

**SHOFFNER CONSULTING**

21529 4<sup>TH</sup> AVE. W #C31 BOTHELL, WA 98021 MOBILE:(206)755-2871

---

September 29, 2014

Hamid Nouri  
13231 NE 40th St.  
Bellevue, WA  
98005

RE: Tree Inventory Report - 7502 132nd Ave. NE Redmond, WA.

Hamid:

This Tree Inventory Report is provided as required by the City of Redmond for single family residence subdivisions addressing the following elements:

- A numbering system of existing significant trees (with corresponding tags on trees)
- Measured driplines
- Trunk size (dbh)
- Species
- Status (significant or Landmark)
- An indication for each tree of whether it is proposed to be retained or removed
- Special instructions for work within their critical root zone (specified for retained trees)
- Location and type of protection measures for these (retained) trees
- Complete description of each tree's health and viability (see attached Tree Evaluation Data)

**1. Tree Inventory Information**

Each tree has been evaluated with the survey in hand showing the numbers that were assigned to the trees during the survey to insure complete inventory. In total, 19 trees were evaluated on site. Of these, 3, all within the developable portion of the site, are found to be dead, diseased or otherwise in poor health and a high risk.

The accompanying tree evaluation data form provides information specific to each tree including the following:

- The number of each pertaining to the numbering system on the tree survey and to the tag on each tree;
- Tree species;
- Diameter at 4.5' above grade;
- Maximum dripline spread rounded up to nearest increment of 5 feet;
- Condition code (1-4);

- Condition notes specific to each tree (for viable trees in good condition and health and without defect, condition information is less specific, however, pertinent to each tree), and
- Proposed fate of each tree (Retention or Removal) based upon condition and risk associated with retaining tree or development impacts.

## **2. General Site Conditions and Conditions of Note**

The forest composition on the project site includes both native and non-native ornamental trees clearly planted by the property owners.

- Weeping Alaska cedar (*Chamaecyparis nootkatensis*)
- Evergreen magnolia (*Magnolia grandiflora*)
- Bittercherry (*Prunus emarginata*)
- Douglas fir (*Pseudotsuga menziesii*)

The landscape is largely ornamental, however the strip along the eastern border includes native elements as well as exotic invasives in the understory.

## **3. Tree Health and Condition Discussion**

In general, the trees are in fair condition with a few exceptions. There are only 3 in the developable portion of the property found to be in dead, diseased, dying or otherwise in poor health and a high risk, all of which are red alders that are declining and diseased. These trees are noted in the Tree Evaluation Data form. All three are large Douglas firs that have been topped or lost their leaders resulting in re-growth from the topping cuts which is unstable and prone to failure, therefore these trees are exempt from the total count, resulting in total of 16 significant trees.

## **4. Required Tree Retention**

The City of Redmond requires the following:

- In all new developments, including additions to existing buildings and parking areas, a minimum of 35 percent of all significant trees shall be retained. Exceptions to this standard shall be requested and reviewed by The City of Redmond.
- Landmark trees (trees 30" dbh and larger) shall not be removed unless an exception has been applied for and granted.

At a total of 16 healthy, significant or landmark trees on the site, the required retention of 35% is a total of 5.6, or 6, significant trees. Four of the trees on the site are greater than 30" dbh and are classified as Landmark.

### **4.1 Summary of Tree Retention**

The following table summarizes the proposed status' of all healthy, significant and landmark trees on the property out of the total of 16 healthy, significant trees.

**SUMMARY OF TREE RETENTION**

	RETAINED	REMOVED	TOTAL
<b>LANDMARK</b>	2 (12.5%)	2 (12.5%)	4 (25%)
<b>SIGNIFICANT</b>	8 (50%)	4 (25%)	12 (75%)
<b>TOTAL</b>	10 (62.5%)	6 (37.5%)	16 (100%)

Of the retained trees included in this summary, 8 significant and 2 are Landmark. These trees are identified in the tree evaluation data form as RETAIN-impacted.

### **5. Tree Protection**

The City of Redmond requires the following for the protection of retained trees:

*"To ensure that structures, utilities, and roadways are located an adequate distance from the dripline of a protected tree to allow adequate room for construction activities, the construction limit line for a structure, utility, or roadway shall be located no closer than five feet outside of the dripline of a protected tree," and, "No proposed structure, utility or roadway shall be located within five feet of the dripline of a protected tree, except where such a structure is a raised deck, bay window or cantilevered or otherwise raised above the ground's surface so as not to disrupt the tree's roots."*

As a general rule for all retained trees, the protection zone is to be established with protection fencing, a minimum of four feet high chain link, set at the required five foot setback from the dripline.

Any proposed encroachments into the required protection area is to be reviewed by the project consulting arborist to determine the extent of impacts.

Most of the trees proposed to be retained are located well within the NGPA, therefore, protection of the NGPA itself will provide adequate protection for the retained trees therein. There are a few trees proposed to be retained on lots where development will be occurring in close proximity to them. For these trees it's very important to institute the required protection measures for each individual tree.

### **6. Tree Replacement**

The City of Redmond requires the following for tree replacement:

*"Replacement Required. A significant tree to be removed shall be replaced by one new tree in accordance with subsection (5) of this section. No tree replacement is required in the following cases:*

- (a) *The tree is hazardous, dead, diseased, injured or in a declining condition with no reasonable assurance of regaining vigor.*
- (b) *The tree is proposed to be relocated to another suitable planting site, provided that relocation complies with the standards in this section.*

Per this requirement, a total of 4 trees are required to be planted as replacement for the significant trees removed at 1:1 for 4 replacement trees. For the 2 landmark trees removed, at a 3:1 ratio 6 more trees are required to be planted. The total number of trees required to be planted as replacement is 10.

If the required number of replacement trees cannot be accommodated on the project site, the City of Redmond allows for off-site replacement of contribution to a Replacement Tree Fee.

The minimum replacement tree sizes are as follows:

- Deciduous trees, a minimum of 2 1/2" caliper.
- Evergreen trees, a minimum of 6 to 8 feet in height.

## **7. Use of This Report and Limitations**

This report is provided to Hamid Nouri as a means of reporting on the conditions of the evaluated trees on the Nouri SP development project site in the City of Redmond, WA. This report doesn't address any trees other than those evaluated in the field and presented in the Tree Evaluation Data Forms nor does it guarantee against damage caused by the failure of any tree, that retained trees or those not recommended for removal will live long into the future or that no damage will result from removal of these trees. Trees are dynamic and their conditions can change rapidly given changes in environmental factors and site development, therefore these assessments pertain only for those noted on the day of their evaluation. Natural decline and failure of trees is not predictable, therefore, Shoffner Consulting and Tony Shoffner cannot be held liable for retained trees that die or fail prior to or following development of the property. The removal of surrounding forest cover, particularly in the direction of prevailing winds, in this case the south and southwest, exposes trees to environmental factors to which many are not adapted. These trees along newly exposed edges to the prevailing winds are at increased risk of unpredictable failure. Removal of the trees is allowed for development of this site, therefore Shoffner Consulting and Tony Shoffner cannot be held liable for the failure of trees during or following development of the project site.

Cordially,



Tony Shoffner  
ISA Certified Arborist #PN-0909A  
CTRA #1759

Tree Evaluation Data					Hamid Nouri SP - 7502 132nd Ave. NE Redmond		9/29/2014
Tree Count	Tree #	Species	Size	Dripline (diam)	Condition	Notes - Status and Condition	Proposed Fate
1	1	MAGR	8"	26'	1	Excellent condition and health - Significant	RETAIN
2	2	CHNO	16"	32'	2	Good condition and health - Significant	REMOVE - I
3	3	PSME	42"	45'	4	Topped - Multiple leaders at top	REMOVE - C
4	4	PSME	34"	42'	4	Topped - Multiple leaders at top	REMOVE - C
5	5	PSME	26"	36'	4	Topped - Multiple leaders at top	REMOVE - C
6	6	PSME	32"	40'	2	Good condition and health - Landmark	REMOVE - I
7	7	PSME	34"	44'	2	Good condition and health - Landmark	REMOVE - I
8	8	PSME	12"	32'	2	Good condition and health	RETAIN
9	9	PSME	34"	40'	2	Good condition and health - Landmark	RETAIN
10	10	PSME	20"	40'	2	Good condition and health	REMOVE - I
11	11	PSME	30"	42'	2	Good condition and health - Landmark	RETAIN
12	12	PSME	20"	40'	2	Good condition and health	REMOVE - I
13	13	PSME	14"	32'	2	Good condition and health	REMOVE - I
14	14	POTR	28"	56'	2	Good condition and health	RETAIN
15	15	PREM	8"	32'	2	Good condition and health	RETAIN
16	16	PSME	26"	36'	2	Good condition and health	RETAIN
17	17	PREM	8"	30'	2	Good condition and health	RETAIN
18	18	PREM	12"	36'	2	Good condition and health	RETAIN
19	19	PREM	8"	28'	2	Good condition and health	RETAIN

**Tree Codes:**

CHNO=Chamaecyparis nootkatensis 'pendula' (weeping Alaska cedar)

MAGR=Magnolia grandiflora (evergreen magnolia)

PREM=Prunus emarginata (bittercherry)

PSME=Pseudotsuga menziesii (Douglas fir)

**Dbh** = Diameter at 4.5' above grade; "mt" indicates multi-trunked and dbh listed is of largest leader**DL** = Maximum dripline from tip to tip rounded up to the nearest five foot increment**Cond = Condition Codes:**

1 = Excellent health condition and vigorous

2 = Good condition, minor health and/or condition concerns

3 = Fair condition, moderate health and/or condition concerns associated with age and/or level of vigor or minor defects, adequate crown ratio (LCR) &gt;50%

4 = Poor condition and/or health and major concerns with state of decline or presence of considerable decay in trunk(s), also include or failed trees and trees with LCR of &lt;50%.

**Notes, Status and Condition** = Size status (significant or non-significant) and condition notes.**Proposed Fate** = To be retained or removed based upon development plan.

REMOVE - I = Remove due to impacts; REMOVE - C = Remove due to condition

SOURCE: TREE INVENTORY REPORT DATED 9-29-2014 BY TONY SHOFFNER