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January 10, 2019 [*Revised November 17, 2021*]

ARBORIST REPORT
560 Winston Churchill Blvd,
Oakville, Ontario

BACKGROUND

MHBC was retained to conduct a detailed tree assessment and arborist report for the existing trees pertaining to the Town of Oakville's Tree By-Laws within the property known as 560 Winston Churchill Blvd in Oakville, Ontario.

PROCEDURE

On-site reviews were conducted on December 4th and 6th, 2018 and a follow up reviews were conducted on January 15th, 2021 and November 1, 2021. The findings noted herein refer to the condition of the trees on those dates. The onsite reviews were carried out on clear days when access to the site was not limited by adverse conditions.

None of the trees inventoried in this report were physically tagged in the field. The trees that were inventoried for this report have been fully assessed documenting tree number, species, ownership, condition (structure and health), and size using standard arboriculture procedures approved by the International Society of Arboriculture (I.S.A). The caliper of each tree was measured at 1.37 metres above existing grade using a caliper tape and recorded in centimetres as Diameter at Breast Height (DBH).

The on-site inventory of existing trees was carried out using the current survey of the property and relies on the accuracy of this survey. The inventory includes by-law trees within the site boundary, all trees within adjacent public boulevards, and all private trees within 6.0 metres of the site boundary as per Town of Oakville's Town Tree Protection By-law 2009-025, and Private Tree Protection By-law 2017-038.

This inventory is summarized graphically in the Tree Inventory Plans TI-1 and TI-2, which shall always be read in conjunction with this report and shall form part of this report.

The following rating system was used in describing the general health condition as well as the structure of the trees inventoried:

Good: Indicates a condition of vigor and no major concerns.
Fair: Indicates an adequate tree, which may have some minor issues.
Poor: Indicates declining health, bad form, or other more serious issues.
Dead: Indicates a dead tree that should be removed.

The following classifications were used in describing the ownership of each tree inventoried:

P	Private (landowner) owned tree
N	Neighbour (private) owned tree
SN	Shared ownership with neighbour
M	Municipal tree on boulevard
M1	Municipal/ Public tree in park or open/naturalized area
SM	Shared ownership with Municipality / Public Agency

ASSUMPTIONS AND LIMITING CONDITIONS

- Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible and is assumed to be correct; however MHBC can neither guarantee nor be responsible for the accuracy of information provided by others.
- It is assumed that the properties are not in violation of any applicable codes, ordinances, statutes, or other governmental regulations.
- Unless otherwise required by law, possession of this report or a copy thereof does not imply right of publication or use for any purpose in whole or in part by any other than the person or company by whom it was commissioned.
- The use of excerpts from this report or alterations to this report, without the authorization of MHBC Planning will invalidate the entire report. This report may not be used for any purpose other than its intended purpose as outlined.
- Unless expressed otherwise: 1) information contained in this report covers only those items that were examined and reflect the condition of those items at the time of inspection; and 2) the inspection is limited to visual examination or accessible items without dissection, excavation, probing, or coring. There is no warranty or guarantee, expressed or implied, that problems or deficiencies in the plants inventoried may not arise in the future.
- Fulfilling the recommendations made within this report is the sole responsibility of the property owner. MHBC will not be responsible for any occurrence resulting from the failure to follow such recommendations.
- The determination of ownership of any subject tree(s) is the responsibility of the owner and any civil or common-law issues, which may exist between property owners with respect to trees, must be resolved by the owner. The recommendation to remove or maintain any tree(s) does not grant authority to encroach in any manner onto adjacent private properties.

SUMMARY OF FINDINGS AND RECOMMENDATIONS

The following tables summarize the on-site trees subject to the Town of Oakville's Tree By-laws. We have individually inventoried one hundred and sixty nine (169) privately owned trees within and around the site boundary. There are also four (4) tree groupings that were inventoried on-site. The trees inventoried will be subject to tree protection per Town of Oakville standards as outlined on schedule 1 (See Figure 1). We have reviewed the proposal for the redevelopment of the site and we conclude that some of the trees inventoried within the site boundary are in conflict with the proposed development and would require removal. This has been reflected on the Tree Inventory Plans (TI-1 and TI-2) as well as in the recommendation column in the tables below.

Tree No.	Owner	Common Name	Botanical Name	DBH (cm)	Canopy Diameter (m)	Condition	Structure	Comments - Condition Related	Recommendation
1	N	Silver Maple	Acer saccharinum	132	12	P	P	Signs of rot typical of an older growth tree	P
2	N	Silver Maple	Acer saccharinum	180	12	P	P	Signs of rot typical of an older growth tree	P
3	N	Dead Coniferous	-	30	0	D	D	Tree is Dead	RX
4	N	Norway Spruce	Picea abies	57	10	F	F		P
5	N	Norway Spruce	Picea abies	45	6	F	P	Co-dominant stems	P
6	N	Norway Spruce	Picea abies	46	8	F	F		P
7	N	Norway Spruce	Picea abies	59	8	F	F		P
8	SN	Ash sp.	Fraxinus Sp.	39	6	P	P	2 stem, tree is nearly dead due to EAB	Rx
9	M	Norway Spruce	Picea abies	55	8	F	F		P
10	M	Norway Spruce	Picea abies	27	4	P	F		P
11	M	Siberian Elm	Ulmus pumila	53	8	P	P	Significant deadwood in canopy	P
12	M	Siberian Elm	Ulmus pumila	22	2	F-P	P		P
13	M	Siberian Elm	Ulmus pumila	65	6	P	F-P		P
14	M	Siberian Elm	Ulmus pumila	76	8	P	P	Fruiting bodies present	P
15	M	Siberian Elm	Ulmus pumila	26	2	P	P		P
16	M	Siberian Elm	Ulmus pumila	27	4	P	P		P
17	M	Siberian Elm	Ulmus pumila	42	8	F-P	P		P
18	M	Siberian Elm	Ulmus pumila	18	2	F-P	P		P
19	M	Siberian Elm	Ulmus pumila	24	4	F-P	P		P
20	M	Ash sp.	Fraxinus Sp.	16	2	P	P		P
21	M	Siberian Elm	Ulmus pumila	46	10	F-P	P		P
22	M	Siberian Elm	Ulmus pumila	33	8	P	P	Internal trunk rot and fruiting bodies are evident	P
23	M	Siberian Elm	Ulmus pumila	40	6	P	P		P
24	M	Siberian Elm	Ulmus pumila	29	6	P	P	Co-dominant stems, included bark	P
25	M	Siberian Elm	Ulmus pumila	20	4	F-P	P		P
26	M	Siberian Elm	Ulmus pumila	70	12	P	P	Co-dominant stems, included bark	P
27	M	Siberian Elm	Ulmus pumila	44	4	P	P	Co-dominant stem was cut	P
28	M	Siberian Elm	Ulmus pumila	46	10	P	P	Co-dominant stem was cut	P
29	M	Siberian Elm	Ulmus pumila	28	0	D	D	Tree is Dead	RX
30	M	Siberian Elm	Ulmus pumila	26	4	P	P	Ash growing out of base	P
31	M	Siberian Elm	Ulmus pumila	53	8	P	P		P
32	M	Siberian Elm	Ulmus pumila	36	4	F-P	P		P

33	M	Siberian Elm	Ulmus pumila	16	2	P	P	Main leader was cut	P
34	M	Siberian Elm	Ulmus pumila	68	4	P	P	Co-dominant stems	P
35	M	Siberian Elm	Ulmus pumila	48	6	P	P		P
36	N	Siberian Elm	Ulmus pumila	55	12	P	P		P
37	N	Siberian Elm	Ulmus pumila	16	0	D	D	Tree is Dead	RX
38	N	Siberian Elm	Ulmus pumila	24	4	P	P		P
39	N	Siberian Elm	Ulmus pumila	43	6	P	P		P
40	N	Siberian Elm	Ulmus pumila	43	0	D	D	Tree is Dead	RX
41	N	Siberian Elm	Ulmus pumila	12	2	P	P		P
42	N	Siberian Elm	Ulmus pumila	21	6	P	P	Co-dominant stems, signs of internal rot	P
43	N	Siberian Elm	Ulmus pumila	33	8	P	P		P
44	N	Siberian Elm	Ulmus pumila	60	8	P	P		P
45	N	Cherry Sp.	Prunus Sp.	23	6	F	F		P
46	N	Austrian Pine	Pinus nigra	63	10	F	F		P
47	N	Colorado Spruce	Picea pungens	27	4	F	F		P
48	N	Austrian Pine	Pinus nigra	75	10	F	F		P
49	N	Red Maple	Acer rubrum	70	12	F	F	Root flare is grown into garage	P
50	N	Siberian Elm	Ulmus pumila	37	8	F-P	P		P
51	N	Siberian Elm	Ulmus pumila	38	4	F-P	P		P
52	N	Siberian Elm	Ulmus pumila	40	8	F-P	P		P
53	N	Siberian Elm	Ulmus pumila	43	0	D	D	Tree is Dead	RX
54	N	Siberian Elm	Ulmus pumila	50	10	P	P		P
55	N	Siberian Elm	Ulmus pumila	17	2	P	P		P
56	N	Siberian Elm	Ulmus pumila	53	8	P	P	Co-dominant stems	P
57	N	Siberian Elm	Ulmus pumila	61	10	P	P	Signs of rot	P
58	P	Red Oak	Quercus rubra	104	12	F	F	Moderate deadwood in canopy	P
59	P	Red Oak	Quercus rubra	45	8	F	F		R
60	P	Red Oak	Quercus rubra	40	8	F	F		R
61	P	Red Oak	Quercus rubra	48	10	F	F		R
62	P	Red Maple	Acer rubrum	41	8	F-P	F-P	Trunk cavity present. Signs of internal rot.	P
63	P	Red Maple	Acer rubrum	54	10	F	F		P
64	P	Red Maple	Acer rubrum	64	12	F	F	Trunk cavity present. Signs of internal rot. Significant structural failures on one side of the tree	P
65	P	Siberian Elm	Ulmus pumila	10-15	2	F	F		R
66	P	Siberian Elm	Ulmus pumila	10-15	2	F	F		R
67	P	Siberian Elm	Ulmus pumila	10-15	2	F	F		R
68	M	Siberian Elm	Ulmus pumila	10-15	2	F	F		P
69	M	Siberian Elm	Ulmus pumila	10-	2	F	F		P

				15					
70	M	Siberian Elm	Ulmus pumila	10-15	2	F	F		P
71	M	Willow sp.	Salix Sp.	15-20	4	F	F		P
72	M	Black Walnut	Juglans nigra	16	4	F	F		P
73	M1	Red Oak	Quercus rubra	59	12	F	F		R
74	M1	Siberian Elm	Ulmus pumila	78	10	F	F		P
75	M1	White Mulberry	Morus alba	17	4	F	F		P
76	M1	Black Walnut	Juglans nigra	20-23	6	F	F		P
77	M1	Manitoba Maple	Acer negundo	42	5	F	F		P
78	M1	Ash sp.	Fraxinus Sp.	21	3	D	D	EAB	P
79	M1	White Cedar	Thuja occidentalis	10-15	4	F	F	4 stem, part of hedge	P
80	M1	White Cedar	Thuja occidentalis	10-15	4	F	F	3 stem, part of hedge	P
81	M1	Red Oak	Quercus rubra	57	10	F	F		P
82	M1	Ash sp.	Fraxinus Sp.	32	5	F	F		P
83	M1	Ash sp.	Fraxinus Sp.	31	5	F	F		P
84	M1	Ash sp.	Fraxinus Sp.	21	3	F-P	F	EAB	P
85	M1	White Mulberry	Morus alba	15-17	5	F	F	3 stem	P
86	M1	White Mulberry	Morus alba	11-23	5	F	F	3 stem	P
87	M1	White Mulberry	Morus alba	12-20	5	F	F	3 stem	P
88	M1	Manitoba Maple	Acer negundo	39	5	F	F		P
89	M1	Red Oak	Quercus rubra	34	5	F	F		P
90	M1	Manitoba Maple	Acer negundo	25-42	5	F	F	2 stem	P
91	M1	Ash sp.	Fraxinus Sp.	29	4	F-P	F	EAB	P
92	M1	Manitoba Maple	Acer negundo	45	6	F	F		P
93	M1	Manitoba Maple	Acer negundo	52	7	F	F		P
94	M1	Red Oak	Quercus rubra	25	4	F	F-P		P
95	M1	Red Oak	Quercus rubra	58	9	F	F		P
96	M1	Red Oak	Quercus rubra	65	10	F	F		P
1401	SN	Ash sp.	Fraxinus Sp.	21		D	D	EAB	RX
1402	SN	Ash sp.	Fraxinus Sp.	32		D	D	EAB. Recommend Removal due to condition. Obtain neighbouring landowner permission prior to removal	P
1403	P	Ash sp.	Fraxinus Sp.	20		D	D	EAB	RX
1404	N	Ash sp.	Fraxinus Sp.	33		D	D	EAB, Beaver damage. Recommend Removal due to condition. Obtain neighbouring landowner permission prior to removal	P

1405	P	Ash sp.	Fraxinus Sp.	22		D	D	EAB	RX
1406	P	Ash sp.	Fraxinus Sp.	15		D	D	EAB	RX
1407	N	Ash sp.	Fraxinus Sp.	24		D	D	EAB. Recommend Removal due to condition. Obtain neighbouring landowner permission prior to removal	P
1408	P	Ash sp.	Fraxinus Sp.	31		D	D	EAB	RX
1409	P	Ash sp.	Fraxinus Sp.	22		D	D	EAB, 2 stem co-dominant	RX
1410	SN	Ash sp.	Fraxinus Sp.	25		D	D	EAB. Recommend Removal due to condition. Obtain neighbouring landowner permission prior to removal	P
1411	P	Ash sp.	Fraxinus Sp.	24		D	D	EAB	RX
1412	P	Ash sp.	Fraxinus Sp.	27		D	D	EAB	RX
1413	P	Ash sp.	Fraxinus Sp.	24		D	D	EAB	RX
1414	P	Ash sp.	Fraxinus Sp.	30		D	D	EAB	RX
1415	P	Ash sp.	Fraxinus Sp.	28		D	D	EAB	RX
1416	P	Ash sp.	Fraxinus Sp.	31		D	D	EAB	RX
1417	P	Ash sp.	Fraxinus Sp.	33		D	D	EAB	RX
1418	P	Ash sp.	Fraxinus Sp.	31		D	D	EAB	RX
1419	P	Ash sp.	Fraxinus Sp.	30		D	D	EAB	RX
1420	P	Ash sp.	Fraxinus Sp.	23		D	D	EAB	RX
1421	SN	Ash sp.	Fraxinus Sp.	24		D	D	EAB, 2 stem	RX
1422	P	Ash sp.	Fraxinus Sp.	28		D	D	EAB	RX
1423	P	Ash sp.	Fraxinus Sp.	22		D	D	EAB	RX
1424	P	Ash sp.	Fraxinus Sp.	26		D	D	EAB	RX
1425	P	Ash sp.	Fraxinus Sp.	18		D	D	EAB	RX
1426	P	Swamp Cedar	Thuja occidentalis	17		F/P	F	Part of hedge of smaller caliper cedar +/- 40 stems	RX
1427	P	Ash sp.	Fraxinus Sp.	24		D	D	EAB	RX
1428	P	Ash sp.	Fraxinus Sp.	25		D	D	EAB	RX
1429	P	Ash sp.	Fraxinus Sp.	26		D	D	EAB	RX
1430	P	Ash sp.	Fraxinus Sp.	43		D	D	EAB	RX
1431	P	Ash sp.	Fraxinus Sp.	40		D		EAB	RX
1432	P	Swamp Cedar	Thuja occidentalis	15		F		4 stem, part of hedge of similar caliper cedars +/- 50 stems at 10-15	R
1433	P	Swamp Cedar	Thuja occidentalis	17		F		Part of hedge	R
1434	P	Manitoba Maple	Acer negundo	54	10	F	F		R
1435	P	Manitoba Maple	Acer negundo	38	8	F	F		R
1436	P	Manitoba Maple	Acer negundo	22	7	F	F/P	Co-dominant at base	R
1437	P	Ash sp.	Fraxinus Sp.	30		D		EAB	Rx

1438	P	Ash sp.	Fraxinus Sp.	56		D		EAB	Rx
1439	P	Manitoba Maple	Acer negundo	29	8	F	F	Mild lean	R
1440	P	Manitoba Maple	Acer negundo	30	6	F/P	P	Mild lean	R
1441	P	Manitoba Maple	Acer negundo	21	5	F	F	Mild lean	R
1442	P	Manitoba Maple	Acer negundo	42	12	F	P	Co-dominant at 1.2m, weak union with included bark and signs of probable failure	R
1443	P	Manitoba Maple	Acer negundo	34	9	F	F	Mild lean	R
1444	P	Manitoba Maple	Acer negundo	20	6	F	F		R
1445	SN	Manitoba Maple	Acer negundo	24	5	F	F	Mild lean	R
1446	P	Manitoba Maple	Acer negundo	59	21	P	F/P	Significant deadwood in canopy, tree is in decline	R
1447	P	Manitoba Maple	Acer negundo	40	10	F	F	Mild lean	R
1448	P	Manitoba Maple	Acer negundo	37		D		EAB	Rx
1449	P	Burr Oak	Quercus macrocarpa	24	6	F/P	P	Strangled by vines	R
1450	P	White Birch	Betula papyrifera	19	4	P	P	Significant failure of former co-dominant stem, unbalanced, former co-dominant stem has failed, remaining stem has moderate/significant lean	R
1451	P	Manitoba Maple	Acer negundo	61	9	F/P	P		R
1452	P	Manitoba Maple	Acer negundo	30	8	F	F/P		PI
1453	P	Manitoba Maple	Acer negundo	34	9	F	P	Imbalanced crown	R
1454	P	Manitoba Maple	Acer negundo	19	4	F	F		P
1455	P	Manitoba Maple	Acer negundo	31	7	F	F	Mild lean	P
1456	P	Manitoba Maple	Acer negundo	15	4	F	F		P
1457	P	Manitoba Maple	Acer negundo	26	6	F/P	F		P
1458	P	Ash sp.	Fraxinus Sp.	31		D			P
1459	P	Manitoba Maple	Acer negundo	21	6	F/P	F/P		R
1460	P	Manitoba Maple	Acer negundo	28	12	F	F		R
1461	P	Manitoba Maple	Acer negundo	26	4	F/P	F/P		R
1462	P	Manitoba Maple	Acer negundo	23	5	F	F/P	3 Stem, co-dominant at base	R
1463	P	Ash sp.	Fraxinus Sp.	16		D			RX
1464	P	Manitoba Maple	Acer negundo	39	22	F/P	F/P	2 Stem, co-dominant, moderate/significant deadwood in canopy	P
1465	P	Manitoba Maple	Acer negundo	45	18	F/P	F/P	2 Stem, co-dominant, moderate/significant deadwood in canopy	P
1466	P	Manitoba Maple	Acer negundo	45	20	F	F/G		P

1467	N	White Pine	Pinus strobus	17	5	F/G	G		P
1468	N	White Pine	Pinus strobus	18	6	F/G	G		P
1469	N	White Pine	Pinus strobus	20	7	F	G		P
1470	N	White Pine	Pinus strobus	22	7	G/H	G		P
1471	N	White Pine	Pinus strobus	18	6	G/H	G		P
1472	N	White Pine	Pinus strobus	17	5	F/G	G		P
1473	P	Manitoba Maple	Acer negundo	37	10	F/P	P	2 stem	P
1474	P	Manitoba Maple	Acer negundo	40	15	F	P		P
1475	P	Red Oak	Quercus rubra	21	6	F/P	F		P
1476	P	Red Oak	Quercus rubra	34	12	F	F		P
1477	P	Red Oak	Quercus rubra	33	14	F	F	Mild lean	P
1478	N	Black Cherry	Prunus serotina	42	18	P	P		P
1479	N	White Oak	Quercus Alba	108	30	P	F/P	Significant deadwood in canopy, multiple developing structural issues, tree in severe decline	P
1480	P	Cherry Sp.	Prunus Sp.	23	6	F	F/P		P
1481	P	American Elm	Ulmus americana	15	4	F	F		P
1482	N	Cherry Sp.	Prunus Sp.	15	3	F	F		P
1483	P	Red Oak	Quercus rubra	18	4	F	F/P		P
1484	N	Burr Oak	Quercus macrocarpa	64	20	F/P	F	Signs of internal rot	P
1485	N	Burr Oak	Quercus macrocarpa	25	8	F	F/P		P
1486	P	American Elm	Ulmus americana	17	4	F/P	P		P
1487	SN	Burr Oak	Quercus macrocarpa	29	8	F	P	co-dominant at 0.9m with included bark	P
1488	N	Burr Oak	Quercus macrocarpa	45	16	F	F/P	co-dominant at 1.5m	P
1489	N	Red Oak	Quercus rubra	35	17	F	F		P
1490	P	American Elm	Ulmus americana	18	4	F	F	Mild lean	P
1491	P	Burr Oak	Quercus macrocarpa	29	7	F/P	F		P
1492	SN	Burr Oak	Quercus macrocarpa	34	9	F	F		P
1493	P	Burr Oak	Quercus macrocarpa	30	7	F/P	F		P
1494	N	Burr Oak	Quercus macrocarpa	43	14	F/P	F		P

Key to Owner Codes			
P	Private client owned tree	M	Municipal tree on boulevard
N	Neighbour (private) owned tree	M1	Municipal tree in park, open space or naturalized area
SN	Shared ownership with neighbour (private)	SM	Shared ownership with Municipality

Key to Condition Ratings
Structure and Health ratings are measured on a scale of Good (G), Fair (F), Poor (P)

Key to Recommendation Codes			
P	Protect tree - retaining 100% of min. TPZ	R	Remove tree
PI	Protect tree - minor Injury	RX	Remove Dead, Dying or Hazard Tree

Tree Grouping Inventory Chart

Vegetation Unit	Species - dominant species shown in bold	Size range DBH (cm) of trees within Group	Proportion % for each size range within Group	General Condition of Group	Comments
A	**Chinese Elm (Ulmus parvifolia)**	0-5	0	F	Border trees along western residential property line.
	Ironwood (Carpinus caroliniana)	6-12	40		
		13-20	10		
		21-40	30		
		>40	20		
B	**Chinese Elm (Ulmus parvifolia)**	0-5	0	F	Wide linear grouping in middle of property
	Scots Pine (Pinus sylvestris)	6-12	5		
	White Cedar (Thuja occidentalis)	13-20	10		
	Red Maple (Acer rubrum)	21-40	75		
		>40	5		
C	**Chinese Elm (Ulmus parvifolia)**	0-5	0	F	Grouping in southeast corner of site
	White Cedar (Thuja occidentalis)	6-12	70		
	Manitoba Maple (Acer negundo)	13-20	20		
	Carolina Poplar (Populus x canadensis)	21-40	5		
		>40	5		
D	**White Cedar (Thuja occidentalis)**	0-5	0	F	Linear grouping in middle of property
	Red Oak (Quercus rubra)	6-12	80		
	Norway Maple (Acer platanoides)	13-20	10		
		21-40	5		
		>40	5		
E	**White Cedar (Thuja occidentalis)**	0-5	0	F	Grouping along northern property boundary
	Red Oak (Quercus rubra)	6-12	80		
	Manitoba Maple (Acer negundo)	13-20	15		
		21-40	5		
		>40	0		
F	**White Cedar (Thuja occidentalis)**	0-5	0	F	Grouping along western property boundary
	Manitoba Maple (Acer negundo)	6-12	60		
	Chinese Elm (Ulmus parvifolia)	13-20	20		
	Birch sp. (Betula sp.)	21-40	20		

		>40	0		
G	**Ash sp. (Fraxinus sp.)**	0-5	0	F	Grouping in northeast corner of the property
	White Cedar (Thuja occidentalis)	6-12	0		
	Manitoba Maple (Acer negundo)	13-20	80		
		21-40	15		
		>40	5		

PHOTOGRAPHIC INVENTORY OF INDIVIDUAL TREES

Tree #1 looking East

Tree #2 looking East

Trees #3 through #8 looking North

Trees #9 through #22 looking North

Trees #23 through #32 looking East

Trees #33 through #44 looking East

Trees #45 through #49 looking West

Trees #50 through #57 looking South

Trees #58 through #63 looking Southwest

Tree #64 looking Southwest

Tree #72 looking Northwest

PHOTOGRAPHIC INVENTORY OF TREE GROUPINGS

Tree Grouping ‘A’ looking South

Tree Grouping ‘A’ looking Southwest

Tree Grouping ‘B’ looking Northwest

Tree Grouping ‘B’ looking North

Tree Grouping ‘C’ looking Southeast

Tree Grouping ‘C’ looking Southeast

Tree Grouping ‘C’ looking Northeast

Tree Grouping ‘C’ looking West

Tree Grouping ‘D’ looking West

Tree Grouping ‘D’ looking Northwest

Tree Grouping ‘E’ looking Southwest

Tree Grouping ‘F’ looking West

Tree Grouping ‘G’ looking West

Tree Grouping ‘G’ looking West

Trees 1479-1494 looking Northwest

TREE PROTECTION RECOMMENDATIONS

The following standards shall apply in order to protect the existing trees. Where the municipality enforces its own standards, those of the governing municipality shall supersede the recommendations contained herein. In all other instances, the following recommendations shall be treated as minimum standards for tree protection and retention.

1.0 ESTABLISH A TREE PROTECTION ZONE

The purpose of the tree protection zone is to prevent root damage, soil compaction and soil contamination during construction activities. Workers and machinery shall not disturb the tree protection zone in any way. In order to prevent access, the following recommendations are offered.

- Install tree protection hoarding as per Town of Oakville standards (See Figure 2 – Tree Protection Barrier).
- Allow no fill, equipment, supplies, or waste within the tree protection zone.
- Maintain the tree protection hoarding in good condition for the duration of construction.
- Tree protection hoarding is not to be removed until all construction activities have been completed.
- A TREE PROTECTION ZONE sign must be mounted on one side of the tree protection barrier for the duration of site construction. The sign should be a minimum 40cm x 60cm and made of white gator board or equivalent material. The sign must contain the same notes and be similar to the illustration shown below.

TREE PROTECTION ZONE (TPZ)

No grade change, storage of materials or equipment is permitted within this area. Tree protection barrier must not be removed without the written authorization of the Town of Oakville.

Report any contraventions to

Contact Name_____Tel. No._____

Unauthorized removal of the tree protection barrier or other contraventions may result in prosecution.

2.0 ROOT PRUNING

Where possible, hand dig areas closest to each tree to prevent any unnecessary tearing or pulling of roots. Removal of roots that are greater than 2.5 centimetres in diameter or roots that are injured or diseased should be performed as follows:

- Preserve the root bark ridge (similar in structure to the branch bark ridge). Directional Root Pruning (DRP) is the recommended technique and should be employed during hand excavation around tree roots. Roots are similar to branches in their response to pruning practices. With DRP, objectionable and severely injured roots are properly cut to a lateral root that is growing downward or in a favorable direction.
- All roots needing to be pruned or removed shall be cut cleanly with sharp hand tools, by a Certified Arborist.
- No wound dressings or pruning paint shall be used to cover the ends of each cut.
- All roots requiring pruning shall be cut using any of the following tools:
  Large or small loppers, Hand pruners, Small hand saws, Woundscribers
- Avoid prolonged exposure of tree roots during construction - keep exposed roots moist and dampened with mulching materials, irrigation or wrap in burlap if exposed for longer than 4 hours.

3.0 FERTILIZATION AND IRRIGATION

The following measures are recommended:

- Fertilizer, if applied, must be a low nitrogen formula such as *5-30-30* to promote root growth rather than shoot growth.
- If construction occurs during July and / or August, roots must be irrigated during conditions of drought.

4.0 ESTABLISH MAINTENANCE PROGRAM

Pre-Construction:

- Prune all trees to remove any deadwood and obstruction prune as required.
- All trees to be preserved shall be protected with a tree protection barrier (See Figure 2 – Tree Protection Barrier)
- Attach a filter cloth 600mm high to the construction side of the hoarding to act as a sediment control. Sediment control fencing per OPSD-219.110, and installed to the satisfaction of Urban Forestry.
- All supports and bracings used to secure barrier must be located outside of Tree Protection Zone.
- The applicant shall notify the Town of Oakville and the consulting Arborist to confirm that the tree protection barriers are in place.

During Construction:

- Irrigate tree preservation zones during drought conditions (June through September), in an attempt to reduce the effects of drought stress.
- Inspect the site every month to ensure that all tree protection fence / hoarding is in place and in good condition, inspect the trees to monitor condition.

Post-Construction:

- Prune crowns to remove any newly developed deadwood only. Do not remove any live growth.
- Inspect the trees three times per year (May, July, and September) to monitor condition for a minimum period of 2 additional years.

5.0 LANDSCAPING

Any landscaping completed within the TPZ, after construction is completed and tree protection fencing / hoarding has been removed, is to be carried out in such a way that it will not cause damage to any of the trees or their roots. The trees must be protected to the same standards listed earlier in this report, but without the use of tree protection fence or hoarding.

The following guidelines are recommended:

- **No grade changes** are permitted which include adding and/or removing soil.
- **No excavation** is permitted that can cause damage to the roots of the tree.
- **No heavy equipment** can be used to compact the soil within the tree preservation zone.
- Where possible, hard surface paving around trees to be protected should be constructed using permeable products such as interlocking stone. Areas to be paved must be hand dug when encroaching within the tree protection zone

CONCLUSION

It is our opinion that the trees identified for retention can be successfully retained if the recommendations contained herein are followed. Tree numbers 3, 8, 29, 37, 40, 53, 1401, 1403-1406, 1408-1408, 1411-1425, 1427-1431, 1437-1438, 1448, and 1463, are dead and their removal is recommended. Trees 59-61 and 65-67, 73, 1426, 1432-1436, 1439-1447, 1449, 1451, 1453, and 1459-1462 require removal for construction purposes and will require a permit. Although not dead, tree 1450 is in severe decline and considered hazardous. Consequently it should also be removed.

Tree Groupings B and D require removal for construction purposes. Small portions of Groupings A and C, E, and F where conflicting with the proposed parking lot will also require removal. Trees that are less than 20cm DBH can be removed without a permit or notification to the Town as they are not subject to the Private Tree By-law.

The removal of any trees located on or bordering neighbouring property will require coordination with the adjacent landowner in addition to the requisite Town permit to such removal.

Special care shall be taken when working within or near the tree protection zones that are to be retained. No removals shall take place in the absence of a Town approved Tree Removal Permit.

Kindly direct any questions regarding this report to the undersigned

Respectfully submitted,
MHBC Planning, Urban Design & Landscape Architecture

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Town of Oakville Arborist Number: 20-143528

Figure 1: Tree Protection Barrier

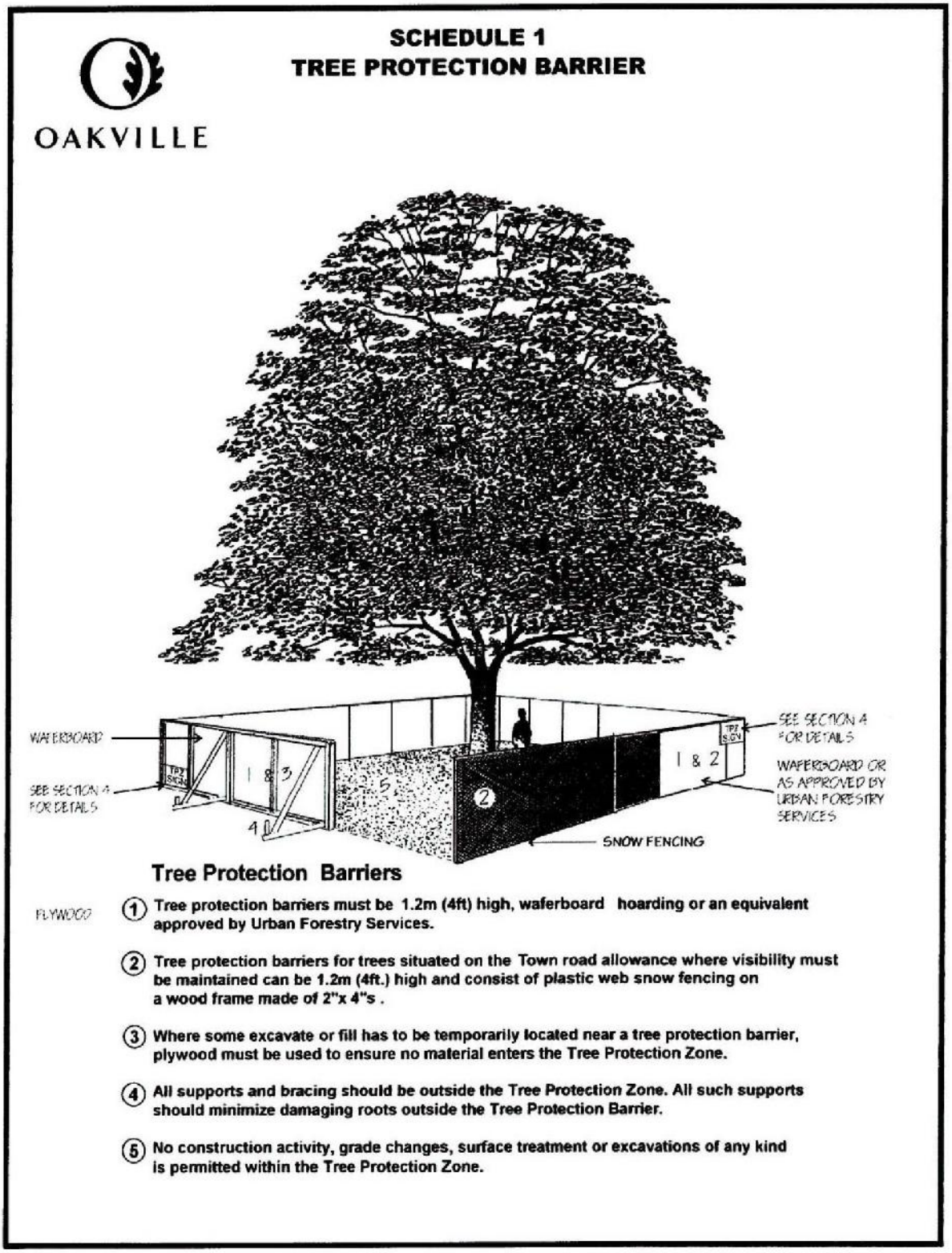

Figure 2: Crown and Root Structure