

# **Urban Forestry Services**

BARTLETT CONSULTING

Divisions of The F.A. Bartlett Tree Expert Company

Title:	3003 77 <sup>th</sup> Ave Project – Mercer South Park Project Full Tree Inventory and Health Assessment Level 2 Basic Tree Risk Assessment 3003 77 <sup>th</sup> Ave SE Mercer Island, Washington
Prepared for:	Ryan Companies US Inc. Attn: Marc Gearhart 110 110 Ave NE Bellevue, Washington 98004
Prepared by:	Urban Forestry Services   Bartlett Consulting Miles Becker ISA Certified Arborist <sup>®</sup> #PN-7808A ISA Tree Risk Assessment Qualified
Reviewed By:	Jim Barborinas, Principal
Contents:	Summary Introduction Findings Recommendations Description of Assessment Levels Tree Assessment Site Plan Tree Assessment Matrix Critical Root Zone Explanation

Date: July 15, 2020; updated July 24, 2020

#### Summary

Another one-hundred sixty (160) trees on the old Farmer's Insurance building property at 3003 77<sup>th</sup> Avenue SE in Mercer Island were inventoried and their health assessed. All but two (2) of the assessed trees are viable and can be retained. Of the inventoried trees, seventy-six (76) are considered significant trees in the city. The building renovations propose to remove four (4) trees on the property that were assessed in an earlier arborist report on May 13, 2020. Based on this inventory, 94.5 percent of the viable significant trees on the property can be retained. Tree protection measures are not necessary for the retained trees whose critical root zones are outside of the areas with construction activities.

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#### Introduction

The commercial office building at 3003 77<sup>th</sup> Avenue SE near the corner of SE 32<sup>nd</sup> Street near downtown Mercer Island is planned to be renovated. The removal of four trees on the property is proposed due to severe grade changes along the east building façade. The trees requested for removal were assessed in an earlier report on May 13, 2020. That earlier report also included a row of six (6) small trees in the adjacent right of way that will need tree protection during construction in order to be retained.

For projects of this size, the City of Mercer Island requires an assessment of all trees on the subject property when significant trees will be removed (MICC 19.10.10(C)(1)). This report includes an inventory and health assessment of all trees on the subject property. Trees with a minimum trunk diameter of 10 inches measured at 4.5 feet above grade (DBH) were assessed in addition to smaller trees which contributed a substantial portion of canopy cover to the property.

I was on-site on June 23 and June 24, 2020, to inspect the trees in a Level 2 Basic Tree Risk Assessment. The time frame for this Level 2 Basic Tree Risk Assessment is three years from the date of inspection.

#### Findings

A Tree Assessment Matrix with photos and detailed information on each of the one-hundred sixty (160) trees is attached. A Tree Assessment Site Plan is also attached that indicates the approximate location of each of the trees.

Of the one-hundred sixty (160) trees on the property proposed for retention, the most common species with seventy-one (71) individuals is Armstrong maple (*Acer x freemanii* 'Armstrong'), a columnar cultivar planted in the parking garage area. Norway maple (*Acer platanoides*) is also common with thirty-seven (37) trees. There are ten (10) trees or less of red alder (*Alnus rubra*), flowering plum (*Prunus species*), Douglas fir (*Pseudotsuga menziesii*), Western red cedar (*Thuja plicata*), Japanese snowbell (*Styrax japonicus*), red maple (*Acer rubrum*), bitter cherry (*Prunus emarginata*), Southern magnolia (*Magnolia grandiflora*), Pacific madrone (*Arbutus menziesii*), Scouler's willow (*Salix scouleriana*), big leaf maple (*Acer macrophyllum*), and black locust (*Robinia pseudoacacia*).

Approximately 90 percent of the assessed trees are between fair to good condition. Most of the trees in poor health are planted in locations with high visibility. The plum trees in the planting areas of the plaza north of the building had consistent health issues, such as significant crown dieback and decay in the primary stems. The plums in poor condition may continue to decline in the long-term. Some of the Armstrong maple trees in the parking garage also have dieback in the crown and they showed a wide range in vigor. The health of the parking area trees could be improved with better soil and water management. Another area of the property with trees in poor condition was the native vegetation south of the building. English ivy (*Hedera helix*) is abundant and severely encroaching on the crown of some of the taller trees. Controlling the ivy may not save all the trees in the natural area, but it will prevent the decline of the trees in better health. Only two trees, #233, a Pacific madrone, and #336, a Japanese snowbell, are almost dead and non-viable.

There are eighty-four (84) trees in this report that have a DBH less than 10 inches. They are primarily the Armstrong maple trees in the parking garage and some of the Norway maple trees on the berm along 77<sup>th</sup> Ave SE. There are only five (5) trees larger than a 20-inch DBH, the largest of which is a bitter cherry, tree #341, at 28.6 inches. The tallest trees on the property are generally native species near the southwest corner and the northwest corner.

The critical root zones (CRZ) of the one-hundred sixty (160) retained trees on the subject property do not overlap with the grading outside the east building façade where the four trees are proposed for removal. At this time, all the described construction activities are outside the CRZ of retained trees, which is used to determine the limits of allowable disturbance in this report. Changes to the building renovation plans or expansion of construction activities into the CRZ of retained trees will require additional review and potentially a new tree protection plan.

#### Recommendations

Retain the one-hundred fifty-eight (158) viable trees on the subject property. The percentage of retained significant trees is well above the minimum 30 percent required for development (MICC 19.10.10(C)(2)). Based on the description of the planned building renovations, the construction activities will be outside the CRZ of retained trees. No tree protection plan is required for the trees on the property at this time.

Justification for the removal of the four (4) trees, recommendations for the number of replacement trees, and tree protection for the retained trees in the public right of way that will be impacted by the renovation are contained in the previous arborist report submitted on May 13, 2020.

Let us know if you have questions regarding this inventory and health assessment.



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## **Tree Risk Assessment Level Descriptions**

The tree risk assessment process is based on factors present at the time of assessment. Because trees are living, growing things that change in size and condition over time, the tree assessment process must also recognize and anticipate where and when future assessments should be performed. The Tree Risk Assessment Qualification (TRAQ) training and methodology, developed and administered by the International Society of Arboriculture is the best available methodology for tree risk assessment at this time. There are three levels of assessment that may be considered and employed according to the expectations of the owner or manager, conditions of the site and of the trees involved:

**Level 1 Limited Visual Assessment:** Includes a broad overview of an individual tree or group of trees near specified targets, conducted to identify obvious defects or other conditions of concern. A limited visual assessment typically focuses on identifying trees with imminent and/or probable likelihood of failure. Level 1 assessments do not always meet the criteria for a "risk assessment" if they do not include documented analysis and evaluation of individual trees. This level is typically used for large populations of trees as a means to quickly identify trees with imminent and/or probable likelihood of failure, at a specified schedule and/or immediately after storms.

Level 1 assessments may be done as walk-by, drive-by or aerial patrols as requested by the tree owner or manager. They may not provide enough information to develop risk mitigation recommendations. They can help identify specific areas and/or trees for further inspection at Level 2 or 3. Trees found to require a Level 2 Basic Assessment are assessed, mapped and documented at the higher level at this time. Trees determined to need a Level 3 Advanced Tree Assessment are documented and recommended for additional testing and analysis. The owner is notified with options discussed.

**Level 2 Basic Assessment:** This is a detailed visual inspection of a tree and its surrounding site, and a synthesis of the information collected. It requires that a tree risk assessor walk completely around the tree, looking at the site, buttress roots, trunk, and branches. This basic assessment may include the use of simple tools to gain additional information about the tree or defects. Our Level 2 Basic Assessment Trees are all typically tagged, mapped and information gathered and retained for each tree. Risk mitigation recommendations may be derived from this level of inspection. Defects found in a Level 2 Basic Tree Assessment may require a Level 3 assessment for further testing and analysis. The owner is notified with options discussed.

**Level 3 Advanced Assessment**: Advanced assessments are performed to provide more highly detailed information about specific tree components, defects, targets or site conditions. An advanced assessment is performed in conjunction with or after a Level 2 Basic Assessment if the assessor determines the need for (requires) additional information. This level is particularly useful where there are concerns about trees that may otherwise be of high value, or to obtain better information on how serious or extensive a particular defect is. The Level 3 Advanced Tree assessment may include but not be limited to a root crown inspection with air spade, Resistograph or Tomograph use to determine sound wood or an aerial crown inspection.

The preliminary Level 1 Limited Visual Assessment if requested would help determine where field assessments at Level 2 and Level 3 will be needed.

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<u>ID</u>	<u>Species</u>	<u>DBH</u>	<u>ID</u>	<u>Species</u>	<u>DBH</u>	<u>ID</u>	Species	<u>DBH</u>	
	Red oak	23.1		Red alder	18.0		Armstrong maple	6.0	
	Norway maple	15.7		Red alder	16.5		Armstrong maple	6.3	
	Norway maple	15.0	-	Red alder	9.0		Armstrong maple	6.8	
	Norway maple	17.5		Armstrong maple	9.2		Armstrong maple	8.0	
	Callery pear	7.0		Armstrong maple	7.2		Armstrong maple	7.3	
	Callery pear	1.2		Armstrong maple	6.4		Armstrong maple	8.6	
	Callery pear	6.5		Armstrong maple	5.6	276	Armstrong maple	4.9	
	Callery pear	6.7		Armstrong maple	6.4		045 24	6 317 040	
	Callery pear	5.7		Armstrong maple	6.3	3	$12 \ 315 \ 31$	6 317 318	319
	Callery pear	7.5		Armstrong maple	6.9	31:	3 203264		1 320
	Plum	11.0	248	Armstrong maple	8.8	31	4 261 265		) 💽 321
	Magnolia	16.5	249	Armstrong maple	6.5		260 • 268•	267 309	322 324 323
203	Plum	17.5	250	Armstrong maple	6.2		259 • 269 269	308	324 323
204	Magnolia	9.3	251	Armstrong maple	8.0		258	306	326
205	Plum	9.0	252	Armstrong maple	10.0		257 • 270	271	328
206	Plum	12.9	253	Armstrong maple	7.9		256 • 272	304 305	329
207	Plum	10.1	254	Armstrong maple	7.2		255 273	, <u>303</u> €330	9331
208	Plum	11.6	255	Armstrong maple	7.9		254 • 274	302	333
209	Plum	11.5	256	Armstrong maple	6.1		253 • <sup>275</sup> •	301	334
210	Plum	13.8	257	Armstrong maple	7.3		252 • 276	300 🖲 336	335
211	Plum	10.2	258	Armstrong maple	6.3		277	299	339
212	Norway maple	10.2	259	Armstrong maple	6.3			298	242
213	Norway maple	9.9	260	Armstrong maple	7.0		250 • 270 • 280	297 33	343
214	Norway maple	10.4	261	Armstrong maple	5.1		249 281	296	349
215	Norway maple	6.5	262	Armstrong maple	7.2		248	295	
216	Norway maple	9.9	263	Armstrong maple	12.4		$247 \stackrel{\textcircled{0}}{=} 282 \stackrel{\textcircled{0}}{=} 283 $	294 340	350
217	Western red cedar	10.8	264	Armstrong maple	10.8		246 284	292	353
218	Western red cedar	19.4	265	Armstrong maple	10.1	24	45 244 285 285	291 354	355
219	Western red cedar	19.2	266	Armstrong maple	10.2		243 286	290 356	
220	Western red cedar	19.5		Armstrong maple	6.9	24	1 242 287	88	<sup>357</sup> н
221	Western red cedar	9.1		Armstrong maple	5.5	222	217 • •		(1) 359 y
222	Douglas fir	11.8		Armstrong maple	7.3	223	<b>ER 8.0</b> ă		.● <mark>360</mark>
	Douglas fir	19.5		0		224	220 216	206 205	259 359 360 Xth Ave SE
	Western red cedar	25.4				1 \	221 21		
225	Red alder	9.0		Legend			222		) 201
226	Red alder	8.5		RetainTree	е			202	·
227	Scouler's willow	18.0		⊗ Removal	Tree			144	<b>145</b>
228	Red alder	8.0		CRZ				143	146
229	Western red cedar	28.0							147
	Bigleaf maple	7.8		Existing B		2	25 226 229	142	<b>थ्</b> 148
	Red alder	7.5		Property E	Boundary		234	141	8 149
	Red alder	8.0		N		ב ב 22	27	39	
	Pacific madrone	19.0		Â			228	240	<b>*</b> 150
	Red alder	14.4		$\mathbf{A}$		<b>L</b>	231 238		
	Red alder	8.5		0 30 60 120	180	Feet 240	236 <sub>237</sub> 238		22nd C+ CF
	Pacific madrone	14.0		0 30 00 120	100	240			32nd St SE
	Scouler's willow	9.5							
-									



# Urban Forestry Services

BARTLETT CONSULTING Divisions of The F.A. Bartlett Tree Expert Company Tree Assessment Site Plan 77th Ave SE Project Mercer Island, Washington

Tree and Critical Root Zone July 14, 2020

<u>ID</u>	<b>Species</b>	<u>DBH</u>
277	Armstrong maple	9.6
278	Armstrong maple	8.9
279	Armstrong maple	5.2
280	Armstrong maple	4.8
281	Armstrong maple	9.8
282	Armstrong maple	15.0
283	Armstrong maple	6.8
284	Armstrong maple	8.5
285	Armstrong maple	7.4
286	Armstrong maple	9.0
287	Armstrong maple	8.0
288	Armstrong maple	8.5
289	Armstrong maple	11.2
290	Armstrong maple	6.5
291	Armstrong maple	8.0
292	Armstrong maple	8.0
293	Armstrong maple	8.5
294	Armstrong maple	8.9
295	Armstrong maple	10.7
296	Armstrong maple	8.9
297	Armstrong maple	6.3
298	Armstrong maple	7.8
299	Armstrong maple	9.7
300	Armstrong maple	8.9
301	Armstrong maple	10.0
302	Armstrong maple	8.8
303	Armstrong maple	9.8
304	Armstrong maple	7.8
305	Armstrong maple	10.8
306	Armstrong maple	9.3
307	Armstrong maple	10.1
308	Armstrong maple	8.0
309	Armstrong maple	12.8
310	Armstrong maple	9.4
311	Armstrong maple	12.1
312	Douglas fir	17.2
313	Douglas fir	11.5
314	Douglas fir	11.2
315	Douglas fir	16.8
316	Red maple	14.5
317	Red maple	9.8
318	Red maple	10.3
319	Norway maple	9.8
320	Norway maple	11.2
321	Norway maple	12.4
322	Norway maple	10.3
323	Norway maple	13.1

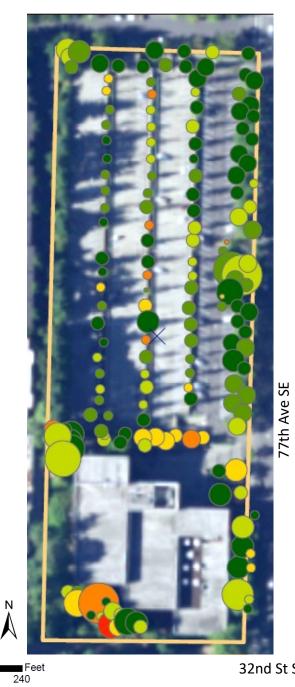
ID	<b>Species</b>	<u>DBH</u>
323	Norway maple	13.1
324	Norway maple	12.6
325	Norway maple	9.2
326	Norway maple	10.9
327	Norway maple	10.9
328	Norway maple	12.2
329	Norway maple	13.8
330	Norway maple	11.8
331	Norway maple	7.8
332	Norway maple	9.1
333	Norway maple	8.7
334	Norway maple	12.1
335	Norway maple	13.3
336	Japanese snowbell	4.2
337	Japanese snowbell	5.8
338	Japanese snowbell	4.0
339	Bitter cherry	11.8
340	Honey locust	25.3
341	Bitter cherry	28.6
342	Norway maple	14.2
343	Douglas fir	14.2
344	Norway maple	10.3
345	Douglas fir	20.5
346	Norway maple	11.0
347	Norway maple	12.0
348	Japanese snowbell	4.3
349	Japanese snowbell	6.5
350	Norway maple	10.9
351	Norway maple	9.1
352	Norway maple	13.2
353	Norway maple	12.6
354	Norway maple	15.5
355	Norway maple	10.2

Tree Condition							
	Good						
	Fair to Good						
	Fair						
	Poor to Fair						
	Poor						
	Dying/Dead						

120

0 30 60

<u>ID</u>	<b>Species</b>	DBH
356	Norway maple	13.1
357	Norway maple	13.1
358	Norway maple	11.6
359	Norway maple	12.0
360	Norway maple	12.2



32nd St SE



## **Urban Forestry Services**

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Tree Assessment Site Plan 77th Ave SE Project Mercer Island, Washington

180

**Tree Condition** July 14, 2020



Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
201	Plum Prunus sp	11.0	12.0	11.0	Fair	Fair to Good	Low	Low	
Notes/ Defects	Fhe tree is on a slope ne:	xt to a drain.	It is leaning no	orth and ther	e is some twig di	eback.	·		







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
202	Southern magnolia Magnolia grandiflora	16.5	11.0	16.5	Good	Good	Low	Low	
Notes/ Defects	he tree is growing in a p	lanting area	next to garage	. The foliage	e is slightly chloro	otic.	·		







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
203	Plum Prunus sp	17.5	9.0	17.5	Poor to Fair	Fair	Low	Low	
Notes/ Defects	he tree is growing in a p	lanting area.	There is a fur	ngus growing	g on the trunk and	d there is some br	anch dieback.		







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
204	Magnolia <i>Magnolia species</i>	9.3	13.0	9.3	Good	Good	Low	Low	
Notes/ Defects	he tree is growing in a p	lanting area.	There are sev	veral roots o	n the surface.				









Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
205	Plum Prunus sp	9.0	7.0	9.0	Poor to Fair	Fair	Low	Low	
Notes/ Defects	here is some branch die	back.	<u> </u>						







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
206	Plum Prunus sp	12.9	8.0	12.9	Poor	Fair to Good	Low	Low	Retain
Notes/ Defects	l The crown is almost half o	L dead. The tr	l ee is growing i	n a raised pl	anting box.	<u> </u>	<u> </u>		I







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
207	Plum Prunus sp	10.1	9.0	10.1	Poor to Fair	Fair to Good	Low	Low	
Notes/ Defects	Γhe tree has major branc	h dieback.							







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
208	Plum Prunus sp	11.6	8.0	11.6	Poor to Fair	Fair	Low	Low	
Notes/ Defects	The tree has major branc	h dieback.	· · · · · ·						







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
209	Plum Prunus sp		8.0	11.5	Poor to Fair	Fair to Good	Low	Low	
Notes/ Defects	l The tree has major branc	h dieback.							







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
210	Plum Prunus sp	13.8	11.0	13.8	Poor to Fair	Fair to Good	Low	Low	
Notes/ Defects	The tree has branch dieb	ack. It is clos	se to the wall r	ext to the pl	anting area.				-









Urban Forestry Services I Bartlett Consulting 15119 McLean Road Mount Vernon, WA 98273

Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
211	Plum Prunus sp	10.2	10.0	10.2	Fair	Fair to Good	Low	Low	
es/ ects	The tree has some branc	h dieback.							

Notes/ Defects









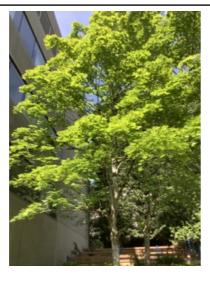
Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
212	Norway maple Acer platanoides	10.2	14.0	10.2	Good	Good	Low	Medium	
Notes/ Defects	he tree is in a group of f	ive maples.	It does not hav	ve any visible	defects.				







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
213	Norway maple Acer platanoides	9.9	14.0	9.9	Good	Good	Low	Medium	
Notes/ Defects	Γhe is the largest tree in t	the group. It	is healthy with	a good sha	De.				







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
214	Norway maple Acer platanoides	10.4	13.0	10.4	Fair	Fair	Low	Low	
Notes/ Defects	Γhe tree has several cod	ominant sten	ns and low brai	nch density.					







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
215	Norway maple <i>Acer platanoides</i>	6.5	8.0	6.5	Fair	Fair	Low	Low	
Notes/ Defects	his is the smallest tree in	n the group.	It has a small	crown.					







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
216	Norway maple Acer platanoides	9.9	10.5	9.9	Fair to Good	Fair	Low	Low	
Notes/ Defects	The crown is asymmetric:	al to the nort	n and it has a s	slight lean in	the same direction	on.			





Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommenda	ations	
217	Western red cedar <i>Thuja plicata</i>	10.8	11.0	10.8	Good	Fair to Good	Low	Low			
Notes/ Defects	The tree is in a group of f	ive cedars. I	English ivy is tl	ne dominant	ground cover and	d encroaching on	the crown of som	e trees.			
200											







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
218	Western red cedar <i>Thuja plicata</i>	19.4	12.0	19.4	Good	Fair to Good	Low	Medium	
Notes/ Defects	his is the largest tree in	the group.	<u> </u>						





Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
219	Western red cedar <i>Thuja plicata</i>	19.2	11.0	19.2	Good	Fair to Good	Low	Medium	
Notes/ Defects	I The tree has a slight lean	east.	· · · · · ·			<u> </u>	·		





Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
220	Western red cedar <i>Thuja plicata</i>	19.5	11.0	19.5	Good	Fair to Good	Low	Medium	
Notes/ Defects	he crown is starting to e	ncroach on t	he building wa	ΙΙ.					







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
221	Western red cedar <i>Thuja plicata</i>	9.1	8.0	9.1	Good	Fair to Good	Low	Low	
Notes/ Defects	his is a healthy small tre	e.							





Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
222	Douglas fir Pseudotsuga menziesii	11.8	6.0	11.8	Poor	Poor	Low	Low	
Notes/ Defects	Fhe crown has very few b	branches and	there is a nev	v leader at th	e top.				







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
223	Douglas fir Pseudotsuga menziesii	19.5	13.0	19.5	Fair	Fair	Low	Medium	
Notes/ Defects	he lower crown is being	choked out l	by ivy.						







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
224	Western red cedar <i>Thuja plicata</i>	25.4	11.0	25.4	Fair	Fair to Good	Low	Medium	
Notes/ Defects	I Fhere is ivy throughout th	ı le crown and	the top is thin	ning.		I	1		









Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
225	Red alder Alnus rubra	9.0	9.0	9.0	Fair	Fair	Low	Low	
Notes/ Defects	The tree has poor taper a	nd ivy is cho	king out the lov	wer crown.					





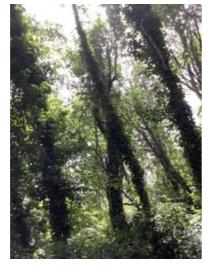
Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
226	Red alder <i>Alnus rubra</i>	8.5	8.0	8.5	Fair to Good	Fair	Low	Low	
Notes/ Defects	The tree is leaning toward	ds the buildin	ig and the lowe	er crown is cl	noked out by ivy.				







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
227	Scouler's willow Salix scouleriana	18.0	7.0	18.0	Poor to Fair	Fair	Low	Low	
Notes/ Defects	The crown is choked out	by ivy and th	ere are some o	dead stems a	and decay in the	trunk.			





Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
228	Red alder <i>Alnus rubra</i>	8.0	9.0	8.0	Fair to Good	Poor to Fair	Low	Low	
Notes/ Defects	he tree has a slight lean	towards the	building. It ha	s ivy on the	irunk.				







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendation	ns		
229	Western red cedar <i>Thuja plicata</i>	28.0	17.0	28.0	Poor	Good	Low	Medium				
Notes/ Defects	vy is choking out the cro	wn and the to	pp is thinning.	The trunk ha	as good taper and	the tree is stable						
3												







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
	Bigleaf maple Acer macrophyllum		13.5	7.8	Good	Poor to Fair	Low	Low	
Notes/ Defects	This is a short leaning tre	e.							





Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
231	Red alder <i>Alnus rubra</i>	7.5	8.0	7.5	Good	Fair to Good	Low	Low	
Notes/ Defects	The tree is tall and thin w	ith no visual :	structural defe	cts.					



Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
232	Red alder <i>Alnus rubra</i>	8.0	8.0	8.0	Fair	Fair to Good	Low	Low	
Notes/ Defects	I vy is choking out the crow	wn.							



Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
233	Pacific madrone Arbutus menziesii	19.0	10.0	19.0	Dying/Dead	Dying/Dead	Low	Hazard or Dead	
Notes/ Defects	This is a tall tree with a st	raight trunk.	There are oth	er trees betw	veen it and the bu	uilding that offer s	ome protection in	the case of failure.	



Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
	Red alder <i>Alnus rubra</i>		13.0	14.4	Fair	Fair to Good	Low	Low	
Notes/ Defects	vy is choking out the crow	wn.							







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
235	Red alder <i>Alnus rubra</i>	8.5	7.0	8.5	Fair	Fair	Low	Low	
Notes/ Defects	The tree is tall and thin w	ith a slight le	an. Ivy is encr	oaching on t	he crown.				



Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
236	Pacific madrone Arbutus menziesii	14.0	10.0	14.0	Poor to Fair	Fair to Good	Low	Medium	
Notes/ Defects	The tree is in decline. It i	s leaning aw	ay from the bu	ilding and no	t likely to strike a	ny target.			





Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
237	Scouler's willow Salix scouleriana	9.5	7.0	9.5	Fair	Poor to Fair	Low	Low	
Notes/ Defects	⁻he tree has a broken top	o with new le	aders.						





Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
238	Red alder <i>Alnus rubra</i>	18.0	18.0	18.0	Good	Fair to Good	Low	Low	
Notes/ Defects	his is a healthy tree in g	ood conditior	י. ז.				·		







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations		
239	Red alder Alnus rubra	16.5	17.0	16.5	Good	Fair	Low	Low			
Ś	The tree has a single trunk with a nice shape.										









Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
240	Red alder <i>Alnus rubra</i>	9.0	10.0	9.0	Fair	Poor to Fair	Low	Low	
Notes/ Defects	This is a small leaning tre	e.	· · · · · ·						



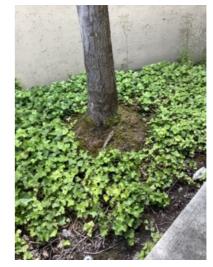




Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
241	Armstrong maple Acer x freemanii 'Armstrong'	9.2	6.0	9.2	Fair to Good	Good	Low	Low	
Notes/ Defects	This is the primary tree s	becies in the	planting area o	of the parking	g lot. Each planti	ng strip row is an	almost continuou	s line from one end of t	he parking area to the other.









Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
242	Armstrong maple Acer x freemanii 'Armstrong'	7.2	6.0	7.2	Fair to Good	Good	Low	Low	
Notes/ Defects	There is some dieback in	the crown. <sup>-</sup>	The irrigation s	ystem is ope	erating.		<u> </u>		







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
243	Armstrong maple Acer x freemanii 'Armstrong'	6.4	5.0	6.4	Fair to Good	Good	Low	Low	
Notes/ Defects	I The tree has a full length	crown.							







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
244	Armstrong maple Acer x freemanii 'Armstrong'	5.6	5.0	5.6	Fair	Good	Low	Low	
Notes/ Defects	The tree has a weak crov	vn with some	dieback.						







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
245	Armstrong maple Acer x freemanii 'Armstrong'	6.4	5.0	6.4	Fair to Good	Good	Low	Low	
Notes/ Defects	here is some minor dieb	ack in the lov	wer crown.				·		







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
246	Armstrong maple Acer x freemanii 'Armstrong'	6.3	5.0	6.3	Fair	Fair	Low	Low	
Notes/ Defects	l Dne of the codominant st	ems is dead.							







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
247	Armstrong maple Acer x freemanii 'Armstrong'		5.0	6.9	Good	Good	Low	Low	
Notes/ Defects	The tree has a full length	and healthy	crown.						







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
248	Armstrong maple Acer x freemanii 'Armstrong'	8.8	5.0	8.8	Good	Good	Low	Low	
Notes/ Defects	The tree has a full length	and healthy	crown.						





Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
249	Armstrong maple Acer x freemanii 'Armstrong'	6.5	5.0	6.5	Fair to Good	Good	Low	Low	
Notes/ Defects	Fhe tree has a full length	and healthy	crown.						







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
250	Armstrong maple Acer x freemanii 'Armstrong'	6.2	5.0	6.2	Poor to Fair	Good	Low	Low	
Notes/ Defects	The tree has a weak crov	vn with some	dieback.						







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
251	Armstrong maple Acer x freemanii 'Armstrong'	8.0	5.0	8.0	Good	Good	Low	Low	
Notes/ Defects	Γhe crown is broad instea	ad of column	ar. It is healthy	/ and in good	d condition.				

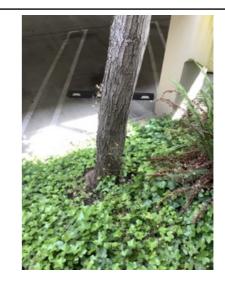






Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
252	Armstrong maple Acer x freemanii 'Armstrong'	10.0	5.0	10.0	Good	Good	Low	Low	
Notes/ Defects	The tree has a full length	crown in goo	od condition.						







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
253	Armstrong maple Acer x freemanii 'Armstrong'	7.9	5.0	7.9	Good	Good	Low	Low	
Notes/ Defects	This is a tall tree with a fu	III crown.							







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
254	Armstrong maple Acer x freemanii 'Armstrong'	7.2	5.0	7.2	Fair to Good	Good	Low	Low	
Notes/ Defects	The tree is healthy and ir	i good condit	ion.						







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
255	Armstrong maple Acer x freemanii 'Armstrong'		5.0	7.9	Fair to Good	Good	Low	Low	
Notes/ Defects	The crown has some min	or dieback.							





Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
256	Armstrong maple Acer x freemanii 'Armstrong'	6.1	5.0	6.1	Fair to Good	Good	Low	Low	
Notes/ Defects	here is some minor dieb	back in the cr	own.						







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
257	Armstrong maple Acer x freemanii 'Armstrong'	7.3	5.0	7.3	Good	Good	Low	Low	
Notes/ Defects	A tall tree with a healthy o	crown.							





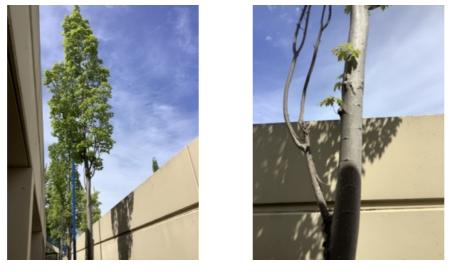
Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
258	Armstrong maple Acer x freemanii 'Armstrong'	6.3	5.0	6.3	Good	Good	Low	Low	
Notes/ Defects	he crown is weak with s	ome dieback							







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
259	Armstrong maple Acer x freemanii 'Armstrong'	6.3	5.0	6.3	Fair to Good	Good	Low	Low	
Notes/ Defects	Γhe tree has some minor	dieback in th	ne crown.						





Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
260	Armstrong maple Acer x freemanii 'Armstrong'	7.0	5.0	7.0	Fair to Good	Good	Low	Low	
Notes/ Defects	There is some minor dieb	pack in the cr	own.						







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
261	Armstrong maple Acer x freemanii 'Armstrong'	5.1	5.0	5.1	Poor to Fair	Good	Low	Low	
Notes/ Defects	The tree has a small crov	wn with mino	dieback.						







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
262	Armstrong maple Acer x freemanii 'Armstrong'	7.2	5.0	7.2	Poor to Fair	Good	Low	Low	
Notes/ Defects	The tree has a small crov	vn with minor	dieback.						







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
263	Armstrong maple Acer x freemanii 'Armstrong'	12.4	13.0	12.4	Good	Fair to Good	Low	Low	
Notes/ Defects	'Armstrong'	oots and the	crown has bee	en trained to	grow away from	the parking garag	e wall.		









Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
264	Armstrong maple Acer x freemanii 'Armstrong'	10.8	9.5	10.8	Good	Fair to Good	Low	Low	
Notes/ Defects	Fhis is a healthy tree with	a broad cro	wn.				·		







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
265	Armstrong maple Acer x freemanii 'Armstrong'	10.1	5.0	10.1	Good	Good	Low	Low	
Notes/ Defects	his is a healthy tree with	a full crown							







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
266	Armstrong maple Acer x freemanii 'Armstrong'	10.2	5.0	10.2	Fair to Good	Good	Low	Low	
Votes/ Defects	This is a healthy tree.								







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
267	Armstrong maple Acer x freemanii 'Armstrong'	6.9	5.0	6.9	Fair to Good	Good	Low	Low	
Notes/ Defects	here is some minor dieb	pack in the cr	own.						







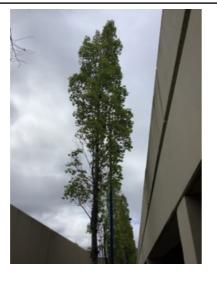
Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
268	Armstrong maple Acer x freemanii 'Armstrong'	5.5	5.0	5.5	Poor	Poor	Low	Low	
Notes/ Defects	he crown has low branc	hing density	and major diet	oack.					







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
269	Armstrong maple Acer x freemanii 'Armstrong'	7.3	5.0	7.3	Fair	Fair to Good	Low	Low	
Votes/ Defects	here is minor dieback in	the crown.							







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
270	Armstrong maple Acer x freemanii 'Armstrong'	6.0	5.0	6.0	Fair	Fair to Good	Low	Low	
Notes/ Defects	There is minor dieback in	the crown.							







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
271	Armstrong maple Acer x freemanii 'Armstrong'	6.3	5.0	6.3	Fair	Fair to Good	Low	Low	
Notes/ Defects	There is minor dieback in	the crown.							







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
272	Armstrong maple Acer x freemanii 'Armstrong'	6.8	5.0	6.8	Fair	Fair to Good	Low	Low	
Notes/ Defects	here is minor dieback in	the crown.							







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
273	Armstrong maple Acer x freemanii 'Armstrong'	8.0	5.0	8.0	Fair to Good	Fair to Good	Low	Low	
Notes/ Defects	here is minor dieback in	the crown.	·				•		







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
274	Armstrong maple Acer x freemanii 'Armstrong'	7.3	5.0	7.3	Fair to Good	Fair to Good	Low	Low	
Notes/ Defects	here is minor dieback in	the crown.	·				<u> </u>		







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
275	Armstrong maple Acer x freemanii 'Armstrong'	8.6	5.0	8.6	Fair to Good	Fair to Good	Low	Low	
Notes/ Defects	here is minor dieback in	the crown.							







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
276	Armstrong maple Acer x freemanii 'Armstrong'	4.9	5.0	4.9	Poor	Poor	Low	Low	
Notes/ Defects	he crown has low branc	hing density.							







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
277	Armstrong maple Acer x freemanii 'Armstrong'	9.6	5.0	9.6	Good	Good	Low	Low	
Notes/ Defects	This is a large healthy tre	e.							







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
278	Armstrong maple Acer x freemanii 'Armstrong'	8.9	5.0	8.9	Good	Good	Low	Low	
Notes/ Defects	he form is broad and sh	ort instead of	f the typical col	umnar shap	e.		· · · · · ·		







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
279	Armstrong maple Acer x freemanii 'Armstrong'	5.2	5.0	5.2	Poor	Poor	Low	Low	
Notes/ Defects	he tree has a weak crow	n and it is le	aning slightly.						







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
280	Armstrong maple Acer x freemanii 'Armstrong'	4.8	5.0	4.8	Fair to Good	Fair to Good	Low	Low	
Notes/ Defects	his is a shorter and broa	der crown th	e typical for th	e cultivar.					







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
281	Armstrong maple Acer x freemanii 'Armstrong'	9.8	5.0	9.8	Poor to Fair	Fair to Good	Low	Low	
Notes/ Defects	This is a small tree with s	ome minor d	ieback.						







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
282	Armstrong maple Acer x freemanii 'Armstrong'		5.0	15.0	Good	Fair to Good	Low	Low	
Notes/ Defects	his tree has multiple coo	lominant ster	ns.				·		







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
283	Armstrong maple Acer x freemanii 'Armstrong'	6.8	5.0	6.8	Poor	Fair	Low	Low	
Notes/ Defects	The crown is weak with s	ome dieback							







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
284	Armstrong maple Acer x freemanii 'Armstrong'	8.5	5.0	8.5	Fair to Good	Fair to Good	Low	Low	
Notes/ Defects	Fhe crown is broad instea	ad of column	ar.				•		







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
285	Armstrong maple Acer x freemanii 'Armstrong'	7.4	5.0	7.4	Fair	Fair to Good	Low	Low	
Notes/ Defects	here is some branch die	back in the c	crown.						







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
286	Armstrong maple Acer x freemanii 'Armstrong'	9.0	5.0	9.0	Fair	Fair to Good	Low	Low	
Notes/ Defects	⁻he crown has minor bra	nch dieback.							







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
287	Armstrong maple Acer x freemanii 'Armstrong'	8.0	5.0	8.0	Fair	Fair to Good	Low	Low	
Notes/ Defects	There is minor dieback in	the crown.	·				<u> </u>		







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
288	Armstrong maple Acer x freemanii 'Armstrong'	8.5	5.0	8.5	Good	Fair to Good	Low	Low	
Notes/ Defects	This is a tall healthy tree.	-							







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
289	Armstrong maple Acer x freemanii 'Armstrong'	11.2	5.0	11.2	Good	Fair to Good	Low	Low	
Notes/ Defects	The crown if healthy and	there is inclu	ded bark betw	een two cod	ominant stems.				





Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
290	Armstrong maple Acer x freemanii 'Armstrong'	6.5	5.0	6.5	Poor to Fair	Fair	Low	Low	
Notes/ Defects	here is minor dieback in	the crown.							







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
291	Armstrong maple Acer x freemanii 'Armstrong'	8.0	5.0	8.0	Fair to Good	Fair to Good	Low	Low	
Notes/ Defects	This is a shorter tree.								







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
292	Armstrong maple Acer x freemanii 'Armstrong'	8.0	5.0	8.0	Fair to Good	Fair to Good	Low	Low	
Notes/ Defects	he tree has minor dieba	ck in the crov	wn.				<u>.</u>		







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
293	Armstrong maple Acer x freemanii 'Armstrong'	8.5	5.0	8.5	Fair to Good	Fair to Good	Low	Low	
Notes/ Defects	his is a healthy tree in g	ood conditior	n.						







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
294	Armstrong maple Acer x freemanii 'Armstrong'	8.9	5.0	8.9	Fair to Good	Fair to Good	Low	Low	
Notes/ Defects	his is a healthy tree in g	ood conditior	ı.						

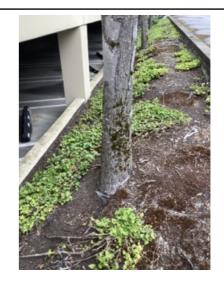






Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
295	Armstrong maple Acer x freemanii 'Armstrong'	10.7	5.0	10.7	Fair to Good	Fair to Good	Low	Low	
Notes/ Defects	he tree is healthy. Ther	e is one circli	ing root around	the root flar	e.				







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
296	Armstrong maple Acer x freemanii 'Armstrong'	8.9	5.0	8.9	Fair to Good	Fair to Good	Low	Low	
Notes/ Defects	There is minor dieback in	the crown.	·				•		







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
297	Armstrong maple Acer x freemanii 'Armstrong'	6.3	5.0	6.3	Fair	Fair	Low	Low	
Notes/ Defects	he spreading crown is s	lightly asymr	netrical.						







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
298	Armstrong maple Acer x freemanii 'Armstrong'	7.8	5.0	7.8	Fair	Fair	Low	Low	
Notes/ Defects	There is minor dieback in	the crown.							







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
299	Armstrong maple Acer x freemanii 'Armstrong'	9.7	5.0	9.7	Fair	Fair	Low	Low	
Notes/ Defects	he tree has a spreading	crown.							







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
300	Armstrong maple Acer x freemanii 'Armstrong'	8.9	5.0	8.9	Fair	Fair	Low	Low	
Notes/ Defects	The tree has codominant	stems and s	ome dieback ii	n the crown.					







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
	Armstrong maple Acer x freemanii 'Armstrong'	10.0	5.0	10.0	Good	Fair to Good	Low	Low	
Notes/ Defects	his is a healthy tree in g	ood conditio	n.						







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
302	Armstrong maple Acer x freemanii 'Armstrong'	8.8	5.0	8.8	Good	Good	Low	Low	
Notes/ Defects	his is a healthy tree in g	ood conditior	۱.						







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
303	Armstrong maple Acer x freemanii 'Armstrong'		5.0	9.8	Fair to Good	Good	Low	Low	
Notes/ Defects	his is a healthy tree in g	ood conditior	n.						







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
304	Armstrong maple Acer x freemanii 'Armstrong'	7.8	5.0	7.8	Good	Fair	Low	Low	
Notes/ Defects	his is a smaller tree in g	ood conditior	ı.						







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
305	Armstrong maple Acer x freemanii 'Armstrong'	10.8	5.0	10.8	Good	Good	Low	Low	
Notes/ Defects	This is a healthy tree with	a full crown.							







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
306	Armstrong maple Acer x freemanii 'Armstrong'	9.3	5.0	9.3	Fair	Fair to Good	Low	Low	
Notes/ Defects	Some dieback, old wound	ds at base of	trunk						







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Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
307	Armstrong maple Acer x freemanii 'Armstrong'	10.1	5.0	10.1	Good	Fair	Low	Low	
s/ cts	his tree has a spreading	crown form.				·	·		

Notes/ Defects

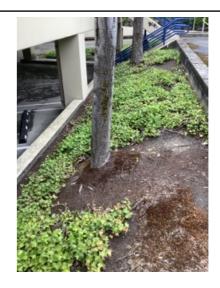






Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
308	Armstrong maple Acer x freemanii 'Armstrong'	8.0	5.0	8.0	Fair	Fair	Low	Low	
Notes/ Defects	There is minor dieback in	the crown.							







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Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
309	Armstrong maple Acer x freemanii 'Armstrong'	12.8	5.0	12.8	Good	Fair to Good	Low	Low	
s/ cts	The crown is full length a	nd healthy.		-	-	•			

Notes/ Defects







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
310	Armstrong maple Acer x freemanii 'Armstrong'	9.4	5.0	9.4	Good	Fair to Good	Low	Low	
Notes/ Defects	L The tree is in good condit	ion.							







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
311	Armstrong maple Acer x freemanii 'Armstrong'	12.1	5.0	12.1	Good	Fair to Good	Low	Low	
Notes/ Defects	The tree is in good condit	ion. It has m	ultiple codomi	nant stems.					







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
312	Douglas fir Pseudotsuga menziesii	17.2	12.0	17.2	Fair	Fair to Good	Low	Medium	
Notes/ Defects	This tree is in a grove of f	11 trees, 4 of	which are on t	the subject p	roperty. They ar	e on a slight slope	e. Ivy is the domin	nant ground cover and a	starting up the trees.
10000									







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
313	Douglas fir Pseudotsuga menziesii	11.5	6.8	11.5	Fair	Fair	Low	Low	
Notes/ Defects	he tree has a slight asyr	nmetrical cro	wn.						





Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
314	Douglas fir Pseudotsuga menziesii	11.2	8.8	11.2	Fair to Good	Fair	Low	Low	
Notes/ Defects	The crown is asymmetric:	al over the pa	arking area.						







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Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations		
315	Douglas fir Pseudotsuga menziesii	16.8	9.8	16.8	Fair to Good	Fair to Good	Low	Medium			
	Ivy is starting to encroach on the lower crown.										

Notes/ Defects





Field Work Completed: 6/24/2020



Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
316	Red maple Acer rubrum	14.5	13.0	14.5	Good	Fair to Good	Low	Medium	
Notes/ Defects	The tree has a nice shape the tree.	e and it is in g	good condition	. The lower	branches could b	be elevated over t	he sidewalk. The	re is an encircling root a	and some sidewalk upheaval next







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations			
317	Red maple Acer rubrum	9.8	11.0	9.8	Good	Good	Low	Low				
Notes/ Defects	This is a healthy tree in g	ood conditior	n. The lower b	ranches ove	r the sidewalk co	uld be pruned.						







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
318	Red maple Acer rubrum	10.3	14.0	10.3	Fair	Fair to Good	Low	Low	
Notes/ Defects	The crown is thinning and	there is one	encircling roo	t.					









Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
319	Norway maple Acer platanoides	9.8	14.0	9.8	Good	Good	Low	Low	
Notes/ Defects	his tree is in good condi	tion at the co	rner of the pro	perty.					









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Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
320	Norway maple Acer platanoides	11.2	10.0	11.2	Good	Good	Low	Medium	
s/	This is a healthy tree in g	ood conditior	n.						

Notes/ Defect









Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
321	Norway maple Acer platanoides	12.4	10.0	12.4	Good	Good	Low	Medium	
Notes/ Defects	his is a healthy tree with	a very dens	e crown.						







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
322	Norway maple Acer platanoides	10.3	10.0	10.3	Fair to Good	Fair to Good	Low	Medium	
Notes/ Defects	There is some minor diet	back in the cr	own.						







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
323	Norway maple Acer platanoides	13.1	10.0	13.1	Good	Fair to Good	Low	Medium	
Notes/ Defects	Γhe tree has some dead	twigs but the	crown is dens	e and the fol	iage is healthy.				







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
324	Norway maple Acer platanoides	12.6	10.0	12.6	Good	Fair to Good	Low	Medium	
Notes/ Defects	The crown is dense and t	the foliage is	healthy.				·		







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
325	Norway maple Acer platanoides	9.2	10.0	9.2	Good	Fair to Good	Low	Medium	
Notes/ Defects	here is some dieaback	in the crown	but the foliage	is healthy.					





Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
326	Norway maple <i>Acer platanoides</i>	10.9	10.0	10.9	Good	Fair to Good	Low	Medium	
Notes/ Defects	Гhere is some dieback in	the crown bi	ut the foliage is	lush and he	ealthy.				







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
327	Norway maple Acer platanoides	10.9	10.0	10.9	Good	Fair to Good	Low	Medium	
Notes/ Defects	Γhe lower crown has som	ne dieback ar	nd the upper cr	own is dens	e.				







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
328	Norway maple <i>Acer platanoides</i>	12.2	10.0	12.2	Good	Fair to Good	Low	Medium	
Notes/ Defects	The upper crown is dense	9.							







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
329	Norway maple Acer platanoides	13.8	10.0	13.8	Good	Fair to Good	Low	Medium	
Notes/ Defects	There is some dieback in	the crown bu	ut the foliage is	healthy.					







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
330	Norway maple <i>Acer platanoides</i>	11.8	10.0	11.8	Good	Fair to Good	Low	Medium	
Notes/ Defects	here is some dieback in	the crown b	ut the foliage is	healthy.					







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
331	Norway maple <i>Acer platanoides</i>	7.8	10.0	7.8	Fair	Fair to Good	Low	Medium	
Notes/ Defects	he crown has some diel	back.							







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
332	Norway maple Acer platanoides	9.1	10.0	9.1	Good	Fair to Good	Low	Medium	
Notes/ Defects	he crown is very dense.	<u>.</u>							







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
333	Norway maple Acer platanoides	8.7	10.0	8.7	Fair	Fair to Good	Low	Medium	
Notes/ Defects	here is some dieback in	the crown bi	ut the foliage is	healthy.					







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
334	Norway maple Acer platanoides	12.1	10.0	12.1	Fair	Fair to Good	Low	Medium	
Notes/ Defects	here is some dieback in	the crown b	ut the foliage is	healthy.					







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
335	Norway maple <i>Acer platanoides</i>	13.3	10.0	13.3	Fair to Good	Fair to Good	Low	Medium	
Notes/ Defects	he crown is dense and h	nealthy. A la	rge wound on	the lower tru	nk is compartmei	ntalized.			





Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
	Japanese snowbell <i>Styrax japonicus</i>		4.0	4.2	Poor	Poor to Fair	Low	Low	
Notes/ Defects	Dne of the codominant st	ems is mostl	y dead.			1	1		









Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
337	Japanese snowbell <i>Styrax japonicus</i>	5.8	6.0	5.8	Fair to Good	Fair to Good	Low	Low	
Notes/ Defects	Fhere is some minor dieb	back in the cr	own. The tree	has a good	shape.				







338Japanese snowbell Styrax japonicus4.06.04.0Fair to GoodFair to GoodLowLow	
This is a short tree growing under a larger cherry.	







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
339	Bitter cherry <i>Prunus emarginata</i>	11.8	15.0	11.8	Good	Fair	Low	Low	
Notes/ Defects	he tree has a slight lean	towards the	parking area.						





Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
340	Honey locust Gleditsia triacanthos	25.3	14.0	25.3	Fair to Good	Good	Low	Medium	
Notes/ Defects	he trunk is mostly growi	ng straight. <sup>-</sup>	The lowest bra	nches start a	at approximately	20 feet high.			







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
341	Bitter cherry <i>Prunus emarginata</i>	28.6	20.0	28.6	Fair	Fair	Low	Medium	
Votes/ Defects	There are three main cod	lominant ster	ns. One stem	has a cavity	and it could fail,	but there is no tar	get within striking	distance.	



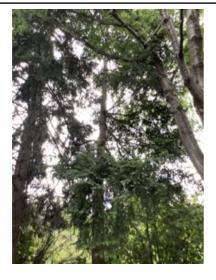


Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
342	Norway maple <i>Acer platanoides</i>	14.2	15.8	14.2	Fair	Fair	Low	Low	
Notes/ Defects	The asymmetrical crown	is growing to	wards the stre	et.			·		





Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
343	Douglas fir Pseudotsuga menziesii	14.2	11.5	14.2	Fair to Good	Fair to Good	Low	Low	
Notes/ Defects	The asymmetrical crown i	is growing to	wards the park	ing area.					







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
344	Norway maple Acer platanoides	10.3	10.0	10.3	Fair to Good	Fair	Low	Low	
Notes/ Defects	he crown has dense hea	althy foliage.							





Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
345	Douglas fir Pseudotsuga menziesii	20.5	14.0	20.5	Good	Good	Low	Medium	
Notes/ Defects	his is the largest tree in	the group.							





Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
346	Norway maple Acer platanoides	11.0	14.0	11.0		Poor to Fair	Low	Low	
Notes/ Defects	here is a large wound a	nd dead woo	d in the trunk.	The crown i	s asymmetrical to	owards the south.			





Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
347	Norway maple Acer platanoides	12.0	12.0	12.0	Good	Good	Low	Low	
Notes/ Defects	Fhere is some dieback ir	the crown b	ut the foliage is	s healthy.					





Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
348	Japanese snowbell <i>Styrax japonicus</i>	4.3	8.0	4.3	Poor to Fair	Fair	Low	Low	
Notes/ Defects	There is dead wood in the	e main stem.	The tree is in	decline.					







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
349	Japanese snowbell <i>Styrax japonicus</i>		4.0	6.5	Fair to Good	Fair to Good	Low	Low	
Notes/ Defects	he crown is thinning but	the tree is st	ill viable.						







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
350	Norway maple <i>Acer platanoides</i>	10.9	10.0	10.9	Good	Good	Low	Low	
Notes/ Defects	The tree has a dense cro	wn.							





Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
351	Norway maple Acer platanoides	9.1	10.0	9.1	Good	Good	Low	Low	
Notes/ Defects	The tree has a dense cro	wn.							







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
352	Norway maple Acer platanoides	13.2	10.0	13.2	Good	Good	Low	Medium	
Notes/ Defects	his is a healthy tree with	a nice form.							







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
353	Norway maple Acer platanoides	12.6	10.0	12.6	Fair to Good	Good	Low	Medium	
Notes/ Defects	here is some minor dieb	back in the cr	own.						







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations		
354	Norway maple <i>Acer platanoides</i>	15.5	10.0	15.5	Good	Good	Low	Medium			
s.	The tree has a large, healthy crown.										

Notes/ Defects





Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
355	Norway maple Acer platanoides	10.2	10.0	10.2	Good	Good	Low	Medium	
Notes/ Defects	he crown is dense and h	nealthy.							







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
356	Norway maple Acer platanoides	13.1	10.0	13.1	Fair to Good	Good	Low	Low	
Notes/ Defects	here is some dieback in	the crown.							





Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
	Norway maple <i>Acer platanoides</i>	13.1	10.0	13.1	Fair to Good	Good	Low	Low	
Notes/ Defects	l There is some dieback in	the crown.							







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
358	Norway maple <i>Acer platanoides</i>	11.6	10.0	11.6	Fair to Good	Good	Low	Low	
Notes/ Defects	here is some dieback in	the crown.							







Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
359	Norway maple Acer platanoides	12.0	10.0	12.0	Fair to Good	Good	Low	Low	
Notes/ Defects	l There is some dieback in	the crown.							

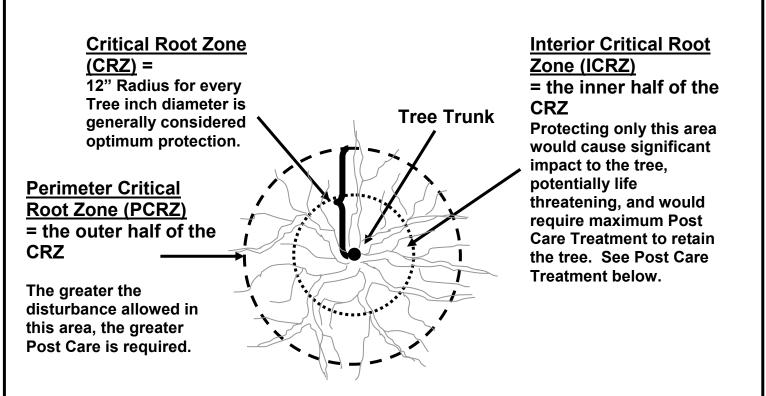




Tree	Species	DBH (in)	Drip Rad.	CRZ (ft)	Vigor	Structure	Risk	Pres Value	Recommendations
360	Norway maple Acer platanoides	12.2	10.0	12.2	Fair	Good	Low	Low	
Notes/ Defects	The crown has lots of die	back and the	foliage is thin	ning overall.					







The <u>Critical Root Zone (CRZ)</u> of a tree is established on the basis of the trunk diameter. The CRZ is a circular area which has a radius of 12 inches for every inch diameter of trunk measured at 4.5 feet above grade. Root systems will vary both in depth and spread depending on size of tree, soils, water table, species and other factors. However, this CRZ description is generally accepted in the tree industry. Protecting this entire root zone area should result in no adverse impact to the tree, except for potentially increased exposure.

The above CRZ drawing has been further differentiated into the <u>Perimeter (PCRZ)</u> and <u>Interior (ICRZ)</u> to help define potential impact and required post care.

Generally, limiting disturbance to outside of the full CRZ is considered the optimum amount of root protection for a tree. Encroaching into the Perimeter CRZ requires greater post care for the tree to remain healthy and stable.

The Interior CRZ (ICRZ) is half the radius of the Perimeter CRZ (PCRZ) and approximately equal to the size of a root ball needed to transplant the tree. Disturbance within any part of the Interior CRZ could destabilize or cause the tree to decline and should be avoided if the tree is to be retained. Due to the immense variability between individual trees and root systems, partial encroachment into the Interior CRZ can be considered on a case by case basis under direction by a certified arborist or similarly qualified tree professional.

This post care treatment would include but may not be limited to; regular irrigation, misting, root treatment with special root hormones or growth stimulants, mulching, guying and monitoring for several years. Lack of this treatment could be fatal.



15119 McLean Road Mount Vernon, Washington 98273 360-428-5810 Title: Critical Root Zone (CRZ) Explanation Source: Urban Forestry Services, Inc Jim Barborinas, ISA Certified Arborist PN-0135 ASCA Registered Consulting Arborist #356, Tree Risk Assessor Qualified

Date: 2020