

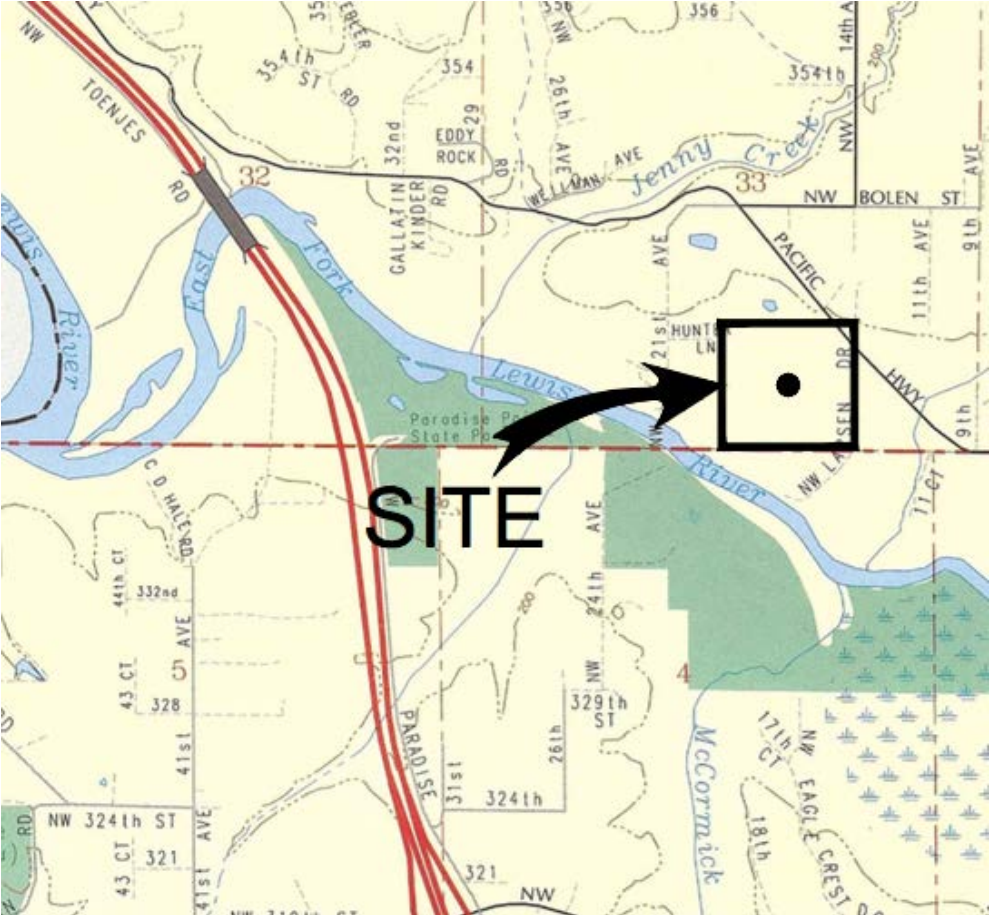
RIVERSIDE ESTATES

SUBDIVISION (Phases 1-5)

17-007-SUB



Project Area



Site Photos – Larsen at Pacific Hwy



Site Photos - Upper



Site Photos – Oregon white oak



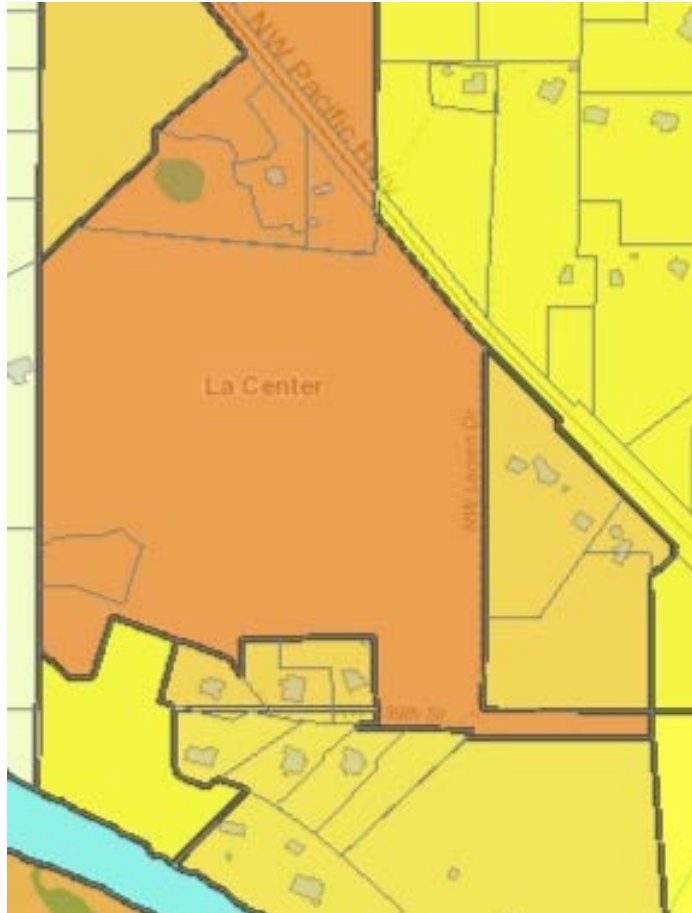
Site Photos – Adjacent Homes



Site Photos - Pond



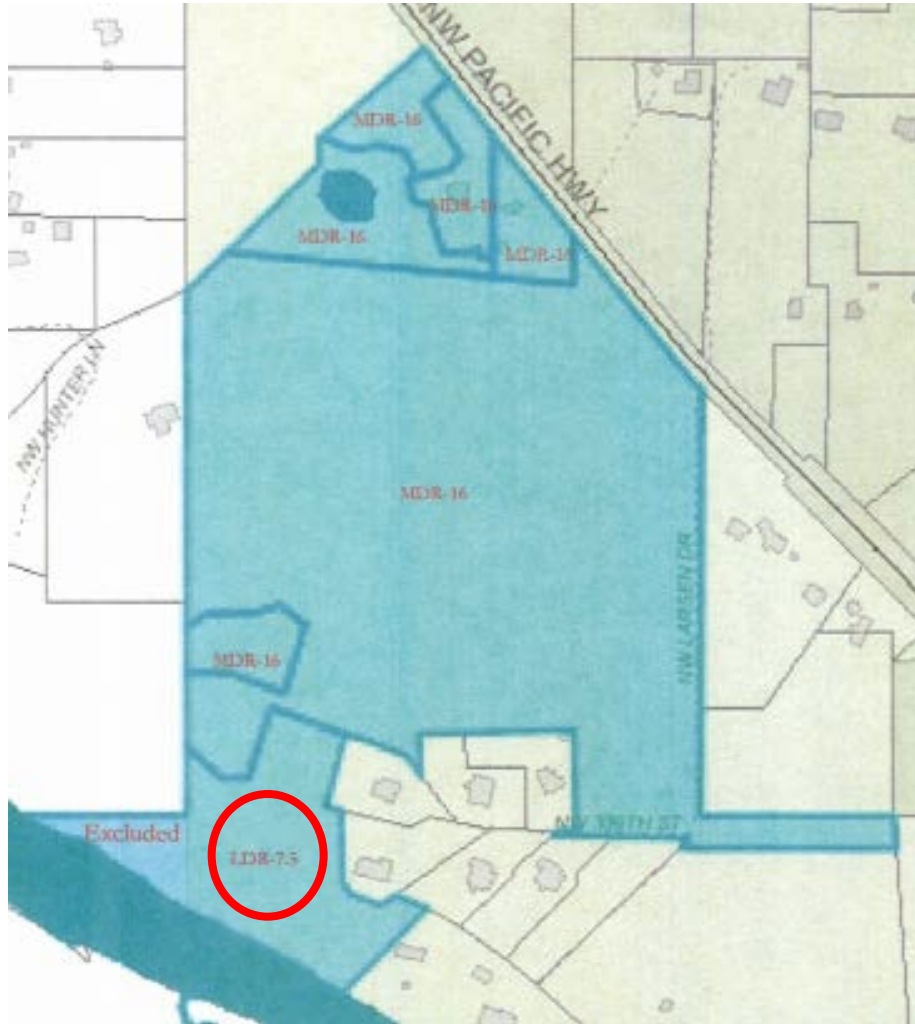
Zoning / Urban Growth Boundary



- MDR-16 zoning (Dark Orange)
- LDR-7.5 zoning
- Other zoning: R1-6 (County), R12 (County), etc.

- City Limits
- Urban Growth Area
- Lewis River

City of La Center Zoning



- MDR-16 zoning (blue)
- LDR-7.5 zoning (lot with circle)

Development As Proposed

Proposed Use

Single-family 211 lot subdivision with detached units, including two large parks and other parks and open space tracts used for active and passive open space.

Proposed Site Information

Gross Site Area = 43.24 AC

Net Developable Area = 29.63 AC

SFR MDR-16 Area = 21.41 AC

Proposed Density = 9.85 DU/ AC

*Parks/ Open Space Tracts = 4.75 AC
of main park and dispersed facilities
(Required Park = 1.51 AC)*

Stormwater/ SPS: 0.18 AC

Public Road Right-of-way = 8.55 AC

MDR-16 Requirements

[detached single family]

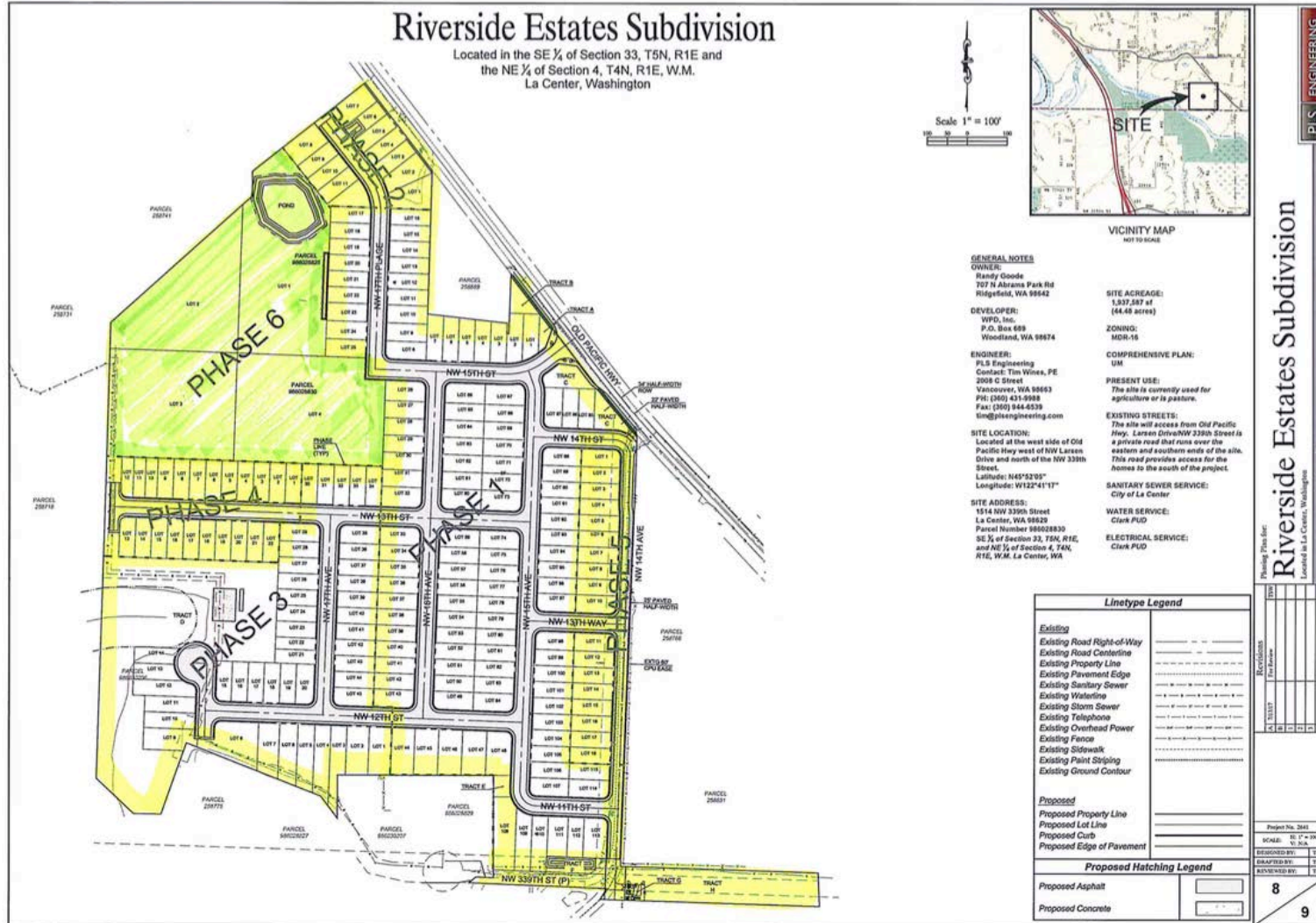
MDR-16 Density & Dimensional Requirements Table 18.140.030

- Net Density: 8 to 12 Detached
- Min Project Area: 5 AC
- Min Lot Width: 30 FT
- Min Lot Depth: 60 FT
- Min Area: 3,000 SF
- Max Area: 15,000 SF
- Max Lot Coverage: 60%
- Max Height: 35 FT

MDR-16 Density & Dimensional Requirements Table 18.140.030

- Setback Front: 10FT (25FT arterial collector)
- Setback Garage: 18FT
- Min Side Setback: 4 FT
- Min Side Street Setback: 10FT
- Min Rear Setback: 10FT

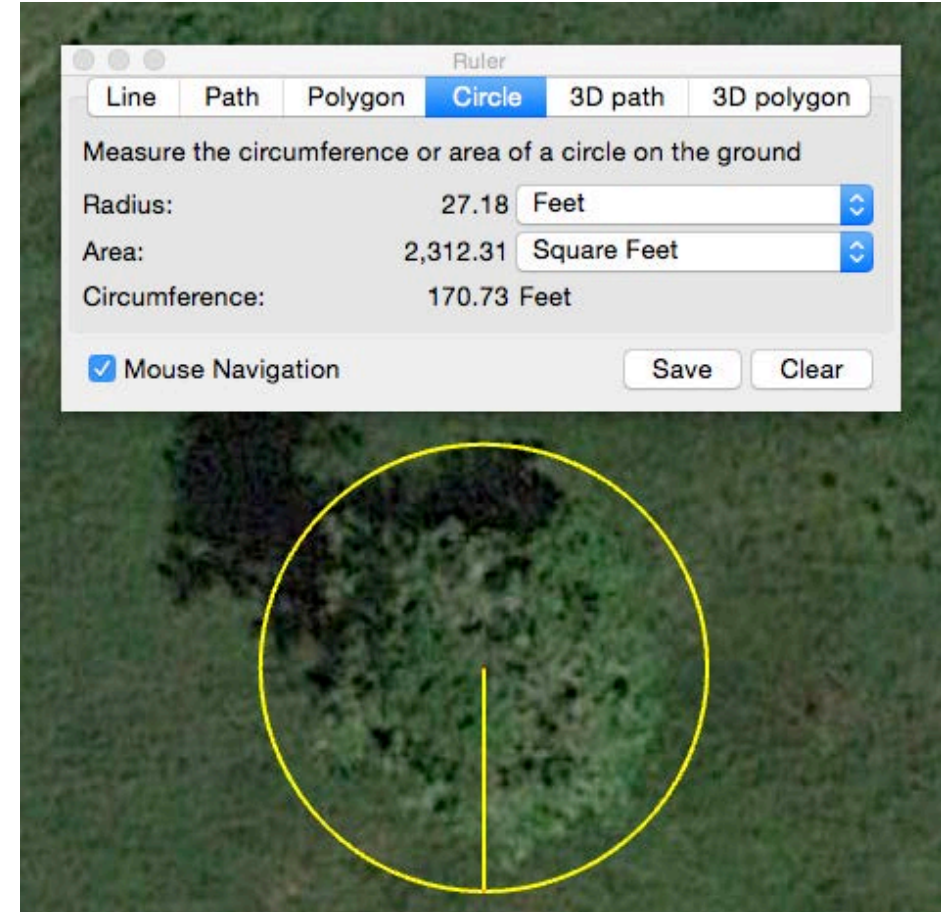
Phases & Reserved Tracts



Phasing – Close Up



Critical Areas – Habitat – Oak



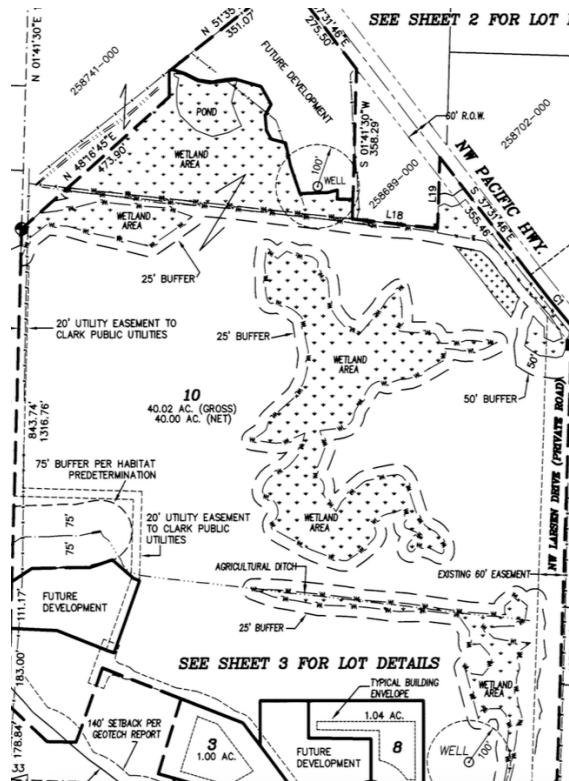
Critical Areas – Habitat – Pond



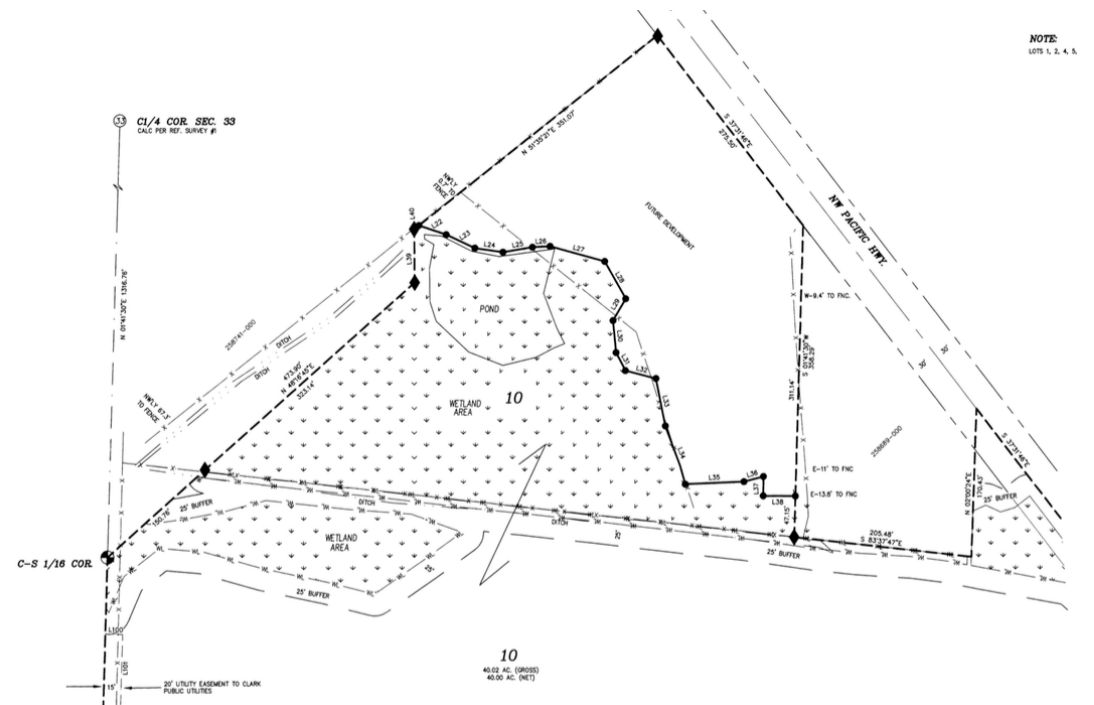
Critical Areas – Wetlands

(East Fork Estates 2005 to 2010)

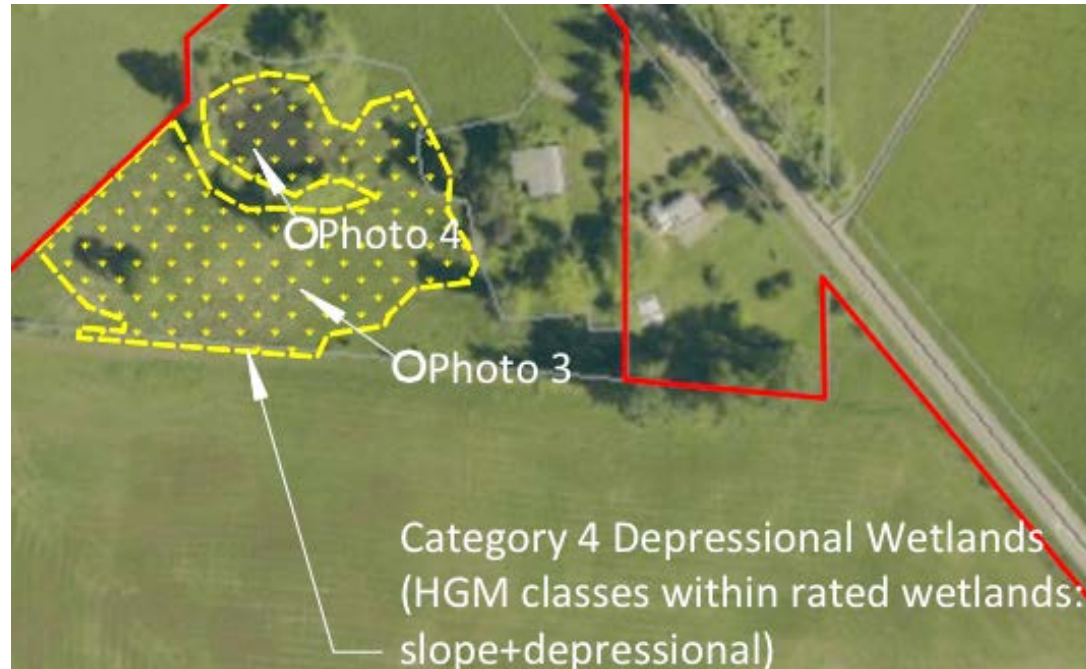
Bluhm Associates / ELS



Bluhm Associates / ELS



Critical Areas – Wetlands (CES 2015)

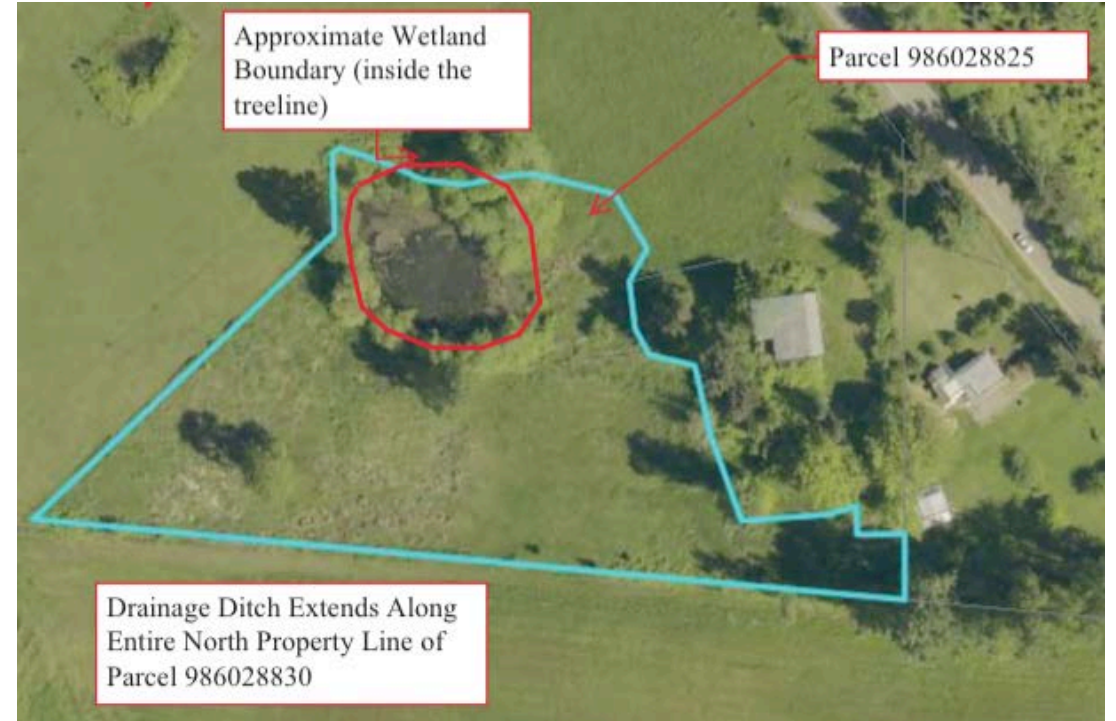


the study area, was planted with a crop of oats (*Avena sativa* - OPL) at the time of the site visit (photos 1 & 2). Wetlands were observed in the north portion of the study area that would be classified as depressional (slope + depressional) according to the *Washington Department of Ecology Wetland Rating System for Western Washington* (Figure 2). The slope wetlands originate on a gentle hillslope along the east part of the parcel and extend to an excavated man-made pond and ditch in the west portion. The pond appears to have been excavated from palustrine emergent depressional wetlands that extend over 200 feet to the south and west from the water's edge. The pond is surrounded by Pacific willow (*Salix lasiandra* - FACW) and black cottonwood (*Populus balsamifera* ssp. *trichocarpa* - FAC) trees, with an

Based on the information presented above, the wetlands on the study area are regulated under Chapter 40.440 (Wetlands) of the Clark County Municipal Code as follows:

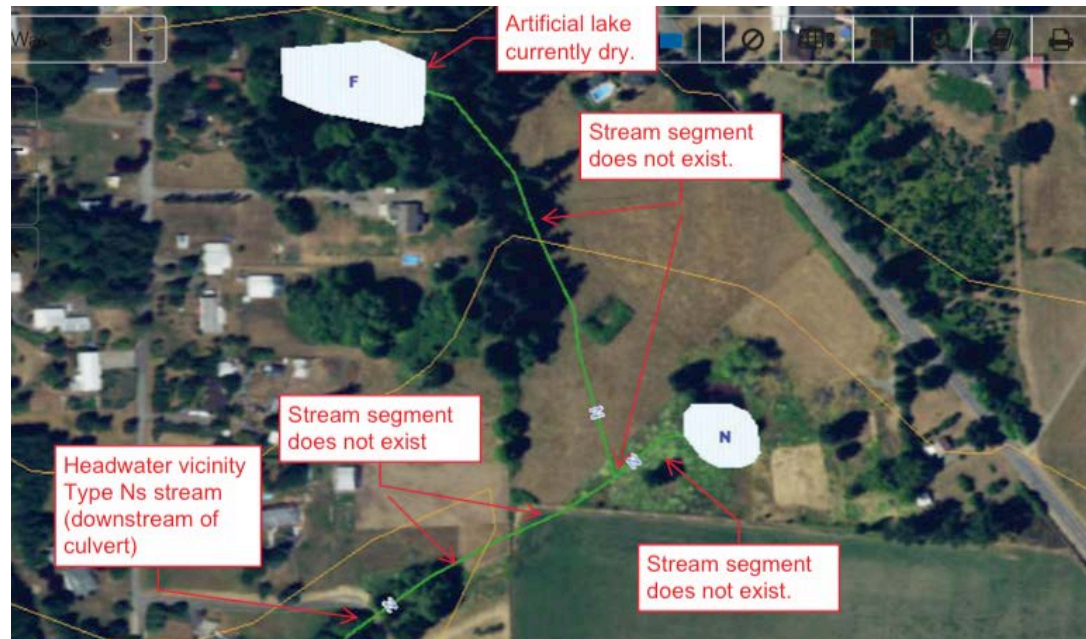
- Category 4 depressional wetlands - 50 ft. buffer for high intensity land uses

Critical Areas – Wetlands (CR-E 2016)



- No regulated wetlands identified on site by the Castle-Rose Environmental report, though pond will be treated as such.

Critical Areas – Wetlands (CR-E)

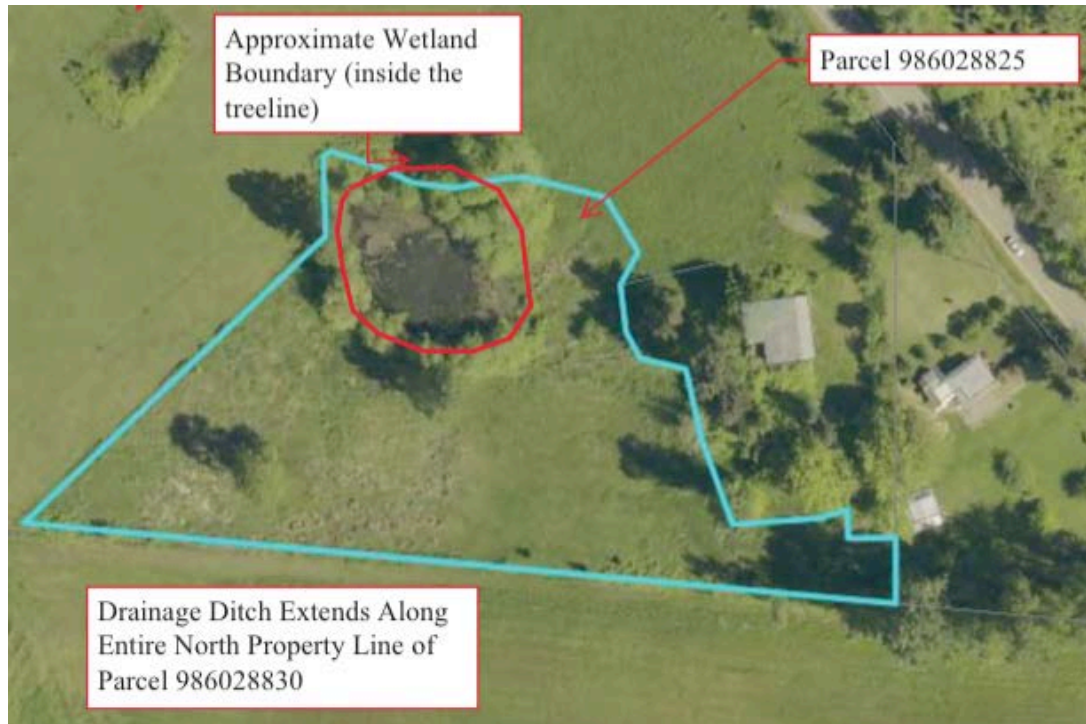


1. *"The low functions are due to the absence of vegetation diversity and structure, variability in hydroperiods, lack of interspersion of habitats, lack of special habitat features, and disturbance in the wetland buffers."*
 - a. This summary by ELS is a strong indicator that delineating these areas as Wetlands was at best problematic, and based on latest information – incorrect.

- Clark County GIS / NWI Mapped Wetlands (green)

ECY Comments - Updated

[October 02, 2017]



ECY Recommends (Oct 02, 2017):

- Update delineation during ideal season and without mowing
- Need to ID 2016 test plot sites
- Use 2014 wetland rating system in scoring
- ECY does not support CR-E interpretation of earlier ELS review, as ECY: “Low-functioning wetlands are still wetlands.” vs CR-E “not wetlands”
- ECY: “If fill is proposed for any of the on-site wetlands, the ...Corps will need to make a determination on whether the wetlands are jurisdictional under the Clean Water Act.”

Parks & Open Space Plan

(10/02/2017 update)



PARK AREA CALCULATIONS - PHASE 1	
PROPOSED SINGLE-FAMILY RESIDENCES	115
PARK AREA REQUIRED (.25 AC / 35 DWELLING UNITS)	.82 AC [(115/35)*.25]
PARK AREAS PROPOSED (TRACTS E & H)	.94 AC

PARK AREA CALCULATIONS - PHASE 2	
PROPOSED SINGLE-FAMILY RESIDENCES	11
PARK AREA REQUIRED (.25 AC / 35 DWELLING UNITS)	.08 AC [(11/35)*.25]
PARK AREAS PROPOSED (PHASE 2 PARK AREA A)	.1 AC

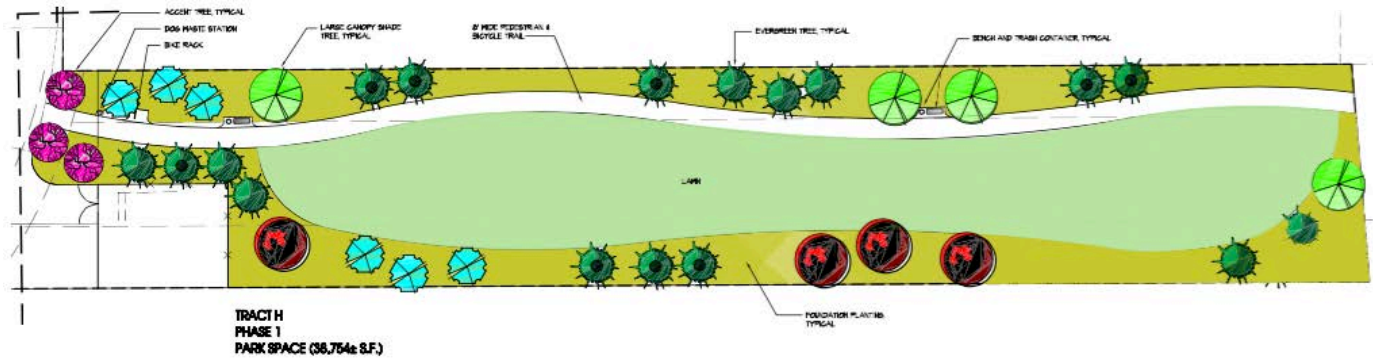
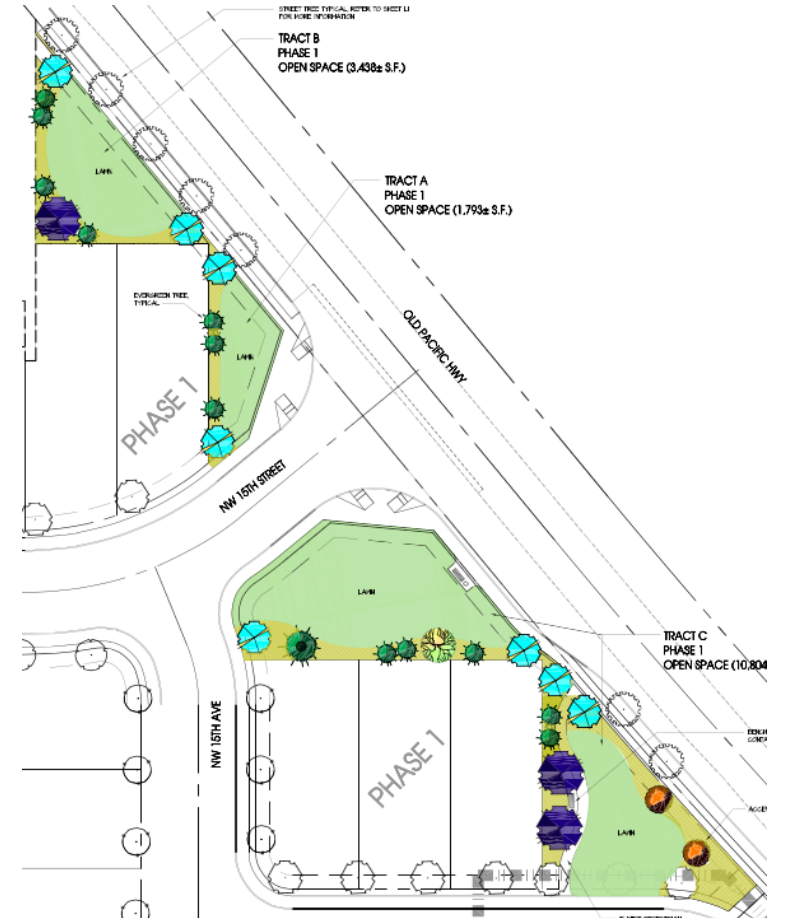
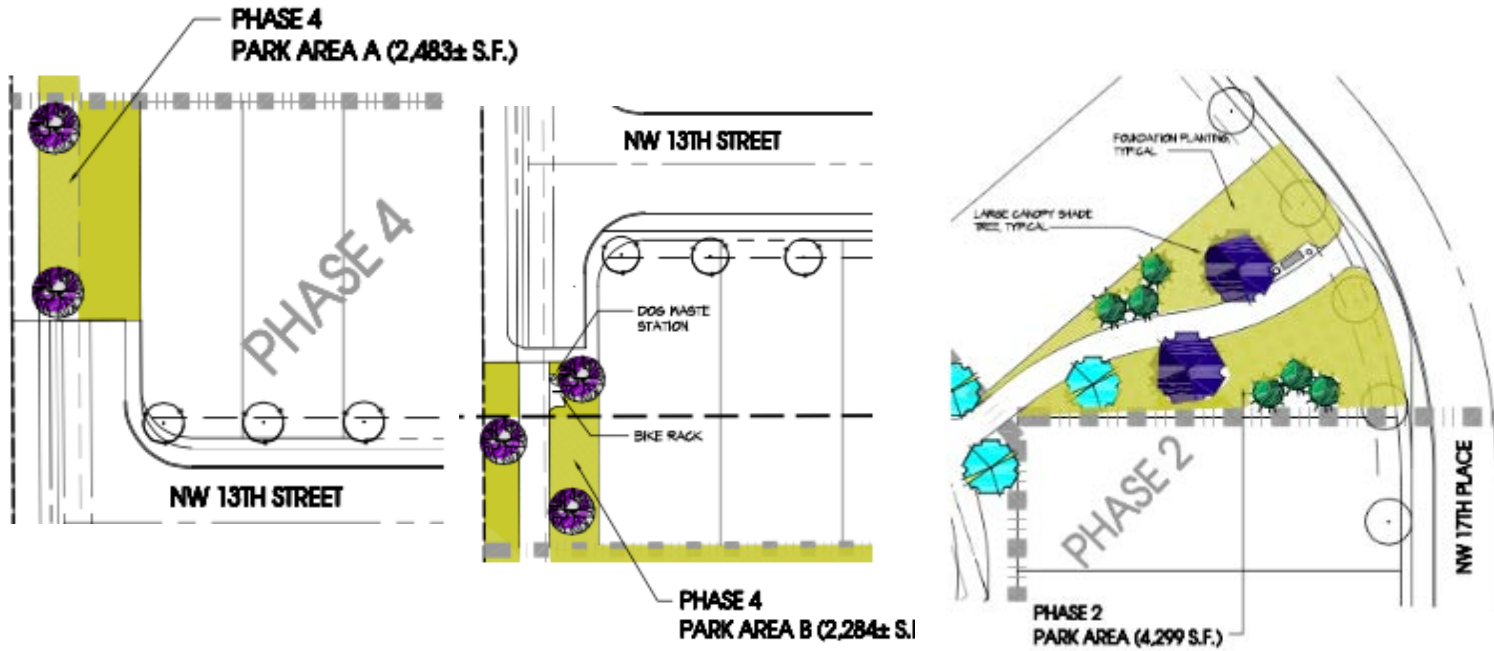
PARK AREA CALCULATIONS - PHASE 3	
PROPOSED SINGLE-FAMILY RESIDENCES	45
PARK AREA REQUIRED (.25 AC / 35 DWELLING UNITS)	.32 AC [(45/35)*.25]
PARK AREAS PROPOSED (TRACT D - RIVERSIDE PARK)	3.58 AC

PARK AREA CALCULATIONS - PHASE 4	
PROPOSED SINGLE-FAMILY RESIDENCES	22
PARK AREA REQUIRED (.25 AC / 35 DWELLING UNITS)	.16 AC [(22/35)*.25]
PARK AREAS PROPOSED (PHASE 4 PARK AREAS A & B)	.11 AC

PARK AREA CALCULATIONS - PHASE 5	
PROPOSED SINGLE-FAMILY RESIDENCES	18
PARK AREA REQUIRED (.25 AC / 35 DWELLING UNITS)	.13 AC [(18/35)*.25]
PARK AREAS PROPOSED	0 AC

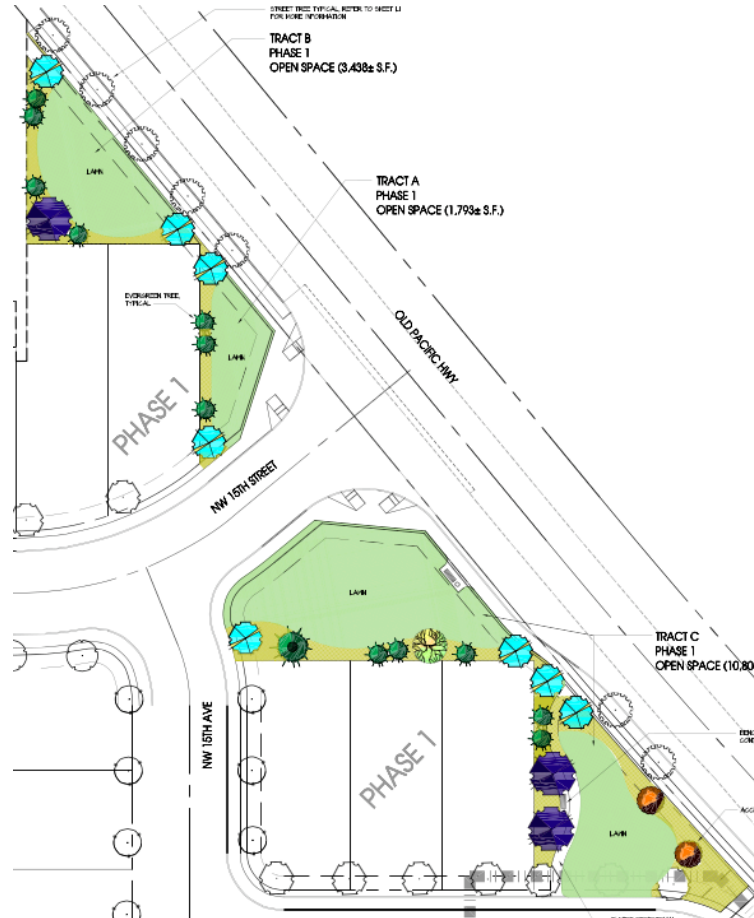
PARK AREA CALCULATIONS - PHASES 1 - 5	
TOTAL PROPOSED DWELLING UNITS	211
PARK AREA REQUIRED (.25 AC / 35 DWELLING UNITS)	1.51 AC
PARK AREA PROPOSED	4.73 AC

Parks – Open Space



Landscaping Plan

(10/02/2017 update)



TREE LEGEND			
SYMBOL	BOTANICAL / COMMON NAME	SIZE	QUANTITY
○	EXISTING STREET TREE. RETAIN & PROTECT	Existing	
⊙	ACER RUBRUM 'ARMSTRONG' / ARMSTRONG MAPLE	2' Cal. Min.	68
⊙	ACER RUBRUM 'BONHALL' / BONHALL MAPLE	2' Cal. Min.	63
⊙	THUJA PLICATA 'HOGAN' / HOGAN'S WESTERN RED CEDAR	6' ht. Min.	15
⊙	ACER RUBRUM 'RED SUNSET' / RED SUNSET MAPLE	2" cal. Min.	76
⊙	PICEA OMORICA / OMORICA SPRUCE	6' ht. Min.	24
⊙	POPULUS TREMULA 'ERECTA' / SWEDISH ASPEN	2' Cal. Min.	7
⊙	PRUNUS SERRULATA 'KWANZAN' / KWANZAN CHERRY	2' Cal. Min.	15
⊙	PYRUS CALLERYANA 'CHANTICLEER' / CHANTICLEER FLOWERING PEAR	2' Cal. Min.	113
⊙	TILIA CORDATA / GREENSPIRE LINDEN	2' Cal. Min.	83
⊙	PINUS FLEXILIS 'VANDERWOLF'S PYRAMID' / VANDERWOLF PINE	6' ht. Min.	60
⊙	ZELKOVA SERRATA / VILLAGE GREEN SELKOVA	2' Cal. Min.	18

SEPA Comments

[September 1 to 16, 2017]

ECY:

- Discussed earlier

DAHP:

- Avoid 2 pre-contact sites, if not then seek DAHP permit prior to disturbance
- Plan for time to process permit

Cowlitz Indian Tribe:

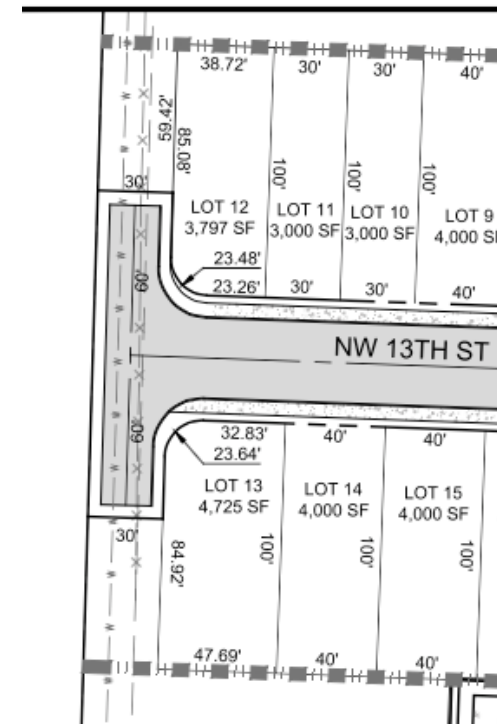
- Inadvertent Discovery Language
- Cultural Resource Protection Laws

Citizens:

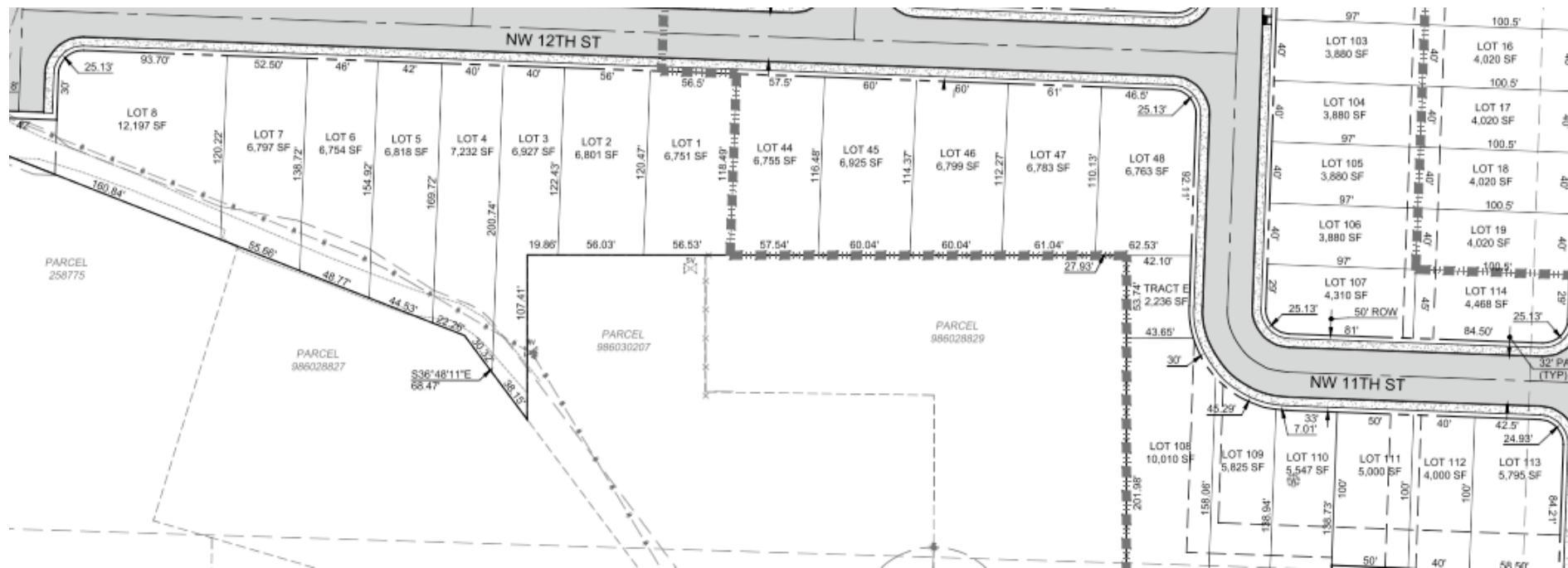
- Stormwater runoff
- Traffic and property access
- Loss of Larsen Road name
- Utility network connections

LCMC 18.140.030(2) Beveling

- “New lots created adjacent to low density residential land shall employ a “beveling” technique at the perimeter of the project. New lots adjacent to: (a) LDR districts, (b) the La Center UGA or (c) land outside of the La Center UGA, shall be no less than 7,000 square feet.
- The term ‘adjacent’ includes abutting land or land separated by a public right-of-way, private road, utility or transportation easement or open space or critical areas less than 60 feet wide. Adjacent rear and side yard setbacks shall be no less than 20 feet and 15 feet respectively. The future developer may transfer the density lost by application of this beveling standard to interior lots.”



LCMC 18.140.030(2) Beveling



Traffic Study (previous)

[CofA: update table at time of final approval], and
 [future CofA: update analysis for reserved tracts using conditions at time of application]

Table 1 Trip Generation Summary

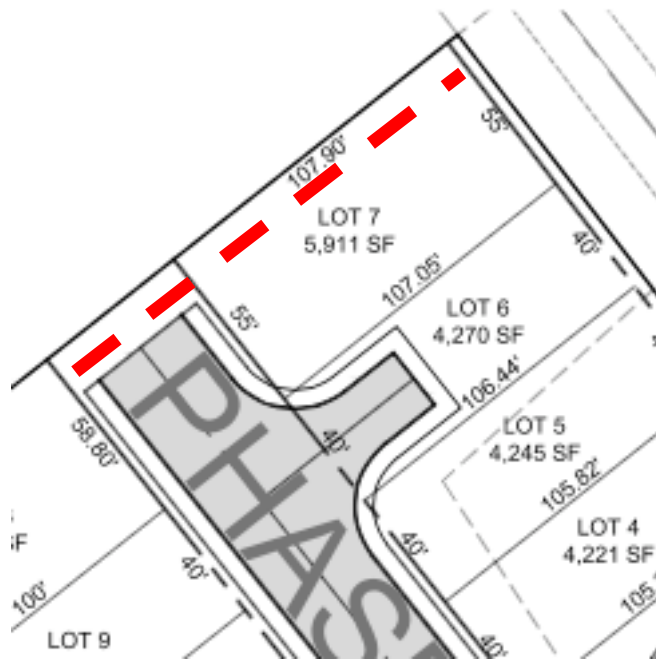
ITE Land Use	Units (#)	Weekday						
		ADT	AM Peak Hour			PM Peak Hour		
			Total	Enter	Exit	Total	Enter	Exit
Single-Family (#210)	99							
Generation Rate ¹		9.52	0.75	25%	75%	1.00	63%	37%
Site Trips		942	74	19	55	99	62	37
Apartment (#220)	306							
Generation Rate ¹		6.65	0.51	20%	80%	0.62	65%	35%
Site Trips		2,035	156	31	125	190	124	66
Site Total Trips		2,977	230	50	180	289	186	103

¹ Source: *Trip Generation*, 9th Edition, ITE, 2012, average rates.

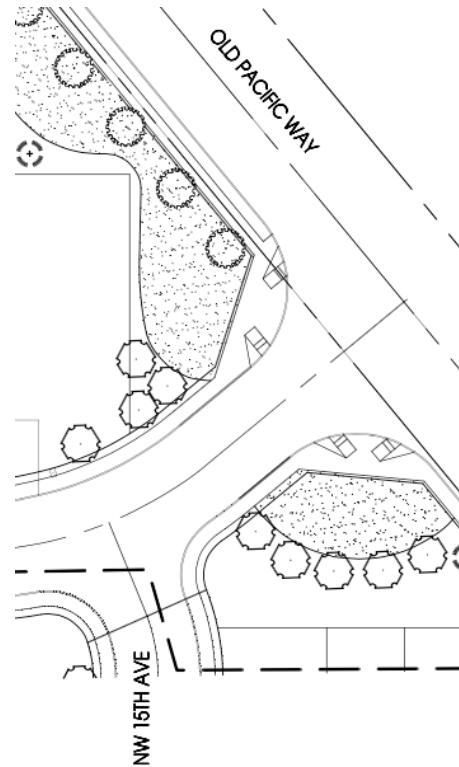
The proposed development is expected to generate a net total 2,977 daily trips, 230 AM peak hour trips, and 289 PM peak hour trips.

Proposed Roadway Access

Unnamed Street



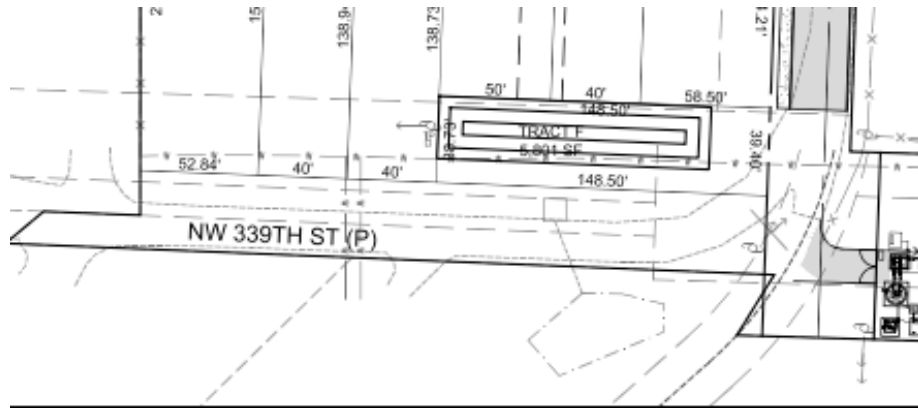
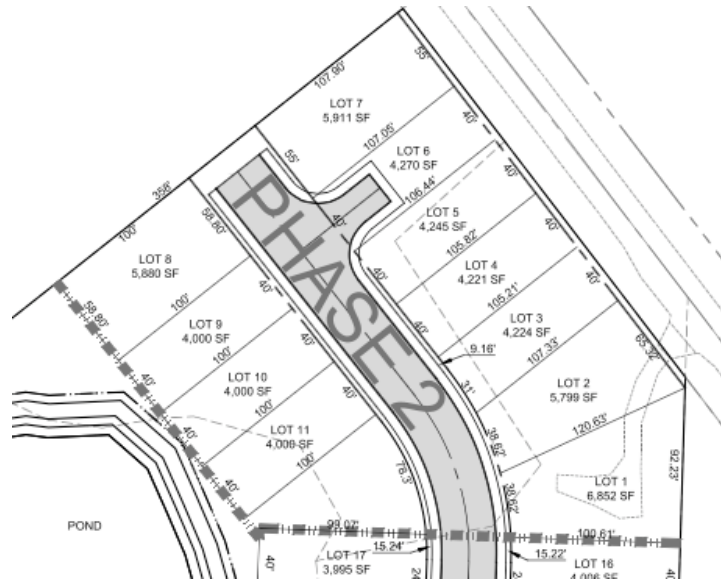
NW 15th Street



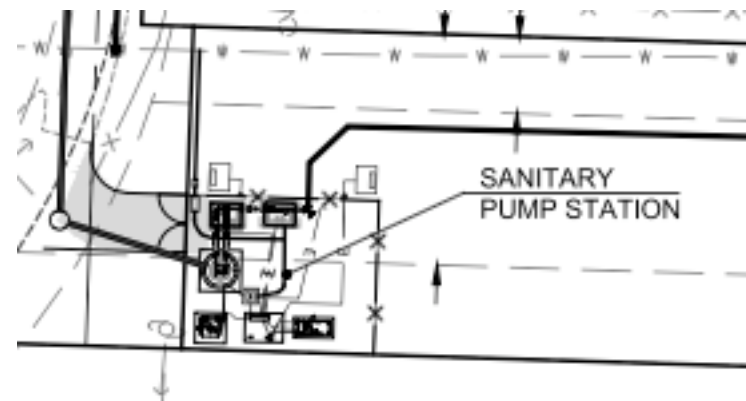
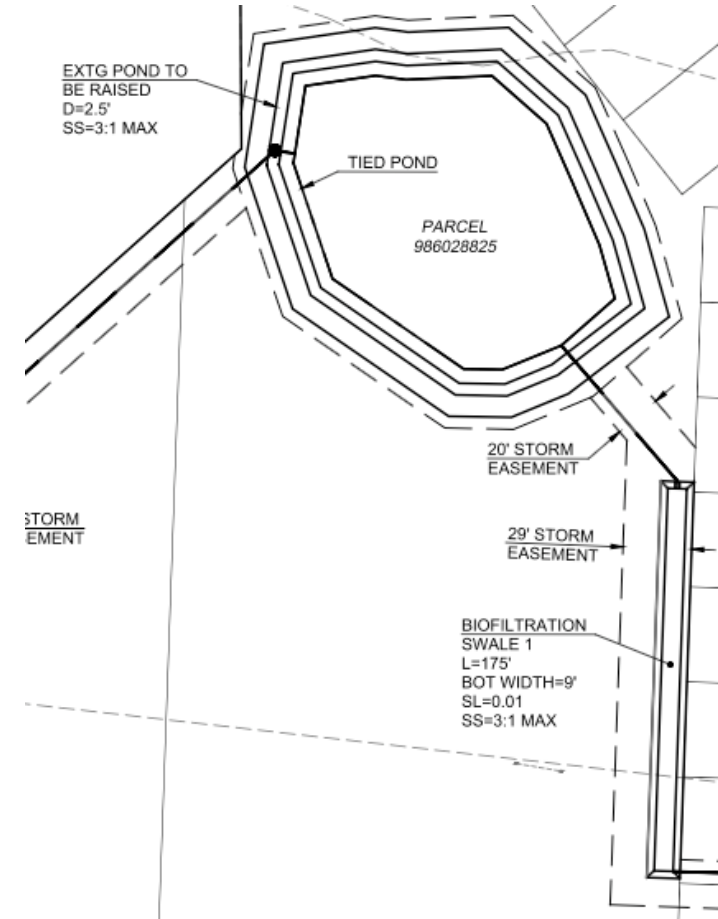
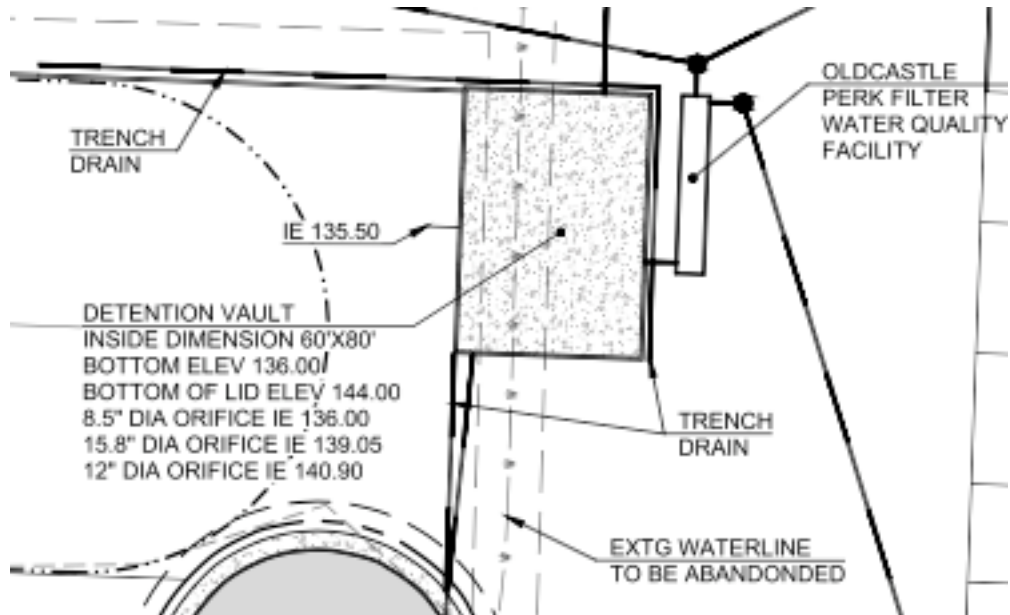
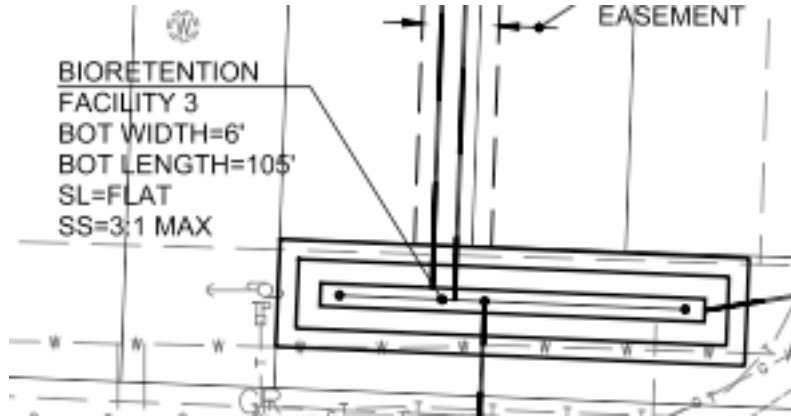
Larsen & Pacific Intersection (temp)



Intersections

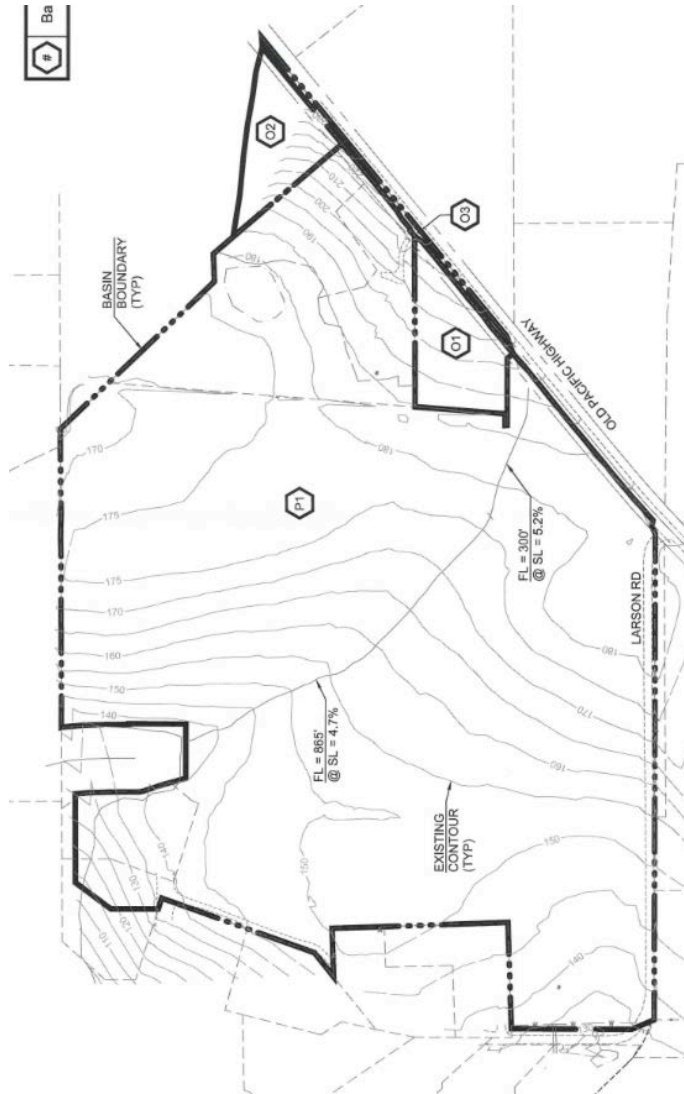


Stormwater

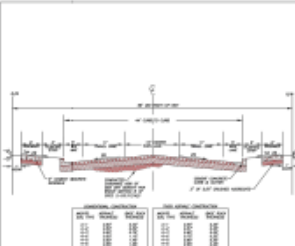
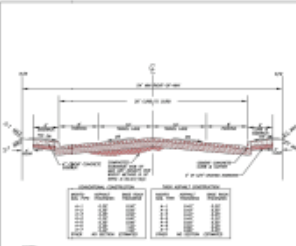
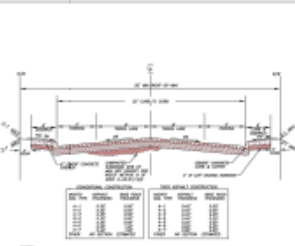
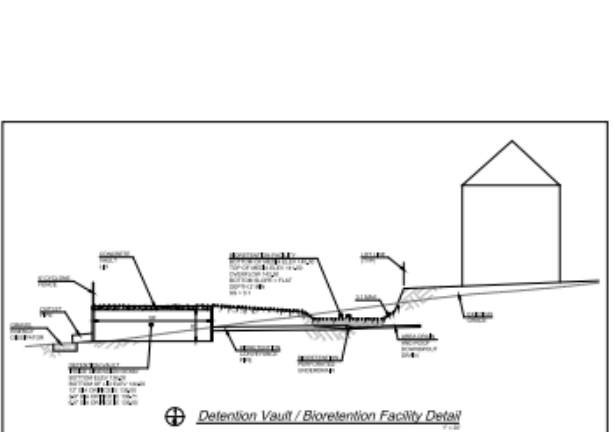
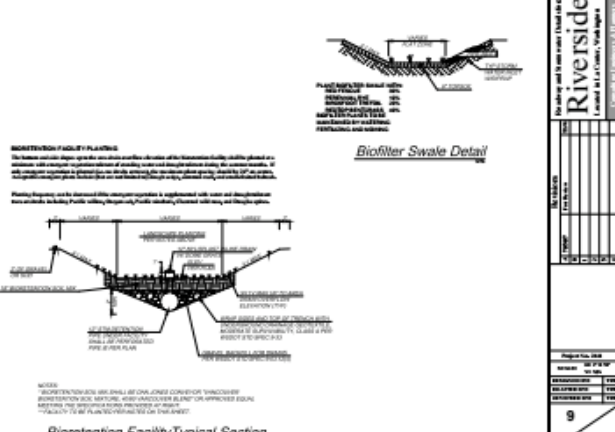


Basin

- Manage all stormwater on site



Roads & Stormwater Standards

 <p>SHALL CITY ARTERIAL A sheet 9</p> <p>CITY OF LA COVER APPROVED</p> <table border="1"><tr><td>DATE</td><td>1/1/2010</td><td>BY</td><td></td></tr><tr><td>DESIGNED</td><td></td><td>CHECKED</td><td></td></tr><tr><td>DRAWN</td><td></td><td>SCALE</td><td>ST-13A</td></tr></table> <p>W.S. & S. Shape, PE REGISTERED PROFESSIONAL ENGINEER STATE OF CALIFORNIA</p>	DATE	1/1/2010	BY		DESIGNED		CHECKED		DRAWN		SCALE	ST-13A	 <p>NEIGHBORHOOD ACCESS sheet 10</p> <p>CITY OF LA COVER APPROVED</p> <table border="1"><tr><td>DATE</td><td>1/1/2010</td><td>BY</td><td></td></tr><tr><td>DESIGNED</td><td></td><td>CHECKED</td><td></td></tr><tr><td>DRAWN</td><td></td><td>SCALE</td><td>ST-14</td></tr></table> <p>W.S. & S. Shape, PE REGISTERED PROFESSIONAL ENGINEER STATE OF CALIFORNIA</p>	DATE	1/1/2010	BY		DESIGNED		CHECKED		DRAWN		SCALE	ST-14	 <p>LOCAL ACCESS sheet 11</p> <p>CITY OF LA COVER APPROVED</p> <table border="1"><tr><td>DATE</td><td>1/1/2010</td><td>BY</td><td></td></tr><tr><td>DESIGNED</td><td></td><td>CHECKED</td><td></td></tr><tr><td>DRAWN</td><td></td><td>SCALE</td><td>ST-15</td></tr></table> <p>W.S. & S. Shape, PE REGISTERED PROFESSIONAL ENGINEER STATE OF CALIFORNIA</p>	DATE	1/1/2010	BY		DESIGNED		CHECKED		DRAWN		SCALE	ST-15	<p style="text-align:center">Riverside Estates Subdivision</p> <p style="text-align:right">P.L.S. ENGINEERING</p>
DATE	1/1/2010	BY																																					
DESIGNED		CHECKED																																					
DRAWN		SCALE	ST-13A																																				
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DESIGNED		CHECKED																																					
DRAWN		SCALE	ST-15																																				
 <p style="text-align:center">⊕ Detention Vault / Bioretention Facility Detail</p>	 <p>Bioretention Facility Typical Section</p>																																						

Recommend Approval with Conditions

I) Planning:

- 211 MDR-16 lots / min 3,000 sf
- Meet beveling standards
- Minimums per phase and for all

II) Engineering:

- Construct required infrastructure
- No increase in off site storm runoff

III) Fire:

- 2 separate & remote access points
- Hydrant spacing and road spacing
- Recommend sprinklers (NFPA13D)

IV) Parks:

- Update amenities per LCMC 18.147.030
- Update plan for Oregon white oak

V) SEPA:

- Revisit wetland delineation w/ ECY and qualified professional
- Revise scoring / buffers if needed
- Protect Oregon white oak during future mass grading

VI) Development Agreement:

Extra Slides

MDR-16 Code

Table 18.140.030

MDR-16 Density and Dimensional Requirements

Standard	Multifamily	Single-Family		
		Attached	Detached	Manufactured Home Park/Subdivision
Net Density ¹	8 – 14	8 – 14	8 – 12	4 – 12
Minimum Project Area ⁵	2.5 ac.	2.5 ac.	5 ac.	10 ac.
Minimum Lot Width	20 feet	20 feet	30 feet	20 feet ⁴
Minimum Lot Depth	60 feet	60 feet	60 feet	60 feet ⁴
Minimum Area	1,400 SF	1,400 SF	3,000 SF	3,000 SF ⁴
Maximum Area	N/A	N/A	15,000 SF	5,000 SF ⁴
Maximum Lot Coverage	85%	60%	60%	85% ⁴
Maximum Height ⁶	45 feet	35 feet	35 feet	20 feet
Setbacks²				
Minimum Front Setback ³	10 feet	10 feet	10 feet	5 feet ⁴
Minimum Garage Setback from Public Street	5 feet	18 feet	18 feet	5 feet ⁴
Minimum Garage Setback from Alley	3 feet	3 feet	3 feet	5 feet
Minimum Side Setback	0 feet attached or 10 feet abutting single-family	0 feet attached/4 feet nonattached	4 feet	5 feet ⁴
Minimum Street Side Setback	0 feet	10 feet	10 feet	5 feet ⁴
Minimum Rear Setback	20 feet	10 feet	10 feet	3 feet ⁴

Housing Styles (4)

