



# Greenforest Incorporated



## Consulting Arborist

TO: Justin Lagers, Director of Land Acquisition & Development  
 RMJ Holdings, LLC  
 9675 SE 36th St., Suite 105  
 Mercer Island, WA 98040

REFERENCE: *Revised Tree Health Report*, Redmond 13

SITE ADDRESS: 113XX 172<sup>nd</sup> Ave NE, Redmond WA  
 TPN 362605-9098

DATE: October 17, 2019

PREPARED BY: Favero Greenforest, ISA Certified Arborist # PN -0143A  
 ISA Tree Risk Assessment Qualified  
 ASCA Registered Consulting Arborist® #379

This *Tree Health Report* is for the Redmond 13 project referenced above, and documents the condition of 77 regulated onsite trees, plus 12 onsite *Unhealthy* trees and 10 offsite trees. I initially visited the site 3/14/2018 and identified, assessed and inventoried these trees, which are the subject of this report.

### SUMMARY:

<i>Significant Onsite Trees</i>	<i>61</i>
<i>Landmark Onsite Trees</i>	<i>16</i>
<hr/>	
<i>Total Onsite Trees</i>	<i>77</i>
<i>Trees Proposed for Retention</i>	<i>27</i>
<hr/>	
<i>Percent of Trees Retained</i>	<i>35.1%</i>
<i>Unhealthy Onsite Trees</i>	<i>12</i>
<i>Offsite Trees</i>	<i>10</i>

[This report is revised from three previous versions, dated 6/4 & 10/4 2018, & 8/8 2019.]

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The site is a 3<sup>+</sup>-acre parcel with a slight SE aspect. A commercial/light industrial garage sits near the center of the property, near 172<sup>nd</sup>. There is minimal mid-story canopy, and most groundcover is invasive bramble or weed species.

The subject trees are mostly native evergreen conifers, Doug-fir and Cedar; and deciduous alder, maple, cherry and willow. A dozen ornamental species (both conifer and deciduous) are planted parallel 172<sup>nd</sup>.

#### TREE INSPECTION METHOD

I visually inspected each tree from the ground. I performed a Level 1 risk assessment.<sup>1</sup> This is the standard assessment for populations of trees near specified targets, conducted in order to identify obvious defects or specified conditions such as a pre-development inventory. This is a limited visual assessment focuses on identifying trees with imminent and/or probable likelihood of failure, and/or other visible conditions that will affect tree retention.

I recorded tree species and size (DBH). I estimated the average dripline of each tree. I rated the condition of each tree, both health and structure. A tree's structure and form is distinct from its health. This inspection identifies what is visible with each.

High-risk trees can appear healthy in that they can have a dense, green canopy. This may occur when there is sufficient sapwood or adventitious roots present to maintain tree health, but inadequate strength for structural support.

Conversely, trees in poor health may or may not be structurally stable. For example, tree decline due to root disease is likely to cause the tree to be structurally unstable, while decline due to drought or insect attack may not.

One way that tree health and structure are linked is that healthy trees are more capable of compensating for structural defects. A healthy tree can develop adaptive growth that adds strength to parts weakened by decay, cracks, and wounds.

This report identifies unhealthy trees based on existing health conditions and tree structure, and specifies which trees are most suitable for preservation.<sup>2</sup>

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<sup>1</sup> Companion publication to the ANSI A300 Part 9: Tree Shrub and Other woody Plant Management – Standard Practices, Tree Risk Assessment. 2011. ISA.

<sup>2</sup> Companion publication to the ANSI A300 Part 5: Tree Shrub and Other woody Plant Maintenance – Standard Practices, Managing Trees During Construction. 2008. ISA.



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I tagged and numbered the trees, with a 1" x 3" aluminum tag, during my inspection. The attached tree inventory contains the following information on each tree.

**Proposed Action** – indicates is tree is to be Retained or Removed.

**Tree Category** indicates if tree is *Significant* (6" or greater DBH) or *Landmark* (greater than 30" DBH), or is *Unhealthy*.

**Tree number** as indicated on tag in field and shown on the attached site plan.

**DBH** Stem (trunk) diameter in inches 4.5 feet from grade. Multiple-trunked trees are listed as the average of all stems.

**Tree Species** Common name.

**Dripline** Average branch extension in feet as radius from the trunk.

**Health, Structure/Form rating** '1' indicates good to excellent condition; no visible health-related problems or structural defects, '2' indicates fair condition; minor visible problems or defects that may require attention if the tree is retained, and '3' indicates poor condition; significant visible problems or defects: the tree is considered *unhealthy* and removal is recommended.

**Notes on Condition** Obvious structural defects, atypical form or diseases visible at time of inspection, including:

Asymmetric canopy - the tree has an asymmetric canopy from space and light competition from adjacent trees.

Canker - disease cankers are established on trunk/branches.

CBT - cherry bark tortrix insect infestation.

Crack - separation of wood fibers and predisposed to failure.

Decay - process of wood degradation by microorganisms resulting in weak and defective structure.

Diseased - foliage and trunk/stems are diseased.

Disease center – suspect soil borne fungal infection site (root rot).

Dogleg in trunk - trunk with a bow or defective bend (90°) in trunk often half way of further up the trunk.

Double leader - the tree has multiple stem attachments, which may require maintenance or monitoring over time.

Foliar disease - foliage is diseased with manageable fungus.

Insect injury - active insect injury affecting tree health.

Ivy - dense ivy prevents a thorough inspection, and other defects may be present.

Poor structure - tree's structure is deformed and defective/unsightly

Previous rootplate failure – tree's rootplate previously lifted in high winds.

Root rot infection – suspect fungal infection decaying tree roots.

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Stem canker - disease canker on trunk/branches.

Sweep in trunk - characterized by a leaning lower trunk and a more upright top.

Thinning foliage - low foliage density may indicate stress, or early infection/declining health.

Suppressed - tree crowded by larger adjacent trees, with defective structure and/or low vigor. Retain tree only as a grove tree, not stand-alone.

Sweep - tree leans away from adjacent trees. Characterized by a leaning lower trunk and a top that is more upright.

Trunk decay - wood decay is visible in the trunk.

Wound/decay base of trunk - open wound with visible decay in trunk.

#### SUMMARIZING COMPLIANCE WITH CODE.

The following table provides you with the format that is required for summarizing a proposal's conformance with the City's tree protection regulations. The table must appear in the Arborist Report and on the Tree Preservation Plan, both of which are part of the application. Please include the total number of trees that are 6" or greater and the number of unhealthy trees in the report.

Compliance Chart for Healthy Significant and Landmark Trees

<b>Tree Type</b>	<b>Removed</b>	<b>Impacted</b>	<b>Retained</b>	<b>Total</b>
Landmark (>30" DBH)	10 13.0%	0 0.0%	6 7.8%	16 20.8%
Significant (6" - 30")	40 51.9%	0 0.0%	21 27.3%	61 79.2%
Totals	50 64.9%	0 0.0%	27 35.1%	77 100.0%
Replacement Trees	3:1 Ratio for 10 Landmark Trees = 30 1:1 Ratio for 40 Significant Trees = 40			70

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The attached Preliminary Site Plan provides the location and numbering for each tree, illustrating each tree's dripline, and illustrating 5' from each tree's dripline.

#### LIMITATIONS AND USE OF THIS REPORT

This tree report establishes, via the most practical means available, the existing conditions of the trees on the subject property. Ratings for health and structure, as well as any recommendations are valid only through the development and construction process. This report is based solely on what is readily visible and observable, without any invasive means.

There are several conditions that can affect a tree's condition that may be pre-existing and unable to be ascertained with a visual-only analysis. No attempt was made to determine the presence of hidden or concealed conditions which may contribute to the risk or failure potential of trees on the site. These conditions include root and stem (trunk) rot, internal cracks, structural defects or construction damage to roots, which may be hidden beneath the soil. Additionally, construction and post-construction circumstances can cause a relatively rapid deterioration of a tree's condition.

#### ATTACHMENTS:

1. Assumptions and Limiting Conditions
2. Certification of Performance
3. Tree Inventory Table
4. Tree Retention and Replacement Plan
5. Tree Retention and Replacement Notes



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### Assumptions & Limiting Conditions

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- 1) A field examination of the site was made 3/14/2018. My observations and conclusions are as of that date.
- 2) Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the consultant/arborist can neither guarantee nor be responsible for the accuracy of information provided by others.
- 3) Unless stated other wise: 1) information contained in this report covers only those trees that were examined and reflects the condition of those trees at the time of inspection; and 2) the inspection is limited to visual examination of the subject trees without dissection, excavation, probing, or coring. There is no warranty or guarantee, expressed or implied that problems or deficiencies of the subject tree may not arise in the future.
- 4) All trees possess the risk of failure. Trees can fail at any time, with or without obvious defects, and with or without applied stress. A complete evaluation of the potential for this (a) tree to fail requires excavation and examination of the base of the subject tree. Permission of the current property owner must be obtained before this work can be undertaken and the hazard evaluation completed.
- 5) The consultant/appraiser shall not be required to give testimony or to attend court by reason of this report unless subsequent contractual arrangements are made.
- 6) Construction activities can impact trees in unpredictable ways. All retained trees should be inspected at the completion of construction, and regularly thereafter as part of ongoing maintenance.
- 7) The consultant does not assume any liability for the subject tree and does not represent the transfer of such for any risks associated with the tree from the landowner to the consultant. **Risk management is solely the responsibility of the landowner.**



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Attachment No. 2 - Certification of Performance

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I, Favero Greenforest, certify that:

- I have personally inspected the trees and the property referred to in this report and have stated my findings accurately.
- I have no current or prospective interest in the vegetation or the property that is the subject of this report and have no personal interest or bias with respect to the parties involved.
- The analysis, opinion, and conclusions stated herein are my own and are based on current scientific procedures and facts.
- My analysis, opinion, and conclusions were developed and this report has been prepared according to commonly accepted arboricultural practices.
- No one provided significant professional assistance to me, except as indicated within the report.
- My compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client of any other party nor upon the results of the assessment, the attainment of stipulated results, or the occurrence of any subsequent events.

I further certify that I am a member in good standing of International Society of Arboriculture (ISA), and the ISA PNW Chapter, I am an ISA Certified Arborist (#PN-0143A) and am Tree Risk Assessment Qualified, and am a Registered Consulting Arborist® (#379) with American Society of Consulting Arborists. I have worked as an independent consulting arborist since 1989.

Signed:



GREENFOREST, Inc.

By Favero Greenforest, M. S.

**Favero**

**Greenforest**

Date: October 17, 2019

Digitally signed by Favero Greenforest  
DN: cn=Favero Greenforest, o, ou,  
email=greenforestinc@mindspring.com,  
c=US  
Date: 2019.10.17 20:05:24 -07'00'



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Attachment No. 3 – Tree Inventory Table

Proposed Action	Category	Tree No.	DBH (Inches)	Tree Species	Dripline Radius (Ft.)	Health	Structure & Form	Comments on Condition
Remove	UNHEALTHY	1	21	Western red-cedar	13	2	3	Crack/trunk decay
RETAIN	Significant	2	23	Douglas-fir	20	1	2	Ivy
RETAIN	Significant	3	20	Douglas-fir	21	1	2	Ivy
Remove	Significant	4	7	Japanese maple	11	1	1	
Remove	UNHEALTHY	5	14	Scots pine	9	2	3	Thin foliage, double leader, suppressed, sapsucker injury
RETAIN	Significant	6	9	Japanese maple	15	1	1	
RETAIN	Significant	7	10	Scots pine	12	2	2	Thin, sapsucker
RETAIN	Significant	8	7	Red maple	14	1	2	Asymmetric canopy
Remove	Significant	9	16	Deodar cedar	15	1	1	
Remove	Significant	10	14	Scots pine	13	2	2	Thin, suppressed
RETAIN	Significant	11	6	Red maple	10	1	1	
RETAIN	Significant	12	6	Red maple	10	1	1	
Remove	Significant	13	14	Norway spruce	12	1	2	Double leader
Remove	Significant	14	15	Scouler's willow	14	2	2	Diseased, decline, decay
Remove	Significant	15	12	Bigleaf maple	16	1	2	Ivy
Remove	Significant	16	28	Douglas-fir	17	1	1	
Remove	Significant	17	29	Douglas-fir	16	1	1	
Remove	Significant	18	21	Douglas-fir	15	1	2	Asymmetric canopy
Remove	Landmark	19	31	Douglas-fir	21	1	2	Asymmetric canopy
Remove	Significant	20	24	Douglas-fir	17	2	2	Asymmetric canopy, trunk burl



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Proposed Action	Category	Tree No.	DBH (Inches)	Tree Species	Dripline Radius (Ft.)	Health	Structure & Form	Comments on Condition
Remove	UNHEALTHY	21	18	Douglas-fir	19	3	3	Asymmetric canopy, trunk wound, canker
Remove	Significant	22	28	Douglas-fir	18	1	2	Asymmetric canopy
Remove	UNHEALTHY	23	6	Kwanzan flowering cherry	18	3	3	Tortrix insect, asymmetric, decline, rootplate failure
Remove	Significant	24	28	Douglas-fir	20	1	1	
Remove	UNHEALTHY	25	6	Red alder	7	1	3	Trunk decay
Remove	UNHEALTHY	26	7	Red alder	8	2	3	Canker, trunk decay
Remove	UNHEALTHY	27	7	Red alder	8	2	3	Canker, trunk decay
Remove	UNHEALTHY	28	7	Red alder	6	2	3	Canker, trunk decay
Remove	Significant	29	10	Red alder	11	1	2	Sweep, dogleg
Remove	Significant	30	26	Douglas-fir	14	1	2	Asymmetric canopy
Remove	Landmark	31	33	Douglas-fir	19	2	1	Thin foliage
Remove	Significant	32	25	Douglas-fir	18	2	1	Thin foliage
Remove	UNHEALTHY	33	24	Douglas-fir	15	1	3	Fire injury on trunk
Remove	Significant	34	26	Douglas-fir	17	1	1	
Remove	Significant	35	28	Douglas-fir	18	1	1	
Remove	Landmark	36	36	Western red-cedar	15	1	1	
Remove	Significant	37	7	Japanese maple	13	1	2	Ivy
Remove	Significant	38	7	Bitter cherry	10	1	1	
Remove	Significant	39	6	Bitter cherry	10	1	1	
Remove	Significant	40	9	Red alder	14	1	1	
Remove	UNHEALTHY	41	10	Red alder	16	3	3	Diseased, decline, decay



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Proposed Action	Category	Tree No.	DBH (Inches)	Tree Species	Dripline Radius (Ft.)	Health	Structure & Form	Comments on Condition
Remove	UNHEALTHY	42	6	Red alder	11	1	3	Crack/trunk decay
Remove	Significant	43	12	Red alder	16	1	1	
RETAIN	Landmark	45	38	Douglas-fir	25	1	1	
RETAIN	Landmark	46	33	Douglas-fir	24	1	1	
Remove	Landmark	47	33	Douglas-fir	21	1	1	
RETAIN	Significant	48	10	Douglas-fir	11	1	1	
Remove	Significant	49	29	Douglas-fir	17	2	1	Oozing resin on trunk
RETAIN	Landmark	50	32	Douglas-fir	22	1	1	
RETAIN	Landmark	51	32	Douglas-fir	21	2	1	Thin foliage
Remove	Significant	52	21	Douglas-fir	21	1	1	
Remove	Significant	53	29	Douglas-fir	22	1	1	
Remove	Significant	54	27	Bigleaf maple	26	1	2	Large pruning cuts near base of trunk
Remove	Significant	55	19	Douglas-fir	15	1	2	Asymmetric canopy
Remove	Landmark	56	32	Douglas-fir	19	1	1	
RETAIN	Significant	59	30	Douglas-fir	23	1	1	
RETAIN	Significant	60	27	Douglas-fir	17	1	1	
Remove	Landmark	61	31	Douglas-fir	19	1	1	
Remove	Significant	62	26	Douglas-fir	20	1	1	
RETAIN	Landmark	63	35	Douglas-fir	23	1	1	
RETAIN	Significant	64	20	Douglas-fir	16	1	1	
Remove	UNHEALTHY	66	22	Douglas-fir	16	3	1	Very thin foliage, suspect root rot infection
Remove	Significant	67	26	Douglas-fir	24	1	1	



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Proposed Action	Category	Tree No.	DBH (Inches)	Tree Species	Drip-line Radius (Ft.)	Health	Structure & Form	Comments on Condition
Remove	Significant	68	20	Douglas-fir	14	1	1	
Remove	Landmark	69	31	Douglas-fir	16	1	1	
Remove	Significant	70	29	Douglas-fir	23	1	1	
RETAIN	Significant	71	12	Douglas-fir	14	1	1	
RETAIN	Significant	72	25	Douglas-fir	23	1	1	
RETAIN	Significant	73	28	Douglas-fir	20	1	1	
RETAIN	Significant	74	28	Douglas-fir	21	1	1	
RETAIN	Significant	75	26	Douglas-fir	15	1	1	
RETAIN	Landmark	78	33	Douglas-fir	25	1	1	
Remove	Significant	79	29	Douglas-fir	20	1	1	
Remove	Significant	80	22	Douglas-fir	23	1	1	
Remove	Significant	81	30	Douglas-fir	21	1	1	
Remove	Landmark	82	31	Douglas-fir	21	1	1	
Remove	Significant	83	29	Western red-cedar	16	1	1	
Remove	Significant	84	28	Douglas-fir	15	1	1	
Remove	Landmark	85	32	Douglas-fir	17	1	1	
Remove	Landmark	86	33	Douglas-fir	17	1	1	
RETAIN	Significant	87	27	Douglas-fir	17	1	1	
Remove	Significant	91	6	Red alder	12	1	2	Asymmetric canopy
Remove	Significant	92	10	Red alder	15	1	1	
Remove	Significant	93	12	Red alder	18	1	1	
RETAIN	Significant	94	8	Scouler's willow	13	2	1	Diseased



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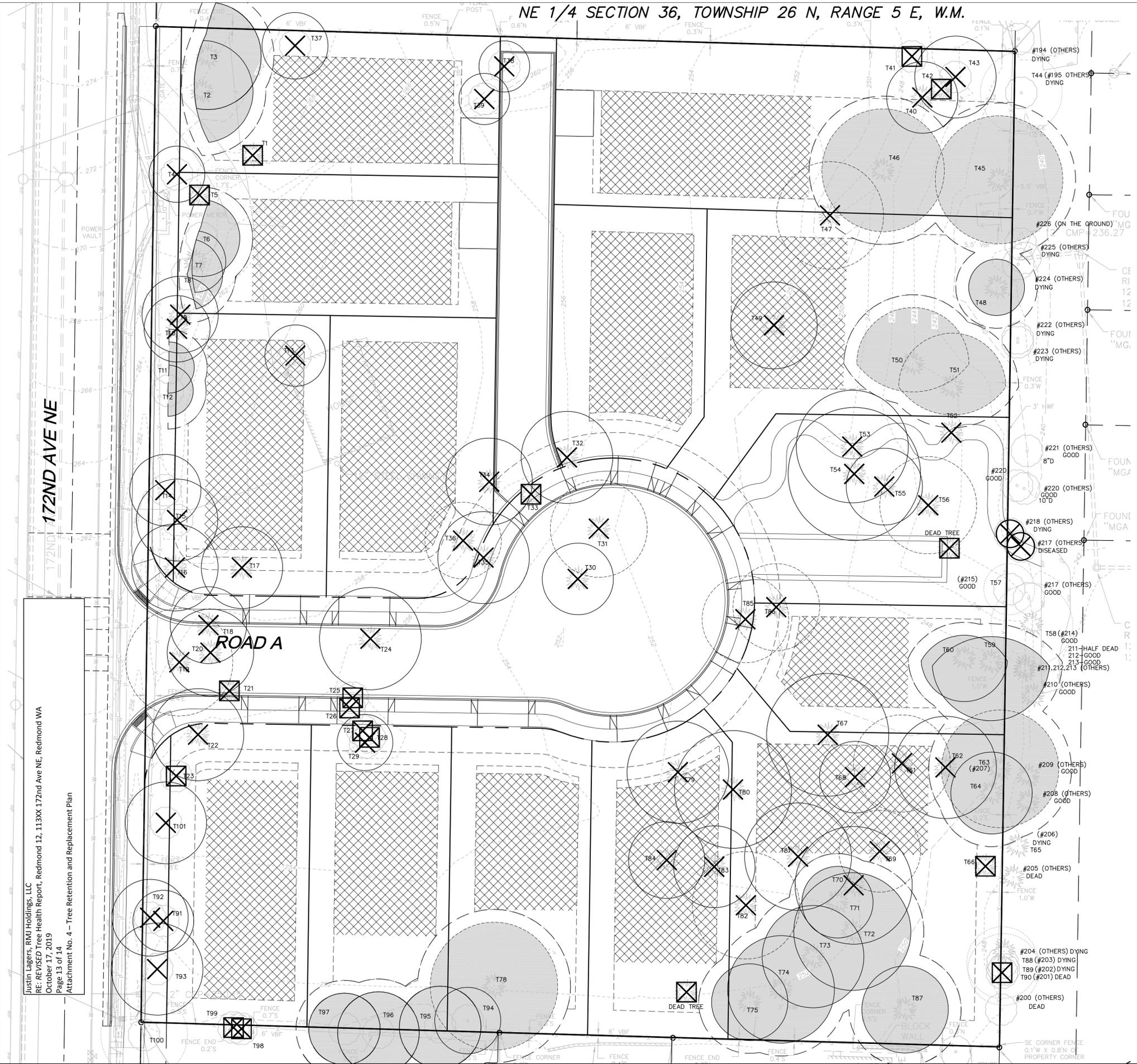
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Proposed Action	Category	Tree No.	DBH (Inches)	Tree Species	Dripline Radius (Ft.)	Health	Structure & Form	Comments on Condition
RETAIN	Significant	95	8	Red alder	16	1	2	Asymmetric canopy
RETAIN	Significant	96	9	Red alder	16	1	2	Asymmetric canopy
RETAIN	Significant	97	6	Red alder	14	1	2	Asymmetric canopy
Remove	Significant	101	13	Red alder	16			
Offsite trees								
	Significant	44	13"	Red alder	16'	1	1	
	Significant	57	10"	Red alder	10'	2	2	Diseased, decline, decay
	Significant	58	18"	Black cottonwood	16'	1	1	
	UNHEALTHY	65	19"	Douglas-fir	15'	3	2	Oozing resin on trunk, asymmetric, root rot suspect
	Significant	88	9"	Red alder	14'	1	1	
	Significant	89	8"	Red alder	14'	1	2	Asymmetric canopy, suppressed
	UNHEALTHY	90	7"	Red alder	11'	3	1	Diseased, decline, decay
	UNHEALTHY	98	10"	Scouler's willow	11'	3	3	Diseased, decline, decay
	UNHEALTHY	99	11"	Scouler's willow	14'	3	3	Diseased, decline, decay
	Significant	100	11"	Red alder	17'	1	1	



NE 1/4 SECTION 36, TOWNSHIP 26 N, RANGE 5 E, W.M.



**TREE RETENTION LEGEND:**

- DRIPLINE OF LANDMARK TREES TO BE RETAINED W/ 5' CONSTRUCTION BUFFER AS SHOWN
- DRIPLINE OF SIGNIFICANT TREES TO BE RETAINED W/ 5' CONSTRUCTION BUFFER AS SHOWN
- LANDMARK TREE TO BE REMOVED
- SIGNIFICANT TREE TO BE REMOVED
- HAZARDOUS ON-SITE TREES TO BE REMOVED
- HAZARDOUS OFF-SITE TREES TO BE REMOVED
- BUILDABLE LOT AREA



**D.R. STRONG CONSULTING ENGINEERS**  
ENGINEERS PLANNERS SURVEYORS  
620 - 7th AVENUE KIRKLAND, WA 98033  
O 425.827.3063 F 425.827.2423

**REDMOND 13**  
TREE PRESERVATION AND REPLACEMENT PLAN  
113XX 172ND AVENUE NE  
REDMOND, WASHINGTON  
PARCEL NO. 362605-9098

**RMJ HOLDINGS, LLC**  
9675 SE 36TH ST. #105  
MERCER ISLAND, WA 98040  
(206)-588-1147

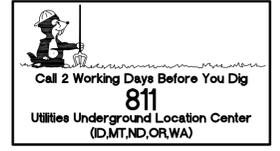
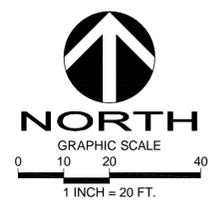


DATE	REVISION	30% PREP COMMENTS	60% PREP COMMENTS	90% PREP COMMENTS
10.22.18	APR	YLP	YLP	YLP
08.13.19				
10.07.19				

DRAFTED BY: GLB  
DESIGNED BY: YLP  
PROJECT ENGINEER: YLP  
DATE: 06.14.18  
PROJECT NO.: 17088

DRAWING: C3  
SHEET: 3 OF 18

Justin Lagares, RMJ Holdings, LLC  
RE: REVISED Tree Health Report, Redmond 12, 113XX 172nd Ave NE, Redmond WA  
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Attachment No. 4 - Tree Retention and Replacement Plan



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 Attachment No. 5 – Tree Retention and Replacement Notes

NE 1/4 SECTION 36, TOWNSHIP 26 N, RANGE 5 E, W.M.  
**REDMOND 13**



**D.R. STRONG**  
**CONSULTING ENGINEERS**  
 ENGINEERS PLANNERS SURVEYORS  
 620 - 7th AVENUE KIRKLAND, WA 98033  
 O 425.827.3063 F 425.827.2423

ON-SITE TREES								
CATEGORY	TREE #	DBH	SPECIES	DL RADIUS	HEALTH	STRUCTURE	VISIBLE DEFECTS	NOTES
UNHEALTHY	1	21	WESTERN RED-CEDAR	13	2	3	CRACK/TRUNK DECAY	
SIGNIFICANT	2	23	DOUGLAS-FIR	20	1	2	IVY	RETAINED
SIGNIFICANT	3	20	DOUGLAS-FIR	21	1	2	IVY	RETAINED
SIGNIFICANT	4	7	JAPANESE MAPLE	11	1	1		
UNHEALTHY	5	14	SCOTS PINE	9	2	3	THIN FOLIAGE, DOUBLE LEADER, SUPPRESSED, SAPSUCKER INJURY	
SIGNIFICANT	6	9	JAPANESE MAPLE	15	1	1		RETAINED
SIGNIFICANT	7	10	SCOTS PINE	12	2	2	THIN, SAPSUCKER	RETAINED
SIGNIFICANT	8	7	RED MAPLE	14	1	2	ASYMMETRIC CANOPY	RETAINED
SIGNIFICANT	9	16	DEODAR CEDAR	15	1	1		
SIGNIFICANT	10	14	SCOTS PINE	13	2	2	THIN, SUPPRESSED	
SIGNIFICANT	11	6	RED MAPLE	10	1	1		RETAINED
SIGNIFICANT	12	6	RED MAPLE	10	1	1		RETAINED
SIGNIFICANT	13	14	NORWAY SPRUCE	12	1	2	DOUBLE LEADER	
SIGNIFICANT	14	15	SCOULE'S WILLOW	14	2	2	DISEASED, DECLINE, DECAY	
SIGNIFICANT	15	12	BIGLEAF MAPLE	16	1	2	IVY	
SIGNIFICANT	16	28	DOUGLAS-FIR	17	1	1		
SIGNIFICANT	17	29	DOUGLAS-FIR	16	1	1		
SIGNIFICANT	18	21	DOUGLAS-FIR	15	1	2	ASYMMETRIC CANOPY	
LANDMARK	19	31	DOUGLAS-FIR	21	1	2	ASYMMETRIC CANOPY	
SIGNIFICANT	20	24	DOUGLAS-FIR	17	2	2	ASYMMETRIC CANOPY, TRUNK BURL	
UNHEALTHY	21	18	DOUGLAS-FIR	19	3	3	ASYMMETRIC CANOPY, TRUNK WOUND, CANKER	
SIGNIFICANT	22	28	DOUGLAS-FIR	18	1	2	ASYMMETRIC CANOPY	
UNHEALTHY	23	6	KWANZAN FLOWERING CHERRY	18	3	3	TORTRIX INSECT, ASYMMETRIC, DECLINE, ROOTPLATE FAILURE	
SIGNIFICANT	24	28	DOUGLAS-FIR	20	1	1		
UNHEALTHY	25	6	RED ALDER	7	1	3	TRUNK DECAY	
UNHEALTHY	26	7	RED ALDER	8	2	3	CANKER, TRUNK DECAY	
UNHEALTHY	27	7	RED ALDER	8	2	3	CANKER, TRUNK DECAY	
UNHEALTHY	28	7	RED ALDER	6	2	3	CANKER, TRUNK DECAY	
SIGNIFICANT	29	10	RED ALDER	11	1	2	SWEEP, DOGLEG	
SIGNIFICANT	30	26	DOUGLAS-FIR	14	1	2	ASYMMETRIC CANOPY	
LANDMARK	31	33	DOUGLAS-FIR	19	2	1	THIN FOLIAGE	
SIGNIFICANT	32	25	DOUGLAS-FIR	18	2	1	THIN FOLIAGE	
UNHEALTHY	33	24	DOUGLAS-FIR	15	1	3	FIRE INJURY ON TRUNK	
SIGNIFICANT	34	26	DOUGLAS-FIR	17	1	1		
SIGNIFICANT	35	28	DOUGLAS-FIR	18	1	1		
LANDMARK	36	36	WESTERN RED-CEDAR	15	1	1		
SIGNIFICANT	37	7	JAPANESE MAPLE	13	1	2	IVY	
SIGNIFICANT	38	7	BITTER CHERRY	10	1	1		
SIGNIFICANT	39	6	BITTER CHERRY	10	1	1		
SIGNIFICANT	40	9	RED ALDER	14	1	1		
UNHEALTHY	41	10	RED ALDER	16	3	3	DISEASED, DECLINE, DECAY	
UNHEALTHY	42	6	RED ALDER	11	1	3	CRACK/TRUNK DECAY	
SIGNIFICANT	43	12	RED ALDER	16	1	1		
LANDMARK	45	38	DOUGLAS-FIR	25	1	1		RETAINED
LANDMARK	46	33	DOUGLAS-FIR	24	1	1		RETAINED
LANDMARK	47	33	DOUGLAS-FIR	21	1	1		
SIGNIFICANT	48	10	DOUGLAS-FIR	11	1	1		RETAINED
SIGNIFICANT	49	29	DOUGLAS-FIR	17	2	1	OOZING RESIN ON TRUNK	
LANDMARK	50	32	DOUGLAS-FIR	22	1	1		RETAINED
LANDMARK	51	32	DOUGLAS-FIR	21	2	1	THIN FOLIAGE	RETAINED
SIGNIFICANT	52	21	DOUGLAS-FIR	21	1	1		
SIGNIFICANT	53	29	DOUGLAS-FIR	22	1	1		
SIGNIFICANT	54	27	BIGLEAF MAPLE	26	1	2	LARGE PRUNING CUTS NEAR BASE OF TRUNK	
SIGNIFICANT	55	19	DOUGLAS-FIR	15	1	2	ASYMMETRIC CANOPY	
LANDMARK	56	32	DOUGLAS-FIR	19	1	1		
SIGNIFICANT	59	30	DOUGLAS-FIR	23	1	1		RETAINED
SIGNIFICANT	60	27	DOUGLAS-FIR	17	1	1		RETAINED
LANDMARK	61	31	DOUGLAS-FIR	19	1	1		
SIGNIFICANT	62	26	DOUGLAS-FIR	20	1	1		
LANDMARK	63	35	DOUGLAS-FIR	23	1	1		RETAINED
SIGNIFICANT	64	20	DOUGLAS-FIR	16	1	1		RETAINED
UNHEALTHY	66	22	DOUGLAS-FIR	16	3	1	VERY THIN FOLIAGE, SUSPECT ROOT ROT INFECTION	
SIGNIFICANT	67	26	DOUGLAS-FIR	24	1	1		
SIGNIFICANT	68	20	DOUGLAS-FIR	14	1	1		
LANDMARK	69	31	DOUGLAS-FIR	16	1	1		
SIGNIFICANT	70	29	DOUGLAS-FIR	23	1	1		
SIGNIFICANT	71	12	DOUGLAS-FIR	14	1	1		RETAINED
SIGNIFICANT	72	25	DOUGLAS-FIR	23	1	1		RETAINED
SIGNIFICANT	73	28	DOUGLAS-FIR	20	1	1		RETAINED
SIGNIFICANT	74	28	DOUGLAS-FIR	21	1	1		RETAINED
SIGNIFICANT	75	26	DOUGLAS-FIR	15	1	1		RETAINED
LANDMARK	78	33	DOUGLAS-FIR	25	1	1		RETAINED
SIGNIFICANT	79	29	DOUGLAS-FIR	20	1	1		
SIGNIFICANT	80	22	DOUGLAS-FIR	23	1	1		

ON-SITE TREES CONTINUED								
CATEGORY	TREE #	DBH	SPECIES	DL RADIUS	HEALTH	STRUCTURE	VISIBLE DEFECTS	NOTES
SIGNIFICANT	81	30	DOUGLAS-FIR	21	1	1		
LANDMARK	82	31	DOUGLAS-FIR	21	1	1		
SIGNIFICANT	83	29	WESTERN RED-CEDAR	16	1	1		
SIGNIFICANT	84	28	DOUGLAS-FIR	15	1	1		
LANDMARK	85	32	DOUGLAS-FIR	17	1	1		
LANDMARK	86	33	DOUGLAS-FIR	17	1	1		
SIGNIFICANT	87	27	DOUGLAS-FIR	17	1	1		RETAINED
SIGNIFICANT	91	6	RED ALDER	12	1	2	ASYMMETRIC CANOPY	
SIGNIFICANT	92	10	RED ALDER	15	1	1		
SIGNIFICANT	93	12	RED ALDER	18	1	1		
SIGNIFICANT	94	8	SCOULE'S WILLOW	13	2	1	DISEASED	RETAINED
SIGNIFICANT	95	8	RED ALDER	16	1	2	ASYMMETRIC CANOPY	RETAINED
SIGNIFICANT	96	9	RED ALDER	16	1	2	ASYMMETRIC CANOPY	RETAINED
SIGNIFICANT	97	6	RED ALDER	14	1	2	ASYMMETRIC CANOPY	RETAINED
SIGNIFICANT	101	13	ALDER	16				

OFF-SITE TREES								
CATEGORY	TREE #	DBH	SPECIES	DL RADIUS	HEALTH	STRUCTURE	VISIBLE DEFECTS	NOTES
SIGNIFICANT	44	13	RED ALDER	16	1	1		OFFSITE
SIGNIFICANT	57	10	RED ALDER	10	2	2	DISEASED, DECLINE, DECAY	OFFSITE
SIGNIFICANT	58	18	BLACK COTTONWOOD	16	1	1		OFFSITE
UNHEALTHY	65	19	DOUGLAS-FIR	15	3	2	OOZING RESIN ON TRUNK, ASYMMETRIC, ROOT ROT SUSPECT	OFFSITE
SIGNIFICANT	88	9	RED ALDER	14	1	1		OFFSITE
SIGNIFICANT	89	8	RED ALDER	14	1	2	ASYMMETRIC CANOPY, SUPPRESSED	OFFSITE
UNHEALTHY	90	7	RED ALDER	11	3	1	DISEASED, DECLINE, DECAY	OFFSITE
UNHEALTHY	98	10	SCOULE'S WILLOW	11	3	3	DISEASED, DECLINE, DECAY	OFFSITE
UNHEALTHY	99	11	SCOULE'S WILLOW	14	3	3	DISEASED, DECLINE, DECAY	OFFSITE
SIGNIFICANT	100	11	RED ALDER	17	1	1		OFFSITE

**TREE NOTES:**

- TREE INFORMATION PER ARBORIST DATED JUNE 4, 2018 BY GREENFOREST INC.
- RZC 21.72.060(C)3 "SIDEWALKS AND UTILITIES MAY BE LOCATED WITHIN THE DRIP LINE OF A PROTECTED TREE, PROVIDED THAT CONSTRUCTION METHODS AND MATERIALS USED WILL RESULT IN MINIMAL DISRUPTION OF THE TREE'S ROOTS, AND THAT ADDITIONAL MEASURES FOR TREE PROTECTION ARE PROPOSED AND APPROVED WHICH WILL ENSURE THE LONG-TERM VIABILITY OF THE TREE."
- ALL SIDEWALK WORK ALONG 172ND AVE NE WITHIN THE DRIPLINE AND BUFFER OF RETAINED TREES SHALL COMPLY WITH THE ADDITIONAL TREE PROTECTION MEASURES AS REQUIRED BY THE PROJECT ARBORIST FOR THE LONG-TERM VIABILITY OF RETAINED TREES.

**TREE CALCULATIONS:**

TOTAL SIGNIFICANT TREES = 77  
 35% MIN. TREE RETENTION = 77 x 0.35 = 27  
 TOTAL TREES SAVED = 27  
 77-27 SAVED TREES = 50 TREES REMOVED  
 50 TREES-10 LANDMARK TREES = 40 SIGNIFICANT TREES  
 SIGNIFICANT TREES TO BE REPLACED AT 1:1 RATIO  
 10 LANDMARK TREES ARE TO BE REPLACED AT A 3:1 RATIO = 30  
 TOTAL REPLACEMENT TREES REQUIRED = 40 + 30 = 70

Tree Type	Removed	Impacted	Retained	Total
Landmark (>30" DBH)	10 13.0%	0 0.0%	6 7.8%	16 20.8%
Significant (6" - 30")	40 51.9%	0 0.0%	21 27.3%	61 79.2%
Totals	50 64.9%	0 0.0%	27 35.1%	77 100.0%
Replacement Trees	3:1 Ratio for 10 Landmark Trees = 30 1:1 Ratio for 40 Significant Trees = 40			70

REDMOND 13

TREE PRESERVATION AND REPLACEMENT NOTES  
 113XX 172ND AVENUE NE  
 REDMOND, WASHINGTON  
 PARCEL NO. 362605-9098

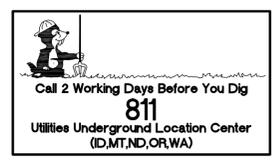
RMJ HOLDINGS, LLC

9675 SE 36TH ST. #105  
 MERCER ISLAND, WA 98040  
 (206)-588-1147



DATE	REVISION	30% PREP COMMENTS	60% PREP COMMENTS	90% PREP COMMENTS
10.22.18				
08.13.19				
10.07.19				

DRAFTED BY: GLB  
 DESIGNED BY: YLP  
 PROJECT ENGINEER: YLP  
 DATE: 06.14.18  
 PROJECT NO.: 17088



DRAWING: C4  
 SHEET: 4 OF 18