



Greenforest Incorporated



Consulting Arborist

11/20/2007

J. Jeffery Potter
Maple Centre Properties, LLC
23175 – 224th Place SE, Ste. A
Maple Valley WA 98038

RE: Tree Tally on 5-Acre Parcel

Dear Mr. Potter:

You contracted my services as a consulting arborist. My assignment is to perform a visual tally of trees on a 5-acre portion of the proposed Maple Centre development parcel, and to identify trees that currently pose a threat or hazard to homes located north of the site.

The subject area fronts Maple Valley – Black Diamond Road, between 228th Ave SE, and approximately SE 244th. The southern portion is mostly flat, and the northern half slopes down to a developed area.

Summary:

A total of 587 trees are tallied on the 5 acres.

The calculated canopy coverage for these trees is 626,600 square feet.

On the 14th and 15th of this month I visually tallied the trees on both the sloped area and the flat area. The table below lists the tree totals by tree size, as described by MVMC, and location. (See below.). The slope is not delineated in the field. The location of the trees, either on the slope or in the flat area, is based on visual assessment of the terrain where the tree stands.

Trees are also tallied to the edge of the street pavement, with no knowledge of the boundary of the street right-of-way.

A total of 587 trees are tallied on the combined areas of the slope and the flat area.

Table No. 1 – Tree Tally

Tree Size	Tree Location		Total Trees
	Slope	Flat Area	
Landmark	28	54	82
Significant	79	105	184
Retained	88	233	321
Total Tally of Trees			587

"Landmark tree" means a significant tree, excluding any alder or cottonwood tree, that is:

- (a) 24 inches or more in diameter measured four and one-half feet above the ground;
- (b) in good health; and
- (c) of specimen quality.

"Significant tree" means an evergreen or deciduous tree, excluding any alder or cottonwood tree, that is:

- (a) 12 inches or more in diameter measured four and one-half feet above the ground;
- (b) in good health; and
- (c) not within one and one-half tree lengths from a habitable structure* or obscuring safe sight distance requirements at intersections or points of ingress/egress.

* Several significant trees growing on the slope are within one and one-half tree lengths from a habitable structure. These trees are included in the tree count.

"Retained tree" is defined as

- (a) an existing tree designated for retention, excluding cottonwood and alders,
- (b) that is less than 12 inches in diameter measured 4.5 feet above grade,
- (c) but greater than six feet tall if evergreen,
- (d) or two inches in diameter if deciduous, and
- (e) located in a landscaping area of sufficient size to support a trunk size at maturity growth of at least 12 inches in diameter following the minimum standards for planted significant trees in this section.
- (f) Retained trees must have a live crown ratio of greater than or equal to 50 percent.



General Site Observations

1. Overall, trees growing on the flat area are in better condition (both health and structure) than trees growing on the slope.
2. Douglas-fir is the predominant evergreen species of Landmark and Significant trees on site.
3. Bigleaf maple is the predominant deciduous species of Landmark and Significant trees on site.
4. The vast majority of evergreen trees of *retained size* are Douglas-fir saplings.
5. Deciduous trees of *retained size* include Cascara (of which there are many, and is an unusual occurrence on this site), bitter cherry, and bigleaf maple.
6. There are large, dense stands of native vine maple (*Acer circinatum*) that currently provide dense understory canopy.
7. There are very few invasive species on this site. Scots broom is established along the highway, and there are only a handful of Himalayan blackberries throughout.
8. There are very few alders and no cottonwoods on the site.
9. Dead or dying trees in the flat area are not included in the tree count, and are not identified since they currently pose no threat by their failure.

Canopy Coverage Calculations.

- i. Retained landmark trees shall be calculated at **1,650 square feet** each, regardless of canopy coverage or dripline area, or as marked in the field and measured by the proponent;
- ii. Retained significant trees shall be calculated at **1,100 square feet** each, regardless of canopy coverage or dripline area, or as marked in the field and measured by the proponent;
- iii. Retained trees shall be calculated at **900 square feet** each, regardless of canopy coverage or dripline area;



Table No. 2 – Canopy Coverage Calculations

	Total Tree Count	Canopy Coverage Credit per tree	Calculated Canopy Coverage
i - Landmark			
Slope	28	1,650	46,200
Flat Area	54	1,650	89,100
<i>Sub Total Landmark Trees</i>	<i>82</i>		<i>135,300</i>
ii - Significant			
Slope	79	1100	86,900
Flat Area	105	1100	115,500
<i>Sub Total Significant Trees</i>	<i>184</i>		<i>202,400</i>
iii - Retained			
Slope	88	900	79,200
Flat Area	233	900	209,700
<i>Sub Total Retained Trees</i>	<i>321</i>		<i>288,900</i>
TOTAL	587		626,600

Hazardous Trees

The following table lists fifteen (15) trees that are either dead or dying, and pose a hazard to nearby homes. These trees are tagged in the field with these corresponding numbers, and with red survey tape around their trunk.

Table No. 3 – List of Hazard Trees

Tree No.	Species	DBH	Defect
1	Douglas-fir	22	Dead
2	Alder	20	Tree top is dead.
3	Hemlock	9	Dead
4	Douglas-fir	18	Dead and leaning.
5	Douglas-fir	18	Dead
6	Douglas-fir	12	Dead
7	Douglas-fir	14	Dead
8	Alder	16	Dying
9	Alder	12	Dead
10	Hemlock	12	Dead
11	Alder	12	Dying
12	Alder	12	Dying
13	Alder	16	Dead
14	Hemlock	24	Dead and leaning.
15	Douglas-fir	30	Dead

I recommend cutting the leaning trees to the ground. The remaining trees should be cut to the ground, or reduced in height and left as wildlife habitat. All wildlife trees should be cut to a height that, in the event of failure, they will not strike the adjacent properties.

Sincerely,

GreenForest, Inc.



By Favero Greenforest, M. S.

ASCA Registered Consulting Arborist #379
ISA Certified Arborist # PN -0143A