



Todd Prager & Associates LLC

MEMORANDUM

DATE: June 13, 2024

TO: Gerry Engler (Tickle Creek Properties LLC)

FROM: Todd Prager, RCA #597, ISA Board Certified Master Arborist WE-6723B

RE: Tree 13.1, 15, and 194 Removal at Tickle Creek Development

This memorandum is to document the removals of tree 13.1, a 14-inch DBH red alder (*Alnus rubra*), tree 15, a 28-inch DBH Douglas-fir (*Pseudotsuga menziesii*), and tree 194, a 12-inch DBH western redcedar (*Thuja plicata*) at the Tickle Creek Development in Sandy, Oregon. Attachment 1 is a site map with the highlighted tree locations. Attachment 2 is the complete tree inventory for the site.

Tree 13.1 was previously incorrectly surveyed and was recently found to be only four feet from the lot 20 house foundation. This tree is recommended for removal due to root conflicts with foundation excavation. It will be replaced with adjacent tree 13, a 14-inch DBH sweet cherry (*Prunus avium*) which is in good health condition and will serve as a new retention tree.

Trees 15 and 194 failed during the January 2024 ice and windstorm. These trees will be replaced by four small diameter Douglas-firs to the north as shown on the site map in Attachment 1. All four trees are in good health condition. Photos of the replacement Douglas-fir trees are provided in Attachment 4.

Please contact me if you have questions, concerns, or need any additional information.

Sincerely,

Todd Prager

ASCA Registered Consulting Arborist #597

ISA Board Certified Master Arborist, WE-6723B

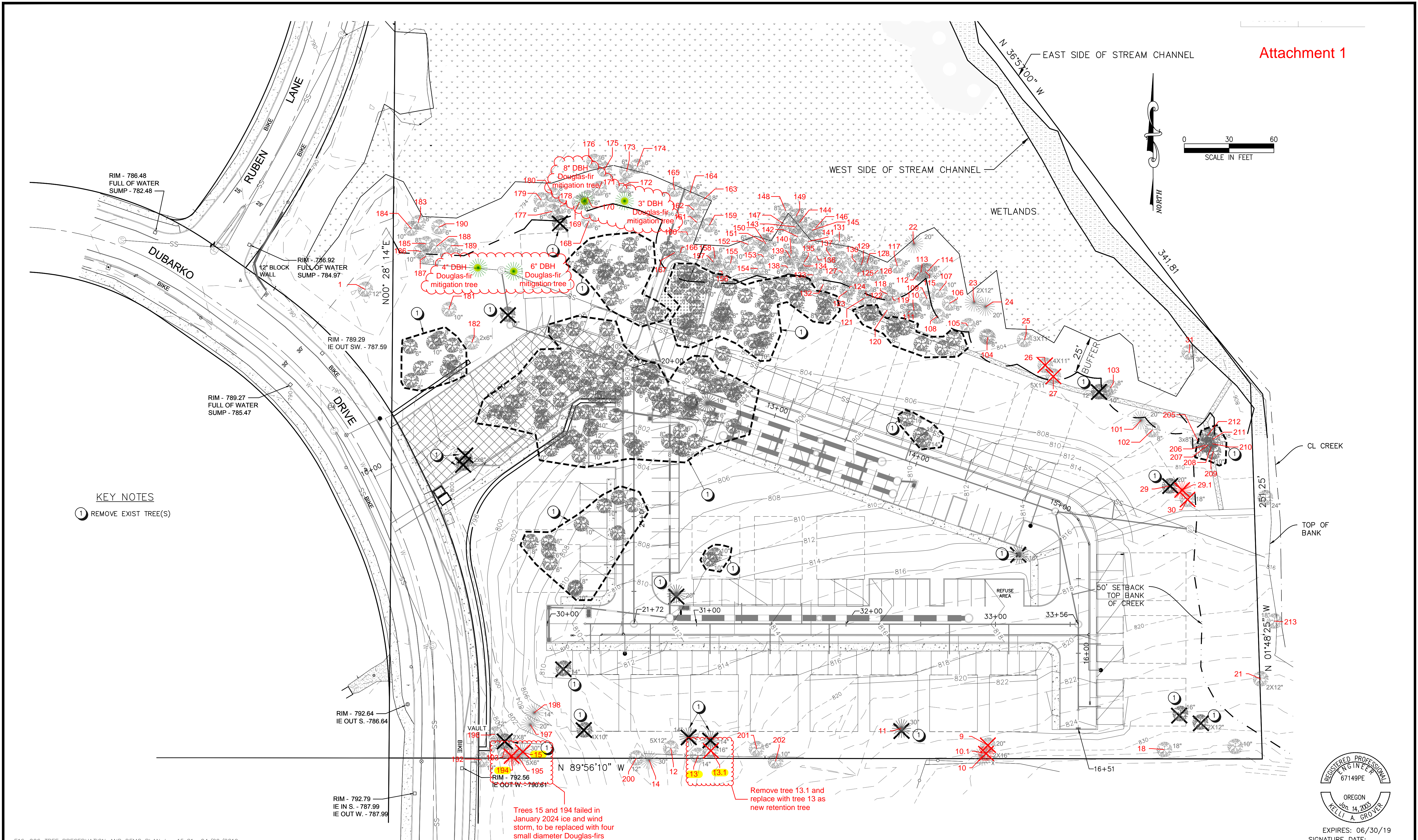
ISA Qualified Tree Risk Assessor

ASCA Tree & Plant Appraisal Qualified

AICP, American Planning Association

Attachments: Attachment 1 - Site Map with Tree Locations
Attachment 2 - Tree Inventory
Attachment 3 - Replacement Douglas-fir Photos

Attachment 1



DATE:	NO.	REVISION

DRAWN:	DESIGNED:	CHECKED:
SCALE: AS SHOWN	DATE: OCTOBER 2018	
PROJECT NO. E16-006		

FDG
 Firwood Design Group, LLC
 SURVEYING + ENGINEERING + PLANNING

359 EAST HISTORIC COLUMBIA RIVER HIGHWAY
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TICKLE CREEK PROPERTIES, LLC
 GERRY ENGLER: gerry.e@buildernw.com
 PO BOX 873580, VANCOUVER, WA 98687

TREE DEMO PLAN
TICKLE CREEK APARTMENTS
DUBARKO DRIVE, SANDY, OREGON

3
9



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Attachment 2

Tree No	Common Name	Scientific Name	DBH ¹	Single DBH ²	Condition ³	Structure ³	Min. Root Protection Zone ⁴	Comments
1	Scoulers willow	<i>Salix scouleriana</i>	12	12	fair	fair	6	one sided, short lived species
9	sweet cherry	<i>Prunus avium</i>	20	20	good	fair	10	multiple leaders at 7' with included bark, nuisance species
10	Douglas-fir	<i>Pseudotsuga menziesii</i>	19	19	good	fair	9.5	one sided
10.1	bigleaf maple	<i>Acer macrophyllum</i>	15	15	good	fair	7.5	one sided, added to site plan in approximate location by arborist
11	grand fir	<i>Abies grandis</i>	31	31	fair	fair	15.5	lost top with multiple new leaders at 35', moderate branch dieback
12	sweet cherry	<i>Prunus avium</i>	12,12, 12,8,6, 6	23	poor	poor	11.5	multiple leaders at ground, heartrot in stem, nuisance species
13	sweet cherry	<i>Prunus avium</i>	14	14	good	fair	7	one sided, nuisance species
13.1	red alder	<i>Alnus rubra</i>	14	14	good	fair	7	moderately one sided, short lived species, added to site plan in approximate location by arborist
14	Douglas-fir	<i>Pseudotsuga menziesii</i>	32	32	good	fair	16	codominant at 40'
15	Douglas-fir	<i>Pseudotsuga menziesii</i>	28	28	good	fair	14	50% live crown ratio
18	sweet cherry	<i>Prunus avium</i>	17	17	good	fair	8.5	multiple leaders, nuisance species
21	bigleaf maple	<i>Acer macrophyllum</i>	13	13	good	fair	6.5	multiple leaders at top of crown
22	western red cedar	<i>Thuja plicata</i>	26	26	good	fair	13	sweep in lower trunk, codominant at 3'
23	western red cedar	<i>Thuja plicata</i>	23	23	good	fair	11.5	multiple leaders at 4' with decay pocket
24	western red cedar	<i>Thuja plicata</i>	23	23	good	good	11.5	
25	red alder	<i>Alnus rubra</i>	10,9,8, 7	17	good	fair	8.5	multiple leaders at ground, short lived species
26	bigleaf maple	<i>Acer macrophyllum</i>	32,12, 6,6	35	good	fair	17.5	multiple leaders at ground



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27	bigleaf maple	<i>Acer macrophyllum</i>	19,13, 12,12, 12,12, 12,6,5, 5,3	35	fair	fair	17.5	multiple leaders at ground with three dead or decayed stems
29	red alder	<i>Alnus rubra</i>	18	18	good	fair	9	one sided, short lived species
29.1	western red cedar	<i>Thuja plicata</i>	12	12	good	fair	6	one sided, added to site plan in approximate location by arborist
30	red alder	<i>Alnus rubra</i>	20	20	good	fair	10	multiple leaders, short lived species
31	black cottonwood	<i>Populus trichocarpa</i>	28	28	good	fair	14	codominant at top of crown
101	western hemlock	<i>Tsuga heterophylla</i>	24	24	fair	fair	12	thin crown, exposed root crown from growing on nurse stump, previously tree 28
102	Scoulers willow	<i>Salix scouleriana</i>	7	7	fair	fair	3.5	suppressed
103	Scoulers willow	<i>Salix scouleriana</i>	8	8	fair	fair	4	moderately suppressed
104	red alder	<i>Alnus rubra</i>	8	8	good	poor	4	33% live crown ratio (lcr)
105	red alder	<i>Alnus rubra</i>	7	7	fair	poor	3.5	33% lcr, wounds at lower trunk
106	red alder	<i>Alnus rubra</i>	6	6	fair	poor	3	25% lcr, wounds at lower trunk
107	red alder	<i>Alnus rubra</i>	9	9	good	fair	4.5	60% lcr
108	red alder	<i>Alnus rubra</i>	9	9	good	poor	4.5	25% lcr
109	red alder	<i>Alnus rubra</i>	7	7	good	poor	3.5	15% lcr
110	red alder	<i>Alnus rubra</i>	7	7	good	poor	3.5	15% lcr
111	red alder	<i>Alnus rubra</i>	5	5	good	poor	2.5	25% lcr
112	red alder	<i>Alnus rubra</i>	6	6	good	fair	3	50% lcr
113	red alder	<i>Alnus rubra</i>	5	5	fair	poor	2.5	15% lcr, epicormic growth at lower trunk
114	red alder	<i>Alnus rubra</i>	7	7	good	poor	3.5	25% lcr
115	red alder	<i>Alnus rubra</i>	7	7	good	fair	3.5	33% lcr
117	red alder	<i>Alnus rubra</i>	8	8	good	poor	4	33% lcr
118	red alder	<i>Alnus rubra</i>	7	7	good	poor	3.5	25% lcr
119	red alder	<i>Alnus rubra</i>	6	6	good	poor	3	15% lcr



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Tree No	Common Name	Scientific Name	DBH ¹	Single DBH ²	Condition ³	Structure ³	Min. Root Protection Zone ⁴	Comments
120	sweet cherry	<i>Prunus avium</i>	9,8	12	fair	fair	6	codominant at ground level, nuisance species
121	red alder	<i>Alnus rubra</i>	10	10	good	poor	5	33% lcr
122	red alder	<i>Alnus rubra</i>	8	8	good	poor	4	25% lcr
123	red alder	<i>Alnus rubra</i>	6	6	good	poor	3	25% lcr
124	red alder	<i>Alnus rubra</i>	8	8	good	poor	4	33% lcr
125	red alder	<i>Alnus rubra</i>	7	7	fair	poor	3.5	25% lcr
126	red alder	<i>Alnus rubra</i>	6	6	good	poor	3	10% lcr
127	red alder	<i>Alnus rubra</i>	7	7	good	poor	3.5	25% lcr
128	red alder	<i>Alnus rubra</i>	7	7	good	poor	3.5	25% lcr
129	red alder	<i>Alnus rubra</i>	6	6	good	poor	3	33% lcr
130	red alder	<i>Alnus rubra</i>	5	5	good	poor	2.5	33% lcr
131	red alder	<i>Alnus rubra</i>	8	8	good	poor	4	33% lcr
132	red alder	<i>Alnus rubra</i>	7,6	9	good	poor	4.5	33% lcr, codominant at ground level
133	red alder	<i>Alnus rubra</i>	8	8	good	poor	4	25% lcr
134	red alder	<i>Alnus rubra</i>	5	5	fair	poor	2.5	15% lcr
135	red alder	<i>Alnus rubra</i>	7	7	good	poor	3.5	33% lcr
136	red alder	<i>Alnus rubra</i>	5	5	good	poor	2.5	10% lcr
137	red alder	<i>Alnus rubra</i>	5	5	good	poor	2.5	25% lcr
138	red alder	<i>Alnus rubra</i>	6	6	good	poor	3	33% lcr
139	red alder	<i>Alnus rubra</i>	8	8	good	poor	4	33% lcr
140	red alder	<i>Alnus rubra</i>	5	5	good	poor	2.5	25% lcr
141	red alder	<i>Alnus rubra</i>	8	8	good	poor	4	25% lcr
142	red alder	<i>Alnus rubra</i>	6	6	good	poor	3	25% lcr



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143	red alder	<i>Alnus rubra</i>	5	5	good	poor	2.5	10% lcr
144	red alder	<i>Alnus rubra</i>	7	7	good	poor	3.5	33% lcr
145	red alder	<i>Alnus rubra</i>	6	6	good	poor	3	33% lcr
146	red alder	<i>Alnus rubra</i>	5	5	good	poor	2.5	25% lcr
147	red alder	<i>Alnus rubra</i>	7	7	good	poor	3.5	33% lcr
148	red alder	<i>Alnus rubra</i>	7	7	good	poor	3.5	33% lcr
149	red alder	<i>Alnus rubra</i>	8	8	good	fair	4	40% lcr
150	red alder	<i>Alnus rubra</i>	5	5	good	poor	2.5	10% lcr
151	red alder	<i>Alnus rubra</i>	5	5	good	poor	2.5	25% lcr
152	red alder	<i>Alnus rubra</i>	5	5	fair	poor	2.5	25% lcr
153	red alder	<i>Alnus rubra</i>	8	8	good	poor	4	33% lcr
154	red alder	<i>Alnus rubra</i>	7	7	poor	poor	3.5	25% lcr, top dieback
155	black cottonwood	<i>Populus trichocarpa</i>	9	9	good	poor	4.5	33% lcr
156	red alder	<i>Alnus rubra</i>	7	7	good	poor	3.5	25% lcr
157	red alder	<i>Alnus rubra</i>	5	5	good	poor	2.5	10% lcr
158	red alder	<i>Alnus rubra</i>	6	6	good	poor	3	25% lcr
159	red alder	<i>Alnus rubra</i>	6	6	good	poor	3	25% lcr
160	red alder	<i>Alnus rubra</i>	6	6	good	poor	3	25% lcr
161	red alder	<i>Alnus rubra</i>	6	6	good	poor	3	25% lcr
162	red alder	<i>Alnus rubra</i>	6	6	good	poor	3	25% lcr
163	red alder	<i>Alnus rubra</i>	7	7	fair	poor	3.5	25% lcr
164	red alder	<i>Alnus rubra</i>	6	6	fair	poor	3	33% lcr, epicormic growth
165	red alder	<i>Alnus rubra</i>	5	5	fair	poor	2.5	33% lcr, epicormic growth



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166	red alder	<i>Alnus rubra</i>	6	6	good	poor	3	25% lcr
167	red alder	<i>Alnus rubra</i>	8	8	good	poor	4	33% lcr
168	red alder	<i>Alnus rubra</i>	6	6	poor	poor	3	branch dieback, thin crown
169	red alder	<i>Alnus rubra</i>	5	5	poor	poor	2.5	suppressed
170	red alder	<i>Alnus rubra</i>	6	6	fair	fair	3	one sided, thin crown
171	red alder	<i>Alnus rubra</i>	5	5	good	fair	2.5	50% lcr
172	red alder	<i>Alnus rubra</i>	7	7	poor	poor	3.5	lost top
173	red alder	<i>Alnus rubra</i>	6	6	good	fair	3	one sided
174	red alder	<i>Alnus rubra</i>	5	5	good	poor	2.5	33% lcr
175	red alder	<i>Alnus rubra</i>	5	5	good	good	2.5	
176	red alder	<i>Alnus rubra</i>	6	6	good	good	3	
177	red alder	<i>Alnus rubra</i>	6	6	good	good	3	
178	red alder	<i>Alnus rubra</i>	8	8	good	fair	4	codominant at 3'
179	red alder	<i>Alnus rubra</i>	5	5	very poor	very poor	2.5	dead
180	red alder	<i>Alnus rubra</i>	7	7	fair	fair	3.5	one sided, epicormic growth
181	black cottonwood	<i>Populus trichocarpa</i>	10	10	good	good	5	
182	red alder	<i>Alnus rubra</i>	8	8	fair	fair	4	multiple leaders at 3'
183	red alder	<i>Alnus rubra</i>	8	8	good	fair	4	one sided
184	red alder	<i>Alnus rubra</i>	10	10	good	fair	5	one sided
185	red alder	<i>Alnus rubra</i>	8	8	fair	fair	4	one sided
186	red alder	<i>Alnus rubra</i>	7	7	good	fair	3.5	one sided
187	red alder	<i>Alnus rubra</i>	10	10	good	fair	5	one sided
188	red alder	<i>Alnus rubra</i>	5	5	good	fair	2.5	one sided



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Tree No	Common Name	Scientific Name	DBH ¹	Single DBH ²	Condition ³	Structure ³	Min. Root Protection Zone ⁴	Comments
189	red alder	<i>Alnus rubra</i>	6	6	good	fair	3	one sided
190	red alder	<i>Alnus rubra</i>	6	6	good	fair	3	one sided
192	bigleaf maple	<i>Acer macrophyllum</i>	10	10	good	fair	5	one sided, pistol butt
193	sweet cherry	<i>Prunus avium</i>	8	8	fair	fair	4	overtopped by adjacent trees, nuisance species
194	western red cedar	<i>Thuja plicata</i>	7,6,6,5	12	good	fair	6	one sided, multiple leaders at ground level, added to site map in approximate location by arborist
195	western red cedar	<i>Thuja plicata</i>	6,5	7	good	fair	3.5	one sided, codominant at 1', leader previously removed at ground level
196	sweet cherry	<i>Prunus avium</i>	10	10	fair	fair	5	one sided, nuisance species
197	red alder	<i>Alnus rubra</i>	8	8	good	poor	4	25% lcr
198	red alder	<i>Alnus rubra</i>	13	13	good	fair	6.5	moderately one sided, 50% lcr
200	sweet cherry	<i>Prunus avium</i>	12	12	good	fair	6	codominant at 10', one sided, overtopped by adjacent trees, not tagged because property line tree, nuisance species
201	casara	<i>Rhamnus purshiana</i>	6	6	good	fair	3	multiple leaders at 8'
202	English holly	<i>Ilex aquifolium</i>	10	10	good	fair	5	multiple leaders, not tagged because property line tree, nuisance species
205	red alder	<i>Alnus rubra</i>	9	9	good	poor	4.5	25% lcr
206	red alder	<i>Alnus rubra</i>	8	8	good	poor	4	25% lcr
207	red alder	<i>Alnus rubra</i>	6	6	very poor	very poor	3	dead, 20' snag
208	red alder	<i>Alnus rubra</i>	8	8	good	poor	4	33% lcr
209	red alder	<i>Alnus rubra</i>	6	6	good	poor	3	25% lcr



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Tree No	Common Name	Scientific Name	DBH ¹	Single DBH ²	Condition ³	Structure ³	Min. Root Protection Zone ⁴	Comments
210	red alder	<i>Alnus rubra</i>	9	9	poor	poor	4.5	25% lcr, top dieback
211	red alder	<i>Alnus rubra</i>	7	7	very poor	very poor	3.5	dead, 40' tall snag
212	red alder	<i>Alnus rubra</i>	7	7	good	poor	3.5	10% lcr
213	red alder	<i>Alnus rubra</i>	11	11	good	fair	5.5	40% lcr, offsite

¹**DBH** is the trunk diameter in inches.

²**Single DBH** is the DBH of multistem trees converted into a single DBH according to the following formula: square root of the sum of the squared DBH of each stem at 4.5 feet above ground level.

³**Condition** and **Structure** ratings range from very poor, poor, fair, to good.

⁴**Miniumum Root Protection Zone** is the minimum setback to be protected from the trunk of a tree in feet when impacted on one side of the root system.

Attachment 3 Replacement Douglas-fir Photos



6-inch DBH Douglas-fir



4-inch DBH Douglas-fir



8-inch DBH Douglas-fir



3-inch DBH Douglas-fir