SOUND URBAN FORESTRY, LLC

Appraisals ~ Site Planning ~ Urban Landscape Design & Management Environmental Education & Restoration ~ Tree Protection Plans ~ Tree Risk Assessments

Greenfield Estates Olympia, WA 98501

Street Tree Removal and Replacement Plan

Prepared for: Greenfield Estates HOA

Prepared by: Kevin M. McFarland, SUF Consulting Urban Forester/ISA Certified Arborist & Tree Risk Assessor Qualified

Date: 4/25/2024

Upon the request of the Greenfield Estates HOA and as a requirement of the City of Olympia, I have conducted an assessment of the street trees located within the single-family residential community in SE Olympia, Washington. The purpose of my assessment and this report is to provide the City with an update to my original report dated 4/30/2018 to reflect the current status of tree street removals, replacements and proposed replanting. I visited the site on April 15 and 23, 2024.

Street Tree Assessment

A total of 118 trees were listed in my 2018 report. The table below has been updated to reflect what is currently found at the site. Locations are shown on the attached original plat maps and photos of the associated sidewalk and curb damage have been included.

Assigned ID#	Species	Trunk Diameter	Condition	Sidewalk Lift	Comments
1					Removed
2	Japanese Maple	2"	Good	No	New planting.
3	Norway Maple	12"	Fair	Yes	Lifting by 2 ¹ ⁄ ₂ " & 1".
4	Norway Maple	11"	Fair	Yes	Lifting by $2\frac{1}{2}$ & 3".
5	Norway Maple	11"	Good	Yes	Lifting sidewalk by ½" & curb by ¼".
6					Removed
7					Removed
8	White Ash	20"	Good	Yes	Lifting sidewalk by 1", curb by ¹ / ₂ " & driveway panel by 1 ¹ / ₄ ". Several cracks in sidewalk.
9	Amur Maple	2.5"	Fair	No	New planting.
10	White Ash	16"	Fair	Yes	Lifting sidewalk and curb by $\frac{1}{2}$ ".
11					Removed
12					Removed
13					Removed
14					Removed
15	Norway Maple	15"	Good	Yes	Lifting sidewalk & curb by 1". Lifting platform by 4".
16	Norway Maple	7"	Fair	Yes	Cracking & lifting sidewalk by $\frac{1}{4}$ % 1".
17	Norway Maple	8"	Fair	Yes	Cracking & lifting sidewalk by $\frac{1}{2}$ " & 3 $\frac{1}{2}$ ".
18	•				Removed
19	Green Ash	4"	Dead	No	New planting, needs to be replaced.
20	Norway Maple	13"	Fair	Yes	Lifting sidewalk by ¹ / ₂ ".
21	•				Removed

 Table 1. Assessed Street Trees

Assigned ID#	Species	Trunk Diameter	Condition	Sidewalk Lift	Comments
22					Removed
23					Removed
24					Removed
25	White Ash	7	Good	Yes	2 panels by $1\frac{1}{2}$ ".
26	Norway	14"	Good	Yes	Lifting sidewalk by 1", previous
	Maple				grinding.
27					Removed
28					Removed
29					Removed
30	Upright Hornbeam	14"	Fair	Yes	Lifting 2 sidewalk panels by 1 $\frac{1}{2}$ ".
31	Upright Hornbeam	12'	Good	Yes	Lifting 2 sidewalk panels by $\frac{1}{2}$ ".
32	Upright Hornbeam	5"+6"	Fair	Yes	Cracking & lifting sidewalk by 1/4", 1/2" & 1",
33	Upright Hornbeam	5"	Poor	No	Sunscald along trunk. Behind sidewalk.
34	Upright Hornbeam	7"	Good	Yes	Behind sidewalk. Lifting 2 panels by ½".
35	Upright Hornbeam	4"+7"	Fair	Yes	Lifting sidewalk panels by ¹ / ₄ " & ¹ / ₂ ".
36	Norway Maple	9"	Fair	Yes	Lifting sidewalk by ¹ / ₂ ".
37	Norway Maple	8"	Fair	Yes	Lifting sidewalk by 1" & $1\frac{1}{2}$ ".
38	White Ash	11"	Fair	Yes	Lifting sidewalk by ¹ / ₄ "
39	Norway Maple	14"	Good	Yes	Lifting sidewalk by 1 ¹ / ₂ " and curb by ¹ / ₂ ".
40	•				Removed
41					Removed
42					Removed
43					Removed
44	Norway Maple	11"	Fair	Yes	Lifting sidewalk by ¹ / ₂ " & ³ / ₄ ".
45	White Ash	11"	Good	Yes	Lifting sidewalk by ¹ / ₄ " & ¹ / ₂ ".
46					Removed
47	Redspire Pear	12"	Fair	Yes	Cracking and lifting sidewalk by ¹ / ₄ " & 1".
48					Removed
49					Removed
50					Removed

Assigned ID#	Species	Trunk Diameter	Condition	Sidewalk Lift	Comments
51	Japanese Maple	1"	Good	No	New planting.
52					Removed
53					Removed
54					Removed
55					Removed
56					Removed
57					Removed
58					Removed
59					Removed
60					Removed
61	Kousa Dogwood	1.25"	Fair	No	New planting.
62					Removed
63	Norway Maple	19"	Good	Yes	Cracking and lifting sidewalk by ¹ / ₂ " & 1".
64					Removed
65	Norway Maple	18"	Good	Yes	Lifting sidewalk by ¹ /4", 2 panels by 3", curb by ¹ /4".
66	Norway Maple	16"	Good	Yes	Cracking & lifting sidewalk by 3", curb by ½".
67	Norway Maple	16"	Good	Yes	Cracking & lifting 2 sidewalk panels by 1", curb by ½".
68	Norway Maple	20"	Good	Yes	Lifting sidewalk by 1", curb by 1/2". Previous grinding.
69	Norway Maple	21"	Good	Yes	Cracking and lifting sidewalk by ¹ /4". Recent grinding.
70					Removed
71					Removed
72	Norway Maple	11"	Faior	Yes	Cracking and lifting sidewalk by ¹ / ₄ " & ¹ / ₂ ".
73	Norway Maple	11"	Good	Yes	Lifting sidewalk by ¹ / ₂ ".
74	*	1			Removed
75					Removed
76					Removed
77					Removed
78					Removed
79					Removed
80					Removed

Assigned ID#	Species	Trunk Diameter	Condition	Sidewalk Lift	Comments
81	Norway Maple	10"	Fair	Yes	Many cracks and lifting sidewalk by 1".
82	Redspire Pear	10"	Poor	Yes	Overall poor structure. Lifting sidewalk by ¹ / ₄ " & 1".
83	Redspire Pear	8"	Poor	Yes	Overall poor structure. Lifting sidewalk by ¹ / ₂ ".
84	Redspire Pear	11"	Fair	Yes	Cracking and lifting sidewalk by ¹ / ₂ " & 1 ¹ / ₂ ".
85					Removed
86					Removed
87	Norway Maple	14"	Fair	Yes	Lifting 2 sidewalk panels by $\frac{1}{2}$.
88	Norway Maple	12"	Good	Yes	Lifting 2 sidewalk panels by 1 ¹ / ₄ ", lifting curb by ¹ / ₂ ".
89	Norway Maple	14"	Fair	Yes	Lifting sidewalk panel by $2\frac{1}{2}$.
90	•				Removed
91					Removed
92					Removed
93					Removed
94					Removed
95					Removed
96					Removed
97					Removed
98					Removed
99					Removed
100					Removed
101					Removed
102					Removed
103					Removed
104					Removed
105	Norway Maple	11"	Good	Yes	Lifting sidewalk by ¹ / ₂ " & 1".
106	Norway Maple	9"	Poor	Yes	Cracking and lifting by ¹ /4".
107	Norway Maple	14"	Good	Yes	Cracking and lifting sidewalk by ¹ / ₄ " & ¹ / ₂ ", curb by ¹ / ₄ ".
108	•				Removed
109					Removed
110					Removed
111					Removed

Assigned ID#	Species	Trunk Diameter	Condition	Sidewalk Lift	Comments
112					Removed
113					Removed
114					Removed
115					Removed
116	Red Maple	2"	Good	No	New planting.
117	Red Maple	1"	Good	No	New planting.
118					Removed
А	Japanese Maple	2"	Good	No	New planting.
В	Kousa Dogwood	1"	Fair	No	New planting.
С	Kousa Dogwood	1.25"	Fair	No	New planting.
D	Kousa Dogwood	1"	Poor	No	New planting.

Replanting

It appears that a total of eleven trees have been replanted since my 2018 assessment. Four of these are in locations where no tree previously existed. Replanted trees are noted in Table 1 and in green on the attached Replanting map.

Per my discussions with Olympia's Urban Forestry Program Manager Jasen Johns and my findings, it will be mandatory that the HOA replant at a 1:1 ratio for all trees that have been removed since my 2018 assessment. This must be completed prior to any additional removals in order to satisfy canopy cover requirements. Due to the constraints of the site, I am also recommending that not all trees be replaced at the same locations. Many of the trees were placed inappropriately and interfere with sight distances or are simply in areas that are unsuitable for trees of any size. Mr. Johns has directed me to identify other locations within the development where trees can be planted to make up any shortfalls. Replanting locations are noted in blue and purple on the attached map.

Summary of Trees Removal and Replacement

The following presents a summary of the removals and required replanting.

- 76 trees have been removed
 - 42 trees still remain
- 11 trees have been replanted, one tree is dead
 - 66 trees will be required for replanting
- 45 vacant street tree locations have been identified for replanting
 - 21 trees will be replanted within Tracts A and B

Recommended Replacement Trees

With the exception of Trees #32-35 which are planted behind the sidewalk, all street trees are located within 5' wide planting strips. Tree selections for these areas should reflect the constraints of the sites in order to avoid and/or minimize future issues with infrastructure. The following replacement trees have been selected from the City of Olympia Recommended Street Tree List dated 9/1/2022.

These varieties are suitable for all planting areas.

- Henry Maple, Acer henryi
- o Rocky Mountain Glow Maple, Acer grandidentatum 'Schmidt'
- Hyperian Dogwood, *Cornus kousa x florida* 'KF111-1', or other *Cornus x rutgersensis* hybrids
- o Persian Ironwood, Parrotia persica, 'Persian Spire', 'Ruby Vase', or 'Vanessa'
- o Japanese Tree Lilac, Syringa reticulata

Future Removals

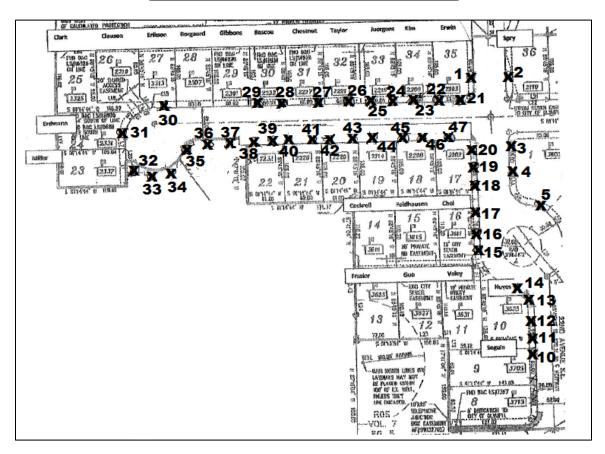
Once the required replanting is completed, I recommend the HOA resume with their tree removal and replacement plan. This will be dependent upon the HOAs budget but those trees associated with the greatest infrastructure damage should be highest priority. At this time, I would consider that to be Trees #3, 4, 15, 17, 65, 66 and 89.

Please contact me if you should have any questions.

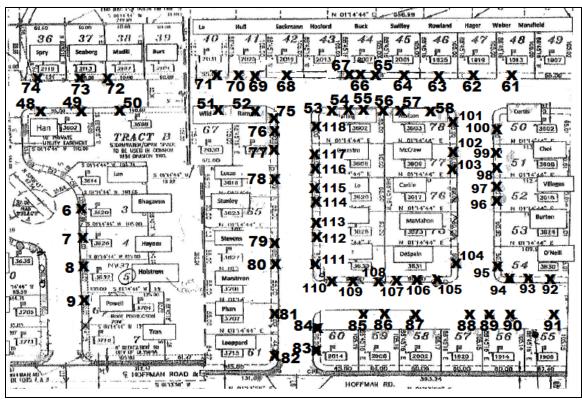
Professionally Submitted,

Hen M. M. Earland

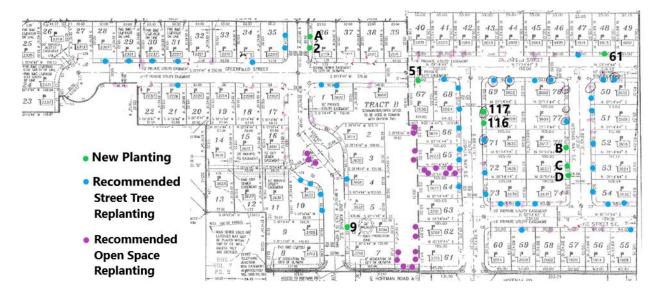
Kevin M. McFarland, Principal Consulting Urban Forester ISA Certified Arborist PN-0373 & ISA Tree Risk Assessment Qualified Sound Urban Forestry, LLC



Locations of Originally Assessed Street Trees

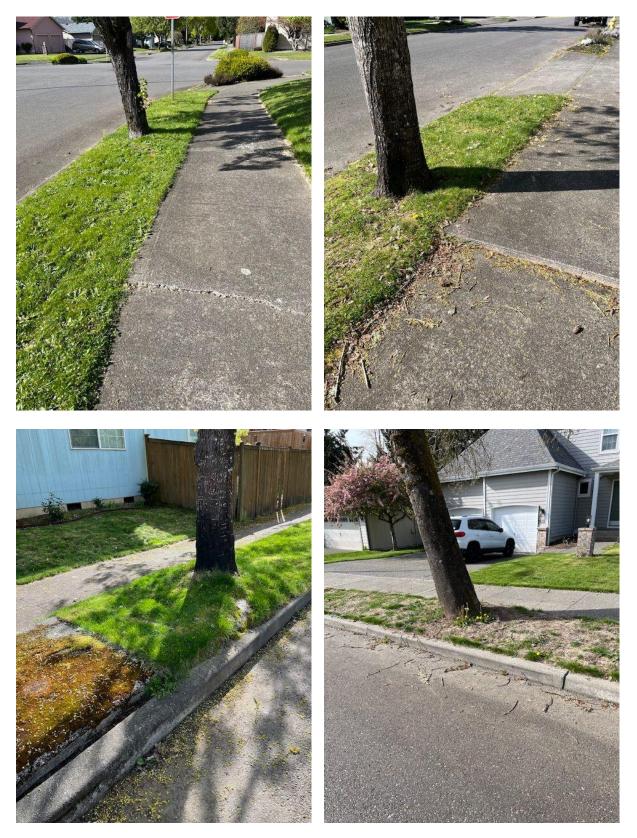


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Locations of New Plantings and Recommend Replacements

Photos





Greenfield Estates Street Tree Removal and Replacement Plan