

# Maple Valley - Legacy Site

## Comparative Analysis and Tree Survey

SARAH PETERS & WILLIAM PERRY  
peters24@uw.edu      wperry@uw.edu

**W** COLLEGE OF BUILT ENVIRONMENTS  
UNIVERSITY of WASHINGTON

 Community, Environment and Planning



# Comparative Analysis of UW Spring 2017 Project with ULI Summer 2017 Report.

Category	UW Spring 2017	ULI Summer 2017 Report	Recommendations
Vision/Intent	- To identify the public needs in the City of Maple Valley and address the needs with a land use plan for the legacy site.	-A need exists to create a regional identity. - Identify how resources are connected by the regional trail. -Satisfaction of community goals through leveraging the value of the Legacy Site.	- Formulate a plan based upon the needs and desires of the city of maple valley which also helps to foster a sense of regional identity while leveraging the value of the legacy site in a way in which promotes local employment, and supports financial and community growth.
Land Use	-Multi-use with a heavy focus on community buildings, municipal buildings, and community open space. Large opportunity for retail.	-Heavily Residential with low, medium, and high density housing options. Mixed use office space in the NE corner of the Site, and small area for community center and related amenities. Space allotted for future transit needs of the Maple valley area.	- In accordance with the UW Spring 2017 report, the Land use should consist of multi-useage with a focus on a combination of municiple, community, recreational, and retail spaces into a singular campus.
Market	- Not Addressed - Community surveys conducted, but in depth analysis not performed.	- Not Addressed	Perform an extensive market analysis of the area. This work would include: Residential, Commercial, Mixed-use, Industrial, Hotel/Recreation.
Design	- Reconfiguration of area to create a municiple and retail center for Maple Valley, configured in the means of 4 differing proposals- Main Street Alternative, Munciple Campus, Urban Grid, and No Development.	- Village green concept with heavy focus on outdoor community gathering and park space.	Create a sustainable, community-oriented, practical, multi-use plan. This may include: Shared plaza , Resort facility , Municipal campus, Recreational facilities , Residential/ commercial/ industrial/ retail as appropriate. Pedestrian-oriented connectivity.
Fiscal/Economic	- In order to finance the development of various community assets, the city must sell land for development.	- Not Addressed	Recommendations that will include: Financial strategies that are both economically sustainable and viable. Public/ Private partnerships that leverage city assets.
Employment	- Not Addressed	- Not Addressed	Recommendations of policies that support family wage employment for the community.
Site Conditions	- Plan adjusted to topography and takes into consideration the natural slope of the site.	- Not Addressed	Evaluation of site constraints and opportunities: Ecological, topographic, geologic, hydrologic, infrastructure, and contextual View shed and other natural attributes.



# Legacy Site Tree Survey: 11/10/2017 & 11/18/2017

Collaborating with students from the School of Environmental and Forest Sciences, 14, 1/20th acre plots were surveyed throughout the Legacy Site. Using state of the art technology to record tree height, circumference, and location, we were then able to extract useful information applicable to future development research.

## Tree Measures:

- Species
- Height
- Circumference
- Location
- Surrounding Features





# Topographic Map

Walking through the Legacy Site provides a first hand look of this diverse terrain. A network of pathways allow pedestrians to wander up hills, through plateaus, and around local habitats.

## Natural Guiding Features

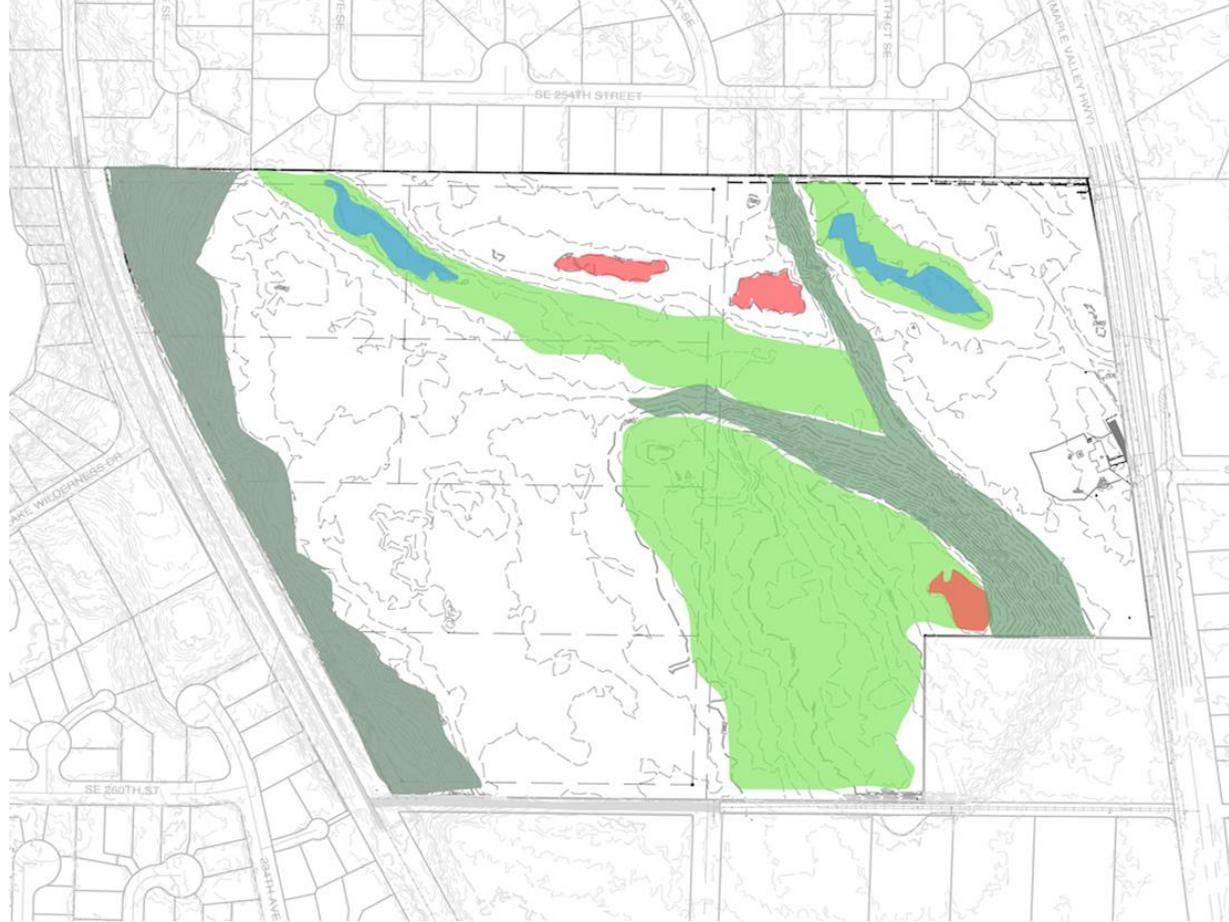
### Forested Swales:

 Shallow, low-lying and intermittent drainage ways.

### Forested Steep Slopes:

 Moderate and typically steep slopes (10% or greater)

 Local High Point  
 Local Low Point



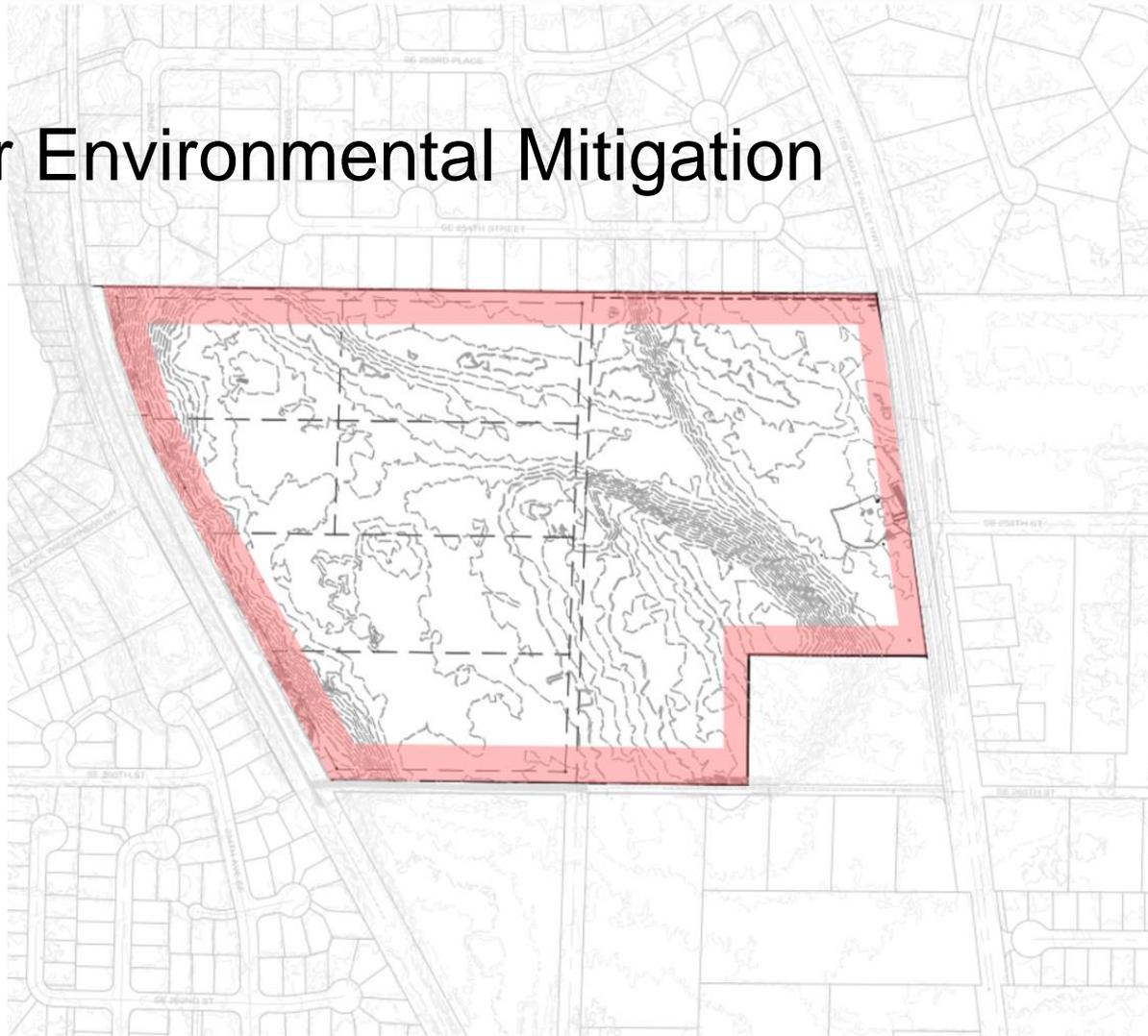


# Proposed Buffer for Environmental Mitigation

Recommendation of 50 ft.

Reasons for buffer zones:

- Protects tree development
- Maintain privacy
- Promotes ecology
- Provide safety
- Mitigate air and sound pollution.









Pacific tree frog found on Legacy Site

# Next Steps for Winter Quarter 2018

## **Supply and Demand Market Analysis:**

- Residential: Single family and multi-family.
- Commercial: Office and related.
- Retail: Stand alone and strip centers.
- Mixed-use: Residential/Commercial/Retail.
- Industrial/ Light Manufacturing: Including warehouse and distribution.

## **Site Analysis:**

- Ecological
- Topographic
- Hydrologic and Infrastructure: CEE civil and environmental engineering





Lion's Mane Mushroom (*Hericium americanum*) on Legacy Site

# Tree Survey Data 1

Count	Spp	DBH	Hgt (ft)	Hgt (m)	CC	Snag?	LCR	NOTES	1/20th acre plot	
1	PSME	33	170		D		60		Nothing below 4 DBH	
2	ACMA	16	85		CD		80			
3	ACMA	22.5	94		CD		50			
1	Root rot pocket								GAP	
2	ACMA							Windthrow -down trees with root wads		
3	PSME							Cedar doing fine		
4	TSHE							ACMA doing fine		
								Really open, light environment		
								Some cascara		
								Vine maple		
2										
1	ACMA	24.5			CD					
2	PSME	46		38.8	CD		30			
3	PSME	25.5		48.3	D		30			
4	ACMA	31.5		24.3	I			Broken top		
5	ACMA	22		26.4	I			Leaning		
3										
1	PSME	9	38		S		50	Not healthy, next to dom		
2	PSME	34		42.9	D		50			
3	ACMA	16.5		27.2	I					
4	THPL	42		34.9	CD		90			
5	ACMA	9	35			Y				
6	ACMA	5.5	20			Y				
7	ACMA	17			I					
8	ACMA	19.5			I					
9	THPL	32		33.7	CD		90			

Count	Spp	DBH	Hgt (ft)	Hgt (m)	CC	Snag?	LCR	NOTES	1/20th acre plot
4									
1	ACMA	23		35.8	CD				
2	ACMA	10		21.1	I				
3	TSHE	33.5		42.3	D				
4	ACMA	21			CD				
5	ACMA	24.5		27	CD			Sweep	
6	ACMA	26			CD				
7	ACMA				CD				
5									
1	ACMA	14		20.6	I				
2	ACMA	14		11.3	I			Broken top	
3	TSHE	22		31.1	CD		20		
4	ACMA	14			I				
5	ACMA	23.5			CD				
5	ACMA	9	27			Y			
6	ACMA	16.5			CD				
7	TSHE	9.5	32			Y			
8	ACMA	24.9			CD				
6									
1	PSME	32.1		40.6	D		40		
2	ACMA	22		20.6	I				
3	ACMA	18			I				
4	ACMA	18	23			Y			
5	TSHE	19.5		24.8	CD		30		
6	ACMA	17			CD				
7	ACMA	8			I			Leaning	
8	ACMA	17.5			CD			Broken top	
9	ACMA	4.5			S				
10	PSME	9			S			Curved, but doing well	
11	ACMA	4			S				
12	ACMA	30		27	CD			Bottom splits into two trees at ground level	
13	ACMA	23			CD			*	
7									
1	PSME	16							40
2	PSME	14.5							40
3	PSME	6	40			Yes			
4	PSME	7	51	15.6	S				
5	PSME	11.5							BROKEN TOP
6	PSME	7							
7	PSME	16							
8	PSME	8.5							
9	PSME	16.5	110	33.5	CD				
10	PSME	16							
11	PSME	12.5	87	26.5	I				
12	PSME	6.7							
13	PSME	17							
14	PSME	8.5							
15	PSME	6.5							
16	PSME	20.5	150	45.6	D				
17	PSME	20.5							
8									
1	PSME	27.2	121	36.8	CD				30
2	PSME	9.3	65	19.8	I				30
3	PSME	9.5							
4	PSME	29.3	140	42.6	D				30
5	PSME	12.5							
6	PSME	10.2	40			Yes			
7	PSME	6							
8	PSME	14.7							
9	PSME	20.5							Splits at 7 feet
10	PSME	4.6	36	11	S				25
11	PSME	7.3	15			Yes			

# Tree Survey 2

Count	Spp	DBH	Hgt (ft)	Hgt (m)	CC	Snag?	LCR	NOTES	1/20th acre plot
<b>9</b>									
1	PSME	11.5	62	18.8	CD			40	
2	PSME	9.2	47	14.3	S			20	UNHEALTHY, bark covered in lumps, branches scarce
3	THPL	12.3	20			Yes			
4	PSME	14.6				Yes			Fallen, but supported by surrounding trees
5	PSME	16.9	100	30.6	D			45	
6	PSME	12.8	60			Yes			Bark falling off at top, has branches still
7	PSME	30.5	20						Big snag, lots of holes
8	PSME	10.3							
9	PSME	9.2							
<b>10</b>									
1	THPL	35.3	90	27.5	I			90	
2	PSME	31.1	136	41.4	D			40	
3	PSME?	17.6	65			Yes			
4	THPL	5.8	33	10.2	S			95	
<b>11</b>									
1	PSME	31.8	126	38.3	D				BIG
2	THPL	6.4	32	9.7	S			90	
3	THPL	10.7	15			YES			
4	THPL	29.4	105	32	CD				
5	THPL	10.8	70			YES			Recently dead
6	PSME	7.2	48	14.6	I			30	
7	ACMA	8.5							

Count	Spp	DBH	Hgt (ft)	Hgt (m)	CC	Snag?	LCR	NOTES	1/20th acre plot
<b>13*</b>									
1	PSME	9							
2	PSME	11.4							
3	PSME	17.6							
4	PSME	17.3							
5	THPL	6.6	40			Yes			
6	PSME	11							
7	THPL	7	35				Yes		
8	PSME	18.4	123	37.6	CD		30		
9	PSME	31.6	131	40	D		30		Curved at bottom
10	PSME	22.4							
<b>12*</b>									
1	THPL	18.7	85	26	D			40	
2	THPL	9	30			Yes			I like ur branches :)
3	THPL	6	71	21.5	CD			15	
4	THPL	11	62	19	I			35	Curved bottom
5	THPL	25.5	25			Yes			
<b>14</b>									
1	PSME	26.7	147	44.7	CD			30	Split below DBH
2	PSME	22.5							BROKEN TOP AROUND 70'
3	ACMA	8.5							
4	PSME	19							
5	PSME	5.2	29	8.8	S			20	
6	PSME	14.6							
7	PSME	17.4	113	34.5	I			25	
8	PSME	43.4	157	48.1	D			50	

# Links

Video 1: [https://youtu.be/c\\_ZRTBHccek](https://youtu.be/c_ZRTBHccek)

Video 2: <https://youtu.be/cOReQ7VLwAA>