is required on the east, west, and south.

A 5ft L1 buffer is required on the north.

Perimeter of the proposed parking areas will be landscaped including a min ratio of one tree per six parking spaces, or at least 25 trees.

A min tree density of 20 tree-units per acre are required and may be incorporated with the proposed landscaping. Tree density is calculated on net acreage, excluding open space, critical areas and their buffers. The oak tree on site is not proposed for removal. It will be retained.

Landscaped areas:
For detailed information, see preliminary landscape plan

Parking

Restaurant, carry-out: min 1 space per gross 225 SF
12,574 SF / 225 SF = 56 stalls
5,904 SF / 225 SF = 27 stalls
Coffee Kiosk min 1 space per gross 110 SF
600 SF / 110 SF = 6 stalls
sum = min 89 stalls
proposed 146 stalls

Engineering

18.17.030 - Corner lot vision clearance

No impact to the corner lot vision clearance area is proposed.

Utilities: all utilities are proposed underground.

To comply with CDSM Table 1 (except coffee kiosk queue):

Aisle widths are min 18' where no parking is adjacent.

Aisle widths are min 24' where adjacent to parking.

Ingress aisles are set back min 50 ft from back of sidewalk on both arterial streets to comply with CDSM Table 1, note 2.d.

Stormwater

See preliminary storm plan and preliminary TIR.

Erosion

See preliminary grading & erosion-control plan

Water & Sewer

See preliminary water & sewer plan

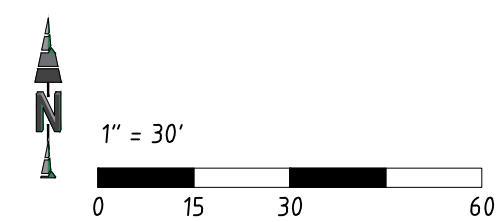
Garbage & Recycling

Collection is proposed on site at screened enclosure points as shown hereon.

SE 202nd Ave (NW Friberg-Strunk St)

PUD No. 1 of Clark County
AFN 4306422 D

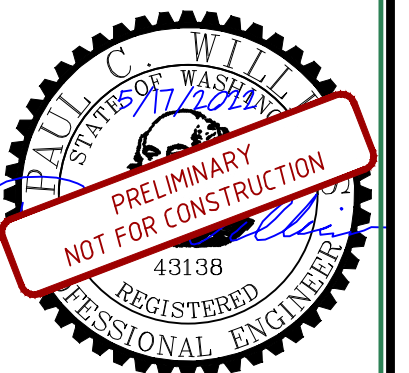
City of Camas
Storm Facility
AFN 3786989



SE 1st St (NW Lake Rd)

Preliminary Site

Oak Tree Station



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P030

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Approximate Earthwork Volumes

Disclaimer: These figures represent approximate earthwork quantities calculated from the existing surface to a design surface at 1:1 volume. This estimate does not include adjustments for pavement or base sections, foundations, trench spoils, utilities, over excavation, shrinkage, swell, deleterious materials removal, etc. Contractors are solely responsible for quantity estimates for bidding purposes. The design surface is typically top of final pavement, finish floor elevations, final grading, etc.

Cut: 1,400 CY

Fill: 1,700 CY

Disturbed Area: 350 AC

Environmental Constraints

As provided by Clark County GIS, no environmental constraints exist on or within 100 feet of the subject site. No critical areas are known to exist on site.

Compaction Specification

All structural fill shall be compacted to 95% maximum density. Non-structural fill shall be compacted to 90% maximum density. Individual lifts shall not exceed 12" in depth. Measurements for compaction shall be taken using the proctor test as detailed in AASHTO T-99 or standard industry practice as approved by the geotechnical engineer of record. All compaction test results shall be made available to the Engineer and the County upon request.

Archeological Note

Should archeological materials (e.g. bones, shell, stone tools, beads, ceramics, old bottles, hearths, etc.) be observed during project activities, all work in the immediate area should stop and contact the State Department of Archaeology and Historic Preservation (360-586-3065.) If human remains are observed, all work should cease and the immediate area be secured. Contact local law enforcement, the County Medical Examiner (360-397-8405,) State Anthropologist, and the Department of Archaeology and Historic Preservation. Compliance with all applicable laws pertaining to archaeological resources (RCW 27.53, 27.44 and WAC 25-48) and human remains (RCW 68.50) is required. Failure to comply with this requirement could constitute a Class C Felony.

Weather Variation

Significant variation and degree of erosion control effort will be dictated by weather conditions. The developer and contractor should be prepared to provide extra erosion control provisions and efforts during winter and wet weather conditions beyond that normally required during summer and dry weather conditions. Fine grained and unconsolidated soils on sloping site may become unstable when subject to excessive moisture.

Grade Change Legend

No.	Min.	Max.	Color
1	-1.950	-1.000	
2	-1.000	-0.100	
3	0.100	1.000	
4	1.000	2.200	

General Grading & Erosion Notes

- See General Grading and Erosion Notes, std details EC1, EC2, EC3.
- Site must have Certified Erosion and Sediment Control Lead (CESCL) to comply with BMP C160.
- All material handling on site must comply with BMP C150, BMP C151, and BMP C154.
- Place plastic covering complying with BMP C123 over all soil piles or straw complying with BMP C121.
- Sequence construction to comply with BMP C162.
- Permanently stabilize site, re-establish vegetation or landscaping prior to removal of erosion control measures.
- Contractor is responsible for meeting post-construction soil quality and depth (BMP T5.13) per current edition of the Clark County Stormwater Manual (CCSM) for all disturbed areas.
- Preserve existing vegetation where feasible per BMP C101.
- Use seeding throughout the project on disturbed areas that have reached final grade or that will remain unworked for more than 30 days per BMP C120.
- A wheel wash may be required if the construction entrance is not sufficient in preventing sediment from being tracked onto public roads. Wheel wash per std detail EC7 and the current edition of the CCSM. If required, wheel wash to be located in the field by contractor.
- All excavation and grading shall be performed in compliance with CCC 14.07.
- The faces of cut and fill slopes shall be prepared and maintained to control erosion. This control shall consist of effective planting. Erosion control for the slopes shall be installed as soon as practicable and prior to calling for final inspection.
- Contractor shall notify engineer immediately and prior to grading activity upon discovery of a bust in existing grade survey. Continuing grading activity upon discovery of a grade bust shall be at contractor's own risk.

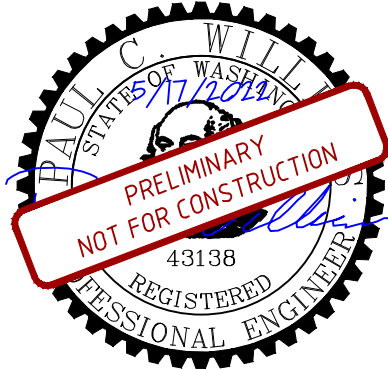
Erosion Control Keynotes

See std details sheets C110 & C120.
BMP's not called out or shown on this plan may be used at the developer's discretion as additional erosion control measures.

- Install Stabilized Construction Entrance per std detail EC28.
- Install Silt Fence per std detail EC12.
- Install concrete washout per detail this sheet. Field located by contractor.
- Install high-visibility fencing about trees to be retained to mark clearing & development activity limits.

Preliminary Grading & Erosion Control

Oak Tree Station



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P040

Project: 2021004SP
Date: 5/17/2022
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Designed: PCW
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Revisions:

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City of Camas
Storm Facility
AFN 3786989

Preliminary Water & Sewer

Oak Tree Station



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P050

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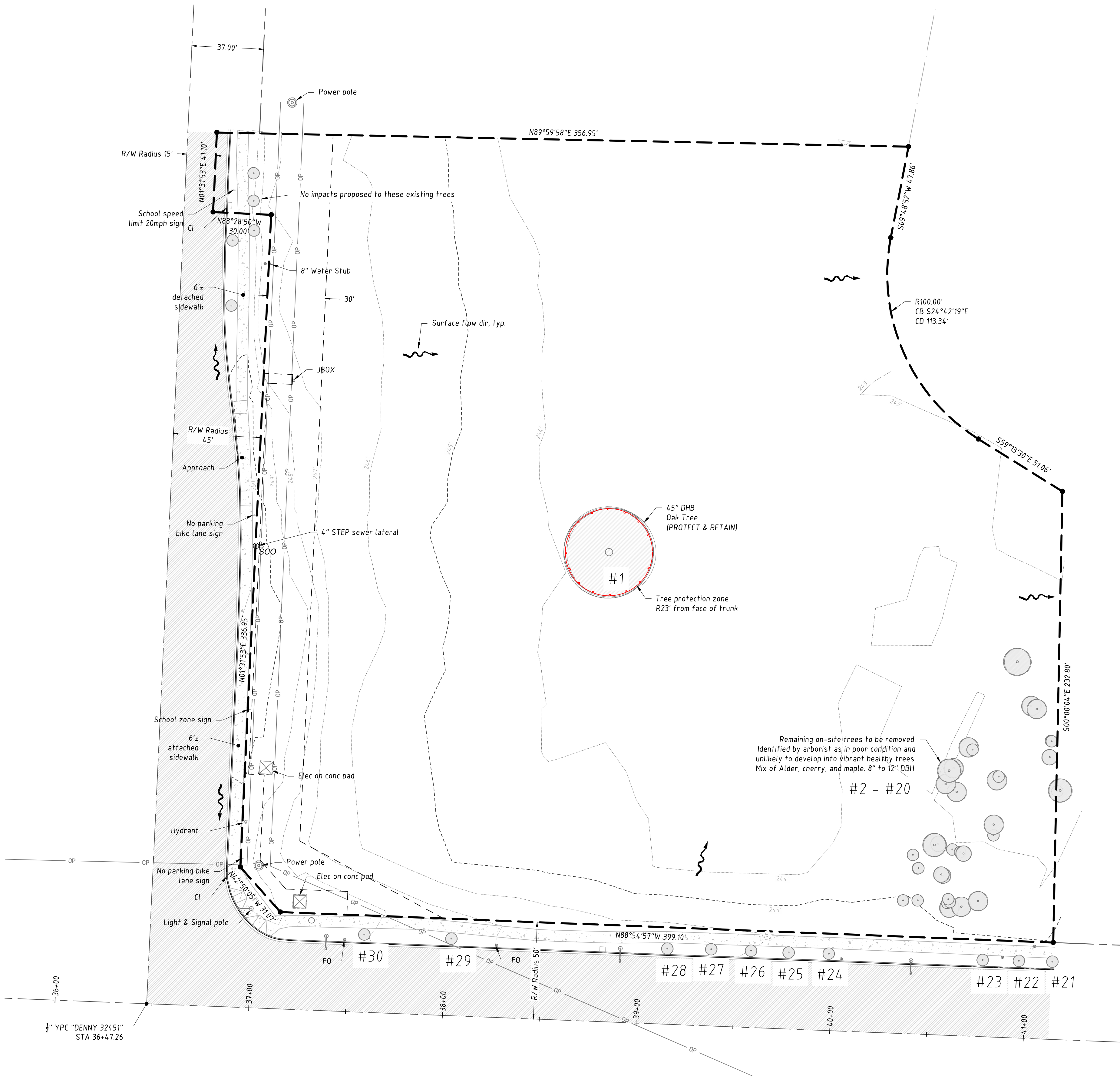
Notes

Consultation by an ISA Certified Arborist performed by Jerry Hofer on March 19, 2022. Recommendations of the arborist shall be followed.

Existing Tree Table

ID #	DBH (inch)	Species	Condition	Retain / Remove	Tree Units	Retained Units
1	45	Oregon White Oak	Fair	Retain	19	19
2	12	Alder	Good	Remove	2	-
3	11	Alder	Good	Remove	2	-
4	12	Cherry	Poor	Remove	2	-
5	8	Maple	Poor	Remove	2	-
6	8	Maple	Fair	Remove	2	-
7	8	Cherry	Poor	Remove	2	-
8	8	Alder	Poor	Remove	2	-
9	8	Cherry	Fair	Remove	2	-
10	8	Cherry	Fair	Remove	2	-
11	12	Cherry	Good	Remove	2	-
12	9	Alder	Fair	Remove	2	-
13	8	Alder	Poor	Remove	2	-
14	11	Alder	Poor	Remove	2	-
15	12	Alder	Good	Remove	2	-
16	12	Alder	Poor	Remove	2	-
17	9	Alder	Poor	Remove	2	-
18	10	Alder	Fair	Remove	2	-
19	12	Alder	Good	Remove	2	-
20	11	Alder	Good	Remove	2	-
21	6	Columnar Oak	Good	Retain	2	(street)
22	6	Columnar Oak	Good	Retain	2	(street)
23	8	Columnar Oak	Good	Retain	2	(street)
24	6	Columnar Oak	Good	Retain	2	(street)
25	7	Ash	Good	Retain	2	(street)
26	7	Ash	Good	Retain	2	(street)
27	8	Ash	Good	Retain	2	(street)
28	7	Ash	Good	Retain	2	(street)
29	3	Columnar Oak	Top dead	Replace	1	(street)
30	4	Columnar Oak	Good	Retain	1	(street)

19
3.59ac x 20 u/ac = 72 tree units
53 additional tree units req'd



Preliminary Tree Removal & Protection

Oak Tree Station



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P060

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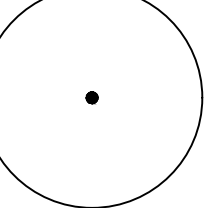
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Landscape Notes

- Lot owners shall be responsible for damage to a street, curb, or sidewalk caused by landscaping.
- Landscaping and trees shall be selected and located to deter sound, filter air contaminants, curtail erosion, minimize stormwater run-off, contribute to living privacy, reduce the visual impacts of large buildings and paved areas, screen, and emphasize or separate outdoor spaces of different uses or character.
- Street trees shall be compliant with the CDSM. Unless otherwise specified, trees must generally be spaced 30 feet apart. Substitute varieties are subject to approval by the City of Camas.
- Proposed vegetation cannot be an invasive species as listed with the most current edition of the Clark County Noxious Weed List (for example, English Ivy cultivars.)
- Appropriate measures shall be taken, such as installation of irrigation systems, to assure landscaping success. If plantings fail to survive, it is the responsibility of the property owner to replace them.
- Required trees, as they grow, shall be pruned in accordance with the international society of arboriculture. The pruned tree will provide at least eight feet of clearance above sidewalks and fourteen feet above street roadway surfaces.
- Street trees and other required landscaping which dies or is removed must be replaced within one year of death or removal. Replacement street trees may be an alternative species from the City's approved list, and may be in a different location, as specifically approved by the City.

Landscape Schedule

Symbol	Common Name	Species	Height x Width	Container	Qty
	Tree			B&B	73
	Shrub			5gal	176

Remaining landscaping area shall be groundcover grass mix.

Final species selection shall consist of min 60% native vegetation and min 50% evergreen. Deciduous trees shall have straight trunks, be fully branched, and have a min caliper of 2 inches with an equivalent 5-gallon container size and be adequately staked for planting. Evergreen trees shall be a min 5 ft height, fully branched, and adequately staked for planting.

Tree Density

min 20 tree units per acre are required for new development.

Net acreage (excluding open space or critical areas and their buffers)
3.59 ac

Required tree units
3.59ac x 20u/ac = 72 units

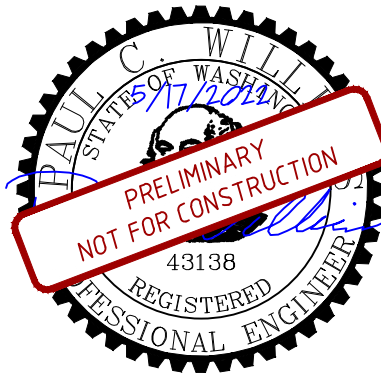
Retained tree units = 19 units (see P050)
Proposed tree units = 73
Total = 92

Tree density is met.



Preliminary Landscape Plan

Oak Tree Station



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P070

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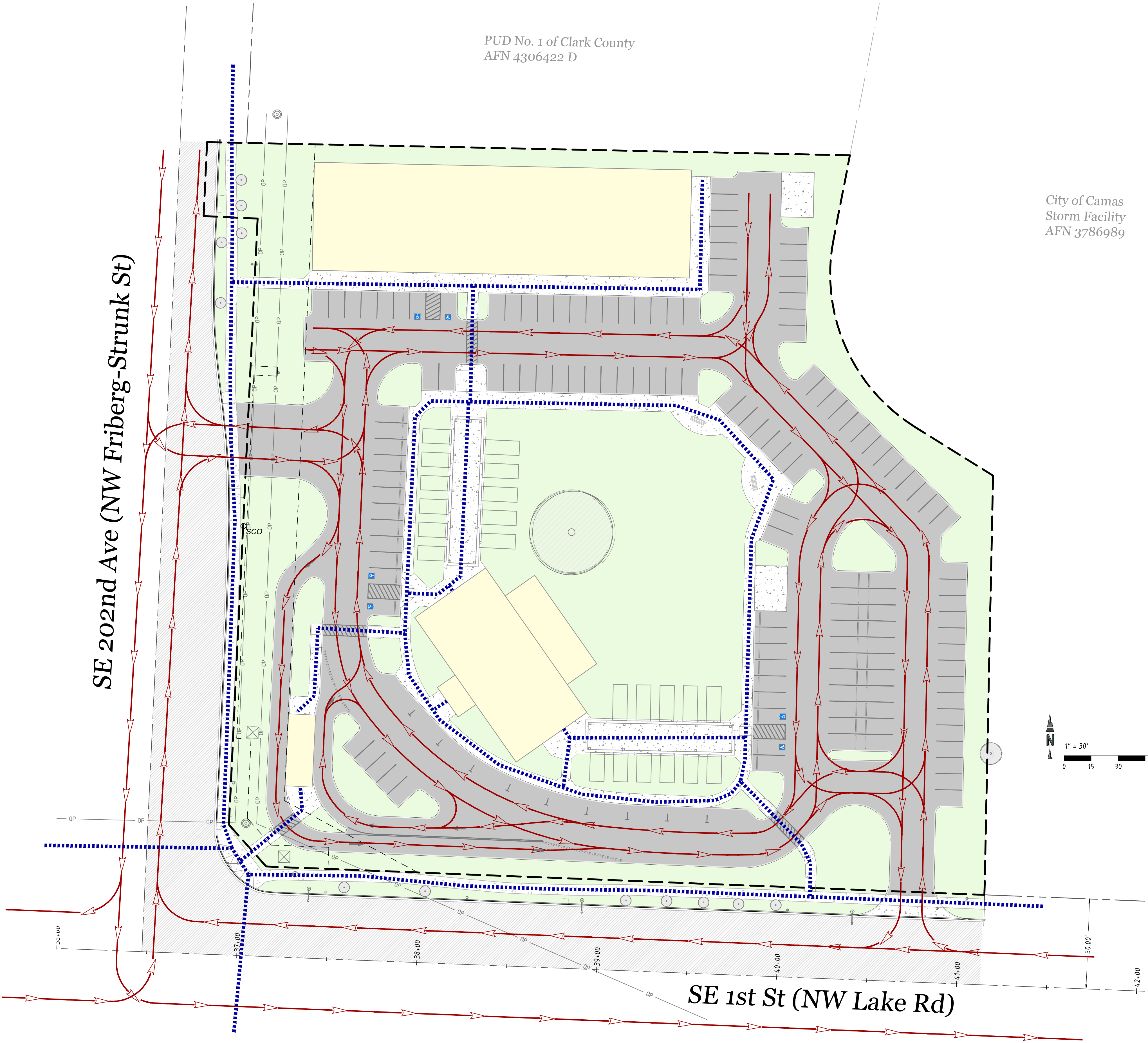
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Circulation Legend

Vehicle Travel: ———→
Pedestrian Travel:→



Preliminary Circulation

Oak Tree Station



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P080

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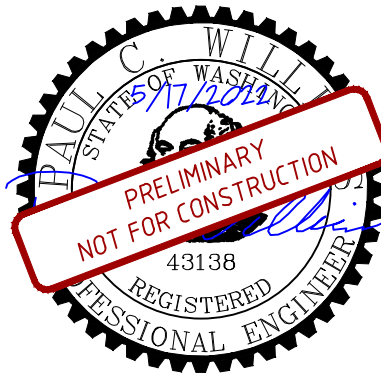
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