



April 12, 2023

Rideau Non-Profit Housing Inc.
5581 Doctor Leach
Manotick, ON
K4M 1J6
Attn.: Sally Brown

RE: TREE CONSERVATION REPORT FOR 5581 DOCTOR LEACH DRIVE, MANOTICK

This Tree Conservation Report (TCR) was prepared by IFS Associates Inc. (IFS) on behalf of Rideau Non-Profit Housing Inc. in support of the development of 5581 Doctor Leach Drive in Manotick. The need for this report is related to trees protected under the City of Ottawa’s Tree Protection By-law (By-law No. 2020-340). The By-law reflects Section 4.8.2. of the City of Ottawa’s Official Plan which calls for the retention of the City’s urban forestry canopy and, in particular, large healthy trees.

Under the Tree Protection By-law a TCR is required for all plans of subdivision, site plan control applications, common elements condominium applications, and vacant land condominium applications where there is a tree of 10 cm in diameter at breast height (DBH) or greater on a site and/or if there is a tree on an adjacent site that has a critical root zone (CRZ) extending onto a development site. Trees of any size on adjacent City lands must also be documented in a TCR. A “tree” is defined in the By-law as any species of woody perennial plant, including its root system, which has reached or can reach a minimum height of at least 450 cm at physiological maturity. The CRZ is calculated as DBH x 10 cm.

The inventory in this report details the assessment of all individual trees on the subject property and adjacent private properties and City of Ottawa land. Field work for this report was completed in October 2022.

The development proposed for this property includes the construction of a new two-storey residential building with adjacent surface parking. No trees on adjacent private or public property will be lost as a result of the proposed construction. However, two trees on the subject property will be removed due to conflicts with the parking access route and building footprint.

TREE SPECIES, CONDITION, SIZE AND STATUS

Table 1 on pages 2 through 7 details the species, ownership, size (diameter), condition and status of the individual and groups of trees on the subject and adjacent properties. Each of these trees is referenced by the numbers plotted on the tree conservation plan on page 9 of this report.



Table 1. Species, ownership, diameter, condition and status of trees at 5581 Doctor Leach Drive

Tree No.	Tree species	Owner-ship ¹	DBH ² (cm)	Tree Condition; Age Class; Condition Notes; Species Origin & Preservation Status (to be removed or preserved and protected)
1	Sugar maple (<i>Acer saccharum</i>)	Private	38	Fair; mature; branch cluster causing dieback of central stem; native species; to be removed (conflicts with access route)
2	Sugar maple (<i>Acer saccharum</i>)	Private	33	Good; mature; central stem with competing laterals at 2.25m and 3.5m; dense crown; native species; to be preserved and protected
3	Sugar maple (<i>Acer saccharum</i>)	Private	38	Fair; mature; multiple competing stems at 1.75m – none central; one binding root; native species; to be preserved and protected
4	Sugar maple (<i>Acer saccharum</i>)	Private	38	Poor; mature; central stem greatly diminished due to branch cluster and girdling root; lateral on east now dominant; native species; to be preserved and protected
5	Sugar maple (<i>Acer saccharum</i>)	Private	45	Fair; mature; co-dominant stems at 3m with inclusion ridge at union; competing and suppressed laterals starting at 1.5m; broad dense crown; native species; to be preserved and protected
6	Sugar maple (<i>Acer saccharum</i>)	Private	46	Fair; mature; co-dominant stems at 2m with included bark to 0.5m from grade; weak unions between secondary stems higher in crown; major girdling root on east; native species; to be preserved and protected
7	Sugar maple (<i>Acer saccharum</i>)	Private	32	Fair; mature; tri-dominant stems at 2.25m with included bark and fissures in union; competing and suppressed laterals starting at 1.5m; broad dense crown; major girdling root on west; native species; to be preserved and protected
8	Sugar maple (<i>Acer saccharum</i>)	Private	29	Fair; mature; co-dominant stems with third suppressed stem at 2.5m; suppressed stems at 1.75 and 2m; broad crown; native species; to be preserved and protected
9	Crab apple (<i>Malus spp.</i>)	Private	42 (at 0.4m)	Good; mature; six-stemmed at 0.5-1m; broad, dense generally symmetric crown; located within small planning bed; cultivar; to be preserved and protected
10	Crab apple (<i>Malus spp.</i>)	Private	37 (at 0.5m)	Fair; mature; tri-stemmed at 1m – central stem with two competing laterals on west; crown asymmetric due to clearance pruning from side of building; located within small planning bed; cultivar; to be preserved and protected

Table 1. Con't

Tree No.	Tree species	Owner-ship ¹	DBH ² (cm)	Tree Condition; Age Class; Condition Notes; Species Origin & Preservation Status (to be removed or preserved and protected)
11	Honey-locust (<i>Gleditsia triacanthos</i>)	Private	53	Fair; mature; central stem with competing and suppressed laterals at 2m; broad crown; elevated root collar; introduced species to Eastern Ontario; to be removed (conflicts with building)
12	Honey-locust (<i>Gleditsia triacanthos</i>)	Private	49	Fair; mature; divergent co-dominant stems at 1.75m; wound from previously removed third stem with incipient decay; introduced species to Eastern Ontario; to be preserved and protected
13	Sugar maple (<i>Acer saccharum</i>)	Private	37	Good; mature; central dominant stem with co-dominant leaders near apex; generally well-spaced branches; native species; to be preserved and protected
14	Sugar maple (<i>Acer saccharum</i>)	Private	41	Fair; mature; co-dominant stems at 2m – north stem in decline due to poor root collar; competing and suppressed laterals starting at 1.5m; broad, thin crown; native species; to be preserved and protected
15	White spruce (<i>Picea glauca</i>)	Private	45	Fair; mature; single dominant stem and leader; poor crown density, fair growth increment and needle colour; many exposed, damaged surface roots; native species; to be preserved and protected
16	Sugar maple (<i>Acer saccharum</i>)	Private	29	Fair; mature; central stem with dominant laterals on east; central in decline due to branch cluster on east at 1.5m and gridding root on west; native species; to be preserved and protected
17	Crab apple (<i>Malus</i> spp.)	Private	33 (at 0.5m)	Fair; mature; tri-dominant stems with two suppressed laterals at 0.7m; broad crown; restricted rooting area; cultivar; to be preserved and protected
18	Crab apple (<i>Malus</i> spp.)	Private	41 (at 0.3m)	Fair; mature; four-stemmed at 0.5m – co-dominant stems with two suppressed laterals on east and west; broad crown; cultivar; to be preserved and protected
19	White spruce (<i>Picea glauca</i>)	Private	39	Fair; mature; single dominant stem and leader; good density, increment and colour; native species; to be preserved and protected
20	White spruce (<i>Picea glauca</i>)	Private	40	Fair; mature; single dominant stem and leader; fair density, increment and colour; native species; to be preserved and protected

Table 1. Con't

Tree No.	Tree species	Ownership ¹	DBH ² (cm)	Tree Condition; Age Class; Condition Notes; Species Origin & Preservation Status (to be removed or preserved and protected)
21	White spruce (<i>Picea glauca</i>)	Private	34	Fair; mature; single dominant stem with three competing leaders near apex; good density, increment and colour; native species; to be preserved and protected
22	White spruce (<i>Picea glauca</i>)	Private	22, 28, 29, 33	Very poor; mature; four trees – all topped by Hydro at 4m; fair density, increment and colour; native species; to be preserved and protected
23	White spruce (<i>Picea glauca</i>)	Private	30, 31, 33, 35, 38	Fair; mature; five trees – one of which is dead; fair density, increment and colour; native species; to be preserved and protected
24	Norway maple (<i>Acer platanoides</i>)	Private	16	Fair; maturing; central stem with three competing leaders at 4m; introduced invasive species; to be preserved and protected
25	European larch (<i>Larix decidua</i>)	Private	21, 21, 22, 25, 27	Fair; mature; five trees – all of which have damaged surface roots and root collars; poor density, fair increment and colour; introduced species; to be preserved and protected
26	Colorado spruce (<i>Picea pungens</i>)	Private	53	Fair; mature; co-dominant parallel stems at 2.5m; good density, increment and colour except near base where invasive growth is thinning lower crown; living crown held to grade; introduced species; to be preserved and protected
27	Colorado spruce (<i>Picea pungens</i>)	Private	47	Fair; mature; co-dominant parallel stems at 5m; good density, increment and colour except near base where invasive growth is thinning lower crown; living crown held to grade; introduced species; to be preserved and protected
28	Sugar maple (<i>Acer saccharum</i>)	Private	48 (at 1m)	Fair; mature; central stem diminished by branch cluster of five competing and suppressed laterals at 1.5m; multiple binding roots; native species; to be preserved and protected
29	Amur maple (<i>Acer tataricum</i> var. <i>ginnala</i>)	Private	<10 avg.	Poor - fair; overmature; eight trees – all multi-stemmed from grade; introduced invasive species; to be preserved and protected
30	White cedar (<i>Thuja occidentalis</i>)	Neighbour	15 avg.	Fair; mature; double-stemmed from grade; fair density, increment and colour; native species; to be preserved and protected

Table 1. Con't

Tree No.	Tree species	Owner-ship ¹	DBH ² (cm)	Tree Condition; Age Class; Condition Notes; Species Origin & Preservation Status (to be removed or preserved and protected)
31	Red pine (<i>Pinus resinosa</i>)	Private	23	Poor; mature; major sweep at 2.5m from previously lost leader; poor density, increment and colour; native species; to be preserved and protected
32	Cottonwood (<i>Populus deltoides</i>)	Private	+/-120 (at 1.5m)	Fair; very mature; central stem with major suppressed lateral at 1.3m on south; co-dominant leaders at 10m; broad crown; native species; to be preserved and protected
33	Norway maple (<i>Acer platanoides</i>)	Shared with city	36	Good; mature; central dominant stem with competing leaders near apex; divergent towards east; crown asymmetric towards west due to influence of tree #34; introduced invasive species; to be preserved and protected
34	Norway maple (<i>Acer platanoides</i>)	Shared with city	33	Very poor; mature; eutypella canker (<i>Eutypella parasitica</i>) from grade to 2m on west; divergent and asymmetric towards east; hazardous (over sidewalk); introduced invasive species; to be preserved and protected
35	Kentucky coffee tree (<i>Gymnocladus dioicus</i>)	Shared with city	6	Good; juvenile; planted within the last 5 years; introduced species to Eastern Ontario; to be preserved and protected
36	Honey-locust (<i>Gleditsia triacanthos</i>)	Shared with city	9	Good; juvenile; planted within the last 5 years; introduced species to Eastern Ontario; to be preserved and protected
37	Honey-locust (<i>Gleditsia triacanthos</i>)	Shared with city	10	Good; juvenile; planted within the last 5 years; introduced species to Eastern Ontario; to be preserved and protected
38	Red oak (<i>Quercus rubra</i>)	Shared with city	5	Fair; juvenile; planted within the last 5 years; sweep at 1m; native species; to be preserved and protected
39	Red oak (<i>Quercus rubra</i>)	Shared with city	5	Good; juvenile; planted within the last 5 years; native species; to be preserved and protected
40	Red oak (<i>Quercus rubra</i>)	Shared with city	5	Good; juvenile; planted within the last 5 years; native species; to be preserved and protected
41	Sugar maple (<i>Acer saccharum</i>)	Shared with city	9	Good; juvenile; planted within the last 5 years; some basal damage from mowers; native species; to be preserved and protected

Table 1. Con't

Tree No.	Tree species	Owner-ship ¹	DBH ² (cm)	Tree Condition; Age Class; Condition Notes; Species Origin & Preservation Status (to be removed or preserved and protected)
42	Sugar maple (<i>Acer saccharum</i>)	Shared with city	8	Good; juvenile; planted within the last 5 years; some basal damage from mowers; native species; to be preserved and protected
43	Sugar maple (<i>Acer saccharum</i>)	Shared with city	9	Good; juvenile; planted within the last 5 years; some basal damage from mowers; native species; to be preserved and protected
44	White cedar (<i>Thuja occidentalis</i>)	Private	10 avg.	Good; mature hedge; good density, increment and colour; native species; to be preserved and protected
45	Colorado spruce (<i>Picea pungens</i>)	Shared with neighbour	33	Fair; mature; poor density, fair increment and colour; crown asymmetric due to influence of nearby hedge (#44); introduced species; to be preserved and protected
46	Colorado spruce (<i>Picea pungens</i>)	Neighbour	28	Fair; mature; fair density, increment and colour; crown asymmetric towards east due to influence of tree #47; introduced species; to be preserved and protected
47	Norway maple (<i>Acer platanoides</i>)	Neighbour	33	Poor; mature; branch cluster at 1.75m causing decline of crown center – no central stem; poor form; introduced invasive species; to be preserved and protected
48	Colorado spruce (<i>Picea pungens</i>)	Neighbour	15	Poor; maturing; lower crown very thin due to influence of trees #47 and 49; fair density, increment and colour elsewhere; introduced species; to be preserved and protected
49	Norway maple (<i>Acer platanoides</i>)	Neighbour	42	Fair; mature; co-dominant stems at 2.25m with very weak union; multiple suppressed laterals on south at 2-2.5m; poor form; introduced invasive species; to be preserved and protected
50	Colorado spruce (<i>Picea pungens</i>)	Private	33	Very good; mature; upright symmetric crown; good density, increment and colour; introduced species; to be preserved and protected
51	Colorado spruce (<i>Picea pungens</i>)	Shared with neighbour	33	Fair; mature; fair density, increment and colour; crown asymmetric due to influence of nearby spruce line (#52); introduced species; to be preserved and protected
52	White spruce (<i>Picea glauca</i>)	Shared with neighbour	21 avg.	Fair; mature; line of 10 trees; fair density, increment and colour; invasive growth at base thinning lower crowns; native species; to be preserved and protected

Table 1. Con't

Tree No.	Tree species	Ownership ¹	DBH ² (cm)	Tree Condition; Age Class; Condition Notes; Species Origin & Preservation Status (to be removed or preserved and protected)
53	White cedar (<i>Thuja occidentalis</i>)	Shared with neighbour	<10 avg.	Very good; mature hedge; well maintained; 5 and 3m heights; native species; to be preserved and protected

¹As determine from topographic survey prepared by Annis O'Sullivan Vollebekk Ltd.; ²Diameter at breast height, or 1.3m from grade (unless otherwise indicated)

Pictures 1 through 10 on pages 10 to 15 of this report show selected trees and groupings on and adjacent to the subject property. All pictures were taken in October 2022.

FEDERAL AND PROVINCIAL REGULATIONS

Federal and provincial regulations can be applicable to trees on private property. In particular, the following two regulations have been considered for this property:

- 1) Endangered Species Act (2007): No butternuts (*Juglans cinerea*) were identified on the subject or adjacent properties. This species of tree is listed as threatened under the Province of Ontario's Endangered Species Act (2007) and so is protected from harm.
- 2) Migratory Bird Convention Act (1994): In the period between April and August of each year nest surveys are required to be performed by a suitably trained person no more than five (5) days before trees or other similar nesting habitat are to be removed.

TREE PRESERVATION MEASURES

As excavation occurs within the CRZs of trees #2-8, 12, 52 and 53 the following measures will be taken:

1. Hydro excavation along the edge of excavation in proximity to the tree to carefully expose roots. Exposed roots will then be cleanly cut and sealed before being reburied. Excavation can then resume using traditional mechanical means. Sealing the cleanly cut root ends with a beeswax product will help prevent the loss of moisture and facilitate healing.
2. If the excavation is to be left open for any time a covering of at least three layers of moistened burlap is to be draped over the exposed face of excavation closet to the tree. This will help reduce the loss of soil moisture (as soil dries the roots contained within die).

TREE PROTECTION MEASURES

Protection measures intended to mitigate damage during construction will be applied for the trees to be retained. The following measures are the minimum required by the City of Ottawa to ensure tree survival during and following construction:

1. As per the City of Ottawa's tree protection barrier specification (included on page 9), erect a fence as close as possible to the CRZ of the tree(s);
2. Do not place any material or equipment within the CRZ of the tree(s);
3. Do not attach any signs, notices or posters to any tree;
4. Do not raise or lower the existing grade within the CRZ without approval;
5. Tunnel or bore instead of trenching within the CRZ of any tree;
6. Do not damage the root system, trunk or branches of any tree;
7. Ensure that exhaust fumes from all equipment are NOT directed towards any tree's canopy.

Please do not hesitate to contact me with any questions concerning this report.

This report is subject to the attached Limitations of Tree Assessments and Liability to which the reader's attention is directed.

Yours,



Andrew K. Boyd, B.Sc.F, R.P.F. (#1828)
Certified Arborist #ON-0496A and TRAQualified
Consulting Urban Forester

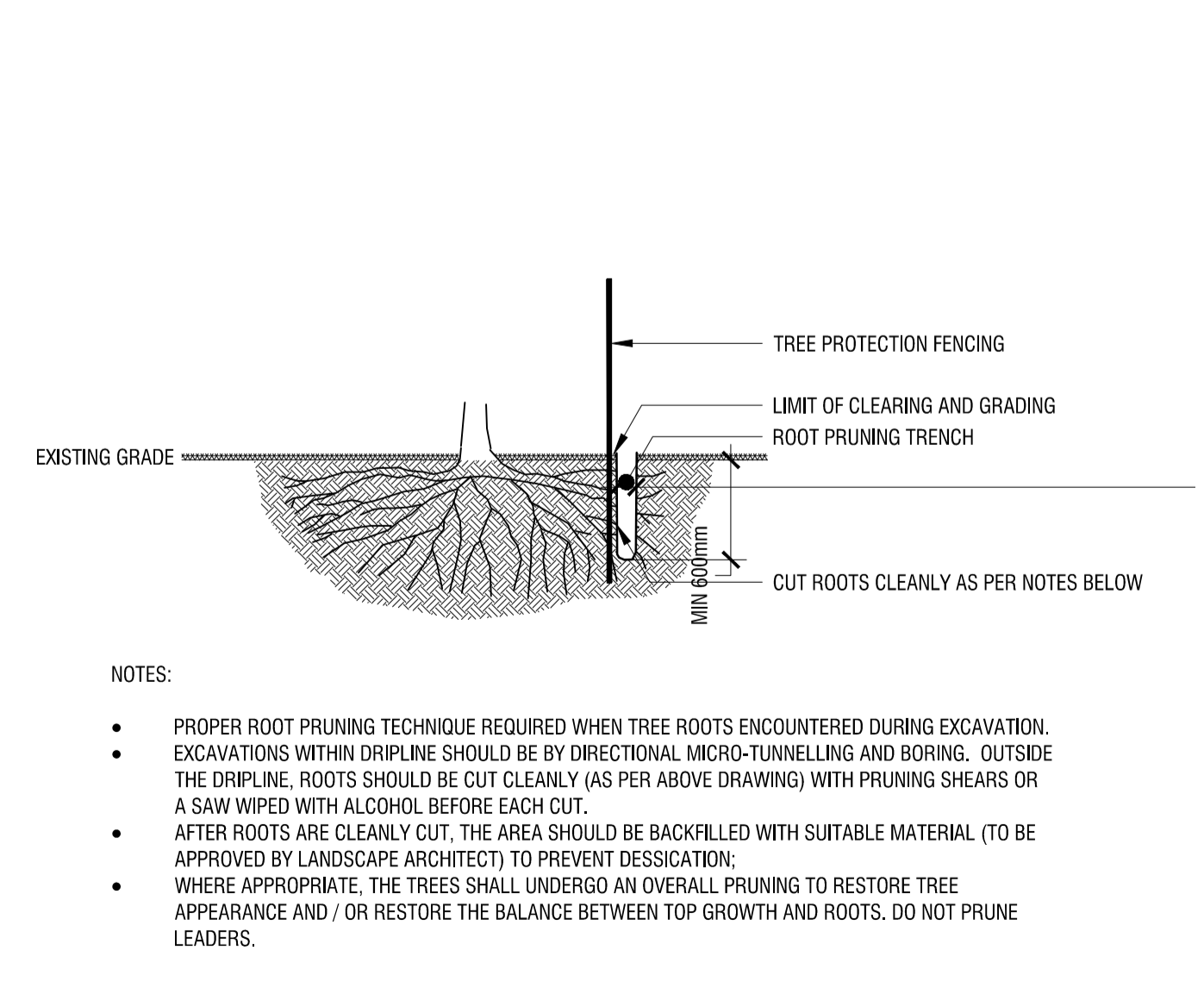
TABLE 1: TREE INVENTORY AND ASSESSMENT

Tree No.	Tree species	DBH2 (cm)	Tree Condition; Age Class; Condition Notes; Species Origin	Preservation Status	CRZ2 (m)
1	Sugar maple (Acer saccharum)	38	Fair; mature; branch cluster causing dieback of central stem; native species;	to be removed (conflicts with access route)	3.8
2	Sugar maple (Acer saccharum)	33	Good; mature; central stem with competing laterals at 2.25m and 3.5m; dense crown; native species	to be preserved and protected	3.3
3	Sugar maple (Acer saccharum)	38	Fair; mature; multiple competing stems at 1.75m – none central; one binding root; native species	to be preserved and protected	3.8
4	Sugar maple (Acer saccharum)	38	Poor; mature; central stem greatly diminished due to branch cluster and girdling root; lateral on east now dominant; native species	to be preserved and protected	3.8
5	Sugar maple (Acer saccharum)	45	Fair; mature; co-dominant stems at 3m with inclusion ridge at union; competing and suppressed laterals starting at 1.5m; broad dense crown; native species	to be preserved and protected	4.5
6	Sugar maple (Acer saccharum)	46	Fair; mature; co-dominant stems at 2m with included bark to 0.5m from grade; weak unions between secondary stems higher in crown; major girdling root on east; native species	to be preserved and protected	4.6
7	Sugar maple (Acer saccharum)	32	Fair; mature; tri-dominant stems at 2.25m with included bark and fissures in union; competing and suppressed laterals starting at 1.5m; broad dense crown; major girdling root on west; native species	to be preserved and protected	3.2
8	Sugar maple (Acer saccharum)	29	Fair; mature; co-dominant stems with third suppressed stem at 2.5m; suppressed stems at 1.75 and 2m; broad crown; native species	to be preserved and protected	2.9
9	Crab apple (Malus spp.)	42 (at 0.4m)	Good; mature; six-stemmed at 0.5-1m; broad, dense generally symmetric crown; located within small planning bed; cultivar	to be preserved and protected	4.2
10	Crab apple (Malus spp.)	37 (at 0.5m)	Fair; mature; tri-stemmed at 1m – central stem with two competing laterals on west; crown asymmetric due to clearance pruning from side of building; located within small planning bed; cultivar	to be preserved and protected	3.7
11	Honey-locust (Gleditsia triacanthos)	53	Fair; mature; central stem with competing and suppressed laterals at 2m; broad crown; elevated root collar; introduced species to Eastern Ontario	to be removed (conflicts with building)	5.3
12	Honey-locust (Gleditsia triacanthos)	49	Fair; mature; divergent co-dominant stems at 1.75m; wound from previously removed third stem with incipient decay; introduced species to Eastern Ontario; to be reserved and protected	to be preserved and protected	4.9
13	Sugar maple (Acer saccharum)	37	Good; mature; central dominant stem with co-dominant leaders near apex; generally well-spaced branches; native species	to be preserved and protected	3.7
14	Sugar maple (Acer saccharum)	41	Fair; mature; co-dominant stems at 2m – north stem in decline due to poor root collar; competing and suppressed laterals starting at 1.5m; broad, thin crown; native species	to be preserved and protected	4.1
15	White spruce (Picea glauca)	45	Fair; mature; single dominant stem and leader; poor crown density, fair growth increment and needle colour; many exposed, damaged surface roots; native species	to be preserved and protected	4.5
16	Sugar maple (Acer saccharum)	29	Fair; mature; central stem with dominant laterals on east; central in decline due to branch cluster on east at 1.5m and girdling root on west; native species	to be preserved and protected	2.9
17	Crab apple (Malus spp.)	33 (at 0.5m)	Fair; mature; tri-dominant stems with two suppressed laterals at 0.7m; broad crown; restricted rooting area; cultivar	to be preserved and protected	3.3
18	Crab apple (Malus spp.)	41 (at 0.3m)	Fair; mature; four-stemmed at 0.5m – co-dominant stems with two suppressed laterals on east and west; broad crown; cultivar	to be preserved and protected	4.1
19	White spruce (Picea glauca)	39	Fair; mature; single dominant stem and leader; good density, increment and colour; native species	to be preserved and protected	3.9
20	White spruce (Picea glauca)	40	Fair; mature; single dominant stem and leader; fair density, increment and colour; native species	to be preserved and protected	4
21	White spruce (Picea glauca)	34	Fair; mature; single dominant stem with three competing leaders near apex; good density, increment and colour; native species	to be preserved and protected	3.4
22	White spruce (Picea glauca)	22, 28, 29, 33	Very poor; mature; four trees – all topped by Hydro at 4m; fair density, increment and colour; native species	to be preserved and protected	2.2, 2.8, 2.9, 3.3
23	White spruce (Picea glauca)	30, 31, 33, 35, 38	Fair; mature; five trees – one of which is dead; fair density, increment and colour; native species	to be preserved and protected	3.0, 3.1, 3.3, 3.5, 3.8
24	Norway maple (Acer platanoides)	16	Fair; maturing; central stem with three competing leaders at 4m; introduced invasive species	to be preserved and protected	1.6
25	European larch (Larix decidua)	21, 21, 22, 25, 27	Fair; mature; five trees – all of which have damaged surface roots and root collars; poor density, fair increment and colour; introduced species	to be preserved and protected	2.1, 2.1, 2.2, 2.5, 2.7
26	Colorado spruce (Picea pungens)	53	Fair; mature; co-dominant parallel stems at 2.5m; good density, increment and colour except near base where invasive growth is thinning lower crown; living crown held to grade; introduced species	to be preserved and protected	5.3
27	Colorado spruce (Picea pungens)	47	Fair; mature; co-dominant parallel stems at 5m; good density, increment and colour except near base where invasive growth is thinning lower crown; living crown held to grade; introduced species	to be preserved and protected	4.7
28	Sugar maple (Acer saccharum)	48 (at 1m)	Fair; mature; central stem diminished by branch cluster of five competing and suppressed laterals at 1.5m; multiple binding roots; native species	to be preserved and protected	4.8
29	Amur maple (Acer tataricum var. ginnala)	<10 avg.	Poor - fair; overmature; eight trees – all multi-stemmed from grade; introduced invasive species	to be preserved and protected	<1.0
30	White cedar (Thuja occidentalis)	15 avg.	Fair; mature; double-stemmed from grade; fair density, increment and colour; native species	to be preserved and protected	1.5
31	Red pine (Pinus resinosa)	23	Poor; mature; major sweep at 2.5m from previously lost leader; poor density, increment and colour; native species	to be preserved and protected	2.3
32	Cottonwood (Populus deltoides)	+/-120 (at 1.5m)	Fair; very mature; central stem with major suppressed lateral at 1.3m on south; co-dominant leaders at 10m; broad crown; native species	to be preserved and protected	+/-12.0
33	Norway maple (Acer platanoides)	36	Good; mature; central dominant stem with competing leaders near apex; divergent towards east; crown asymmetric towards west due to influence of tree #34; introduced invasive species	to be preserved and protected	3.6
34	Norway maple (Acer platanoides)	33	Very poor; mature; eutypella canker (Eutypella parasitica) from grade to 2m on west; divergent and asymmetric towards east; hazardous (over sidewalk); introduced invasive species	to be preserved and protected	3.3
35	Kentucky coffee tree (Gymnocladus dioica)	6	Good; juvenile; planted within the last 5 years; introduced species to Eastern Ontario	to be preserved and protected	0.6
36	Honey-locust (Gleditsia triacanthos)	9	Good; juvenile; planted within the last 5 years; introduced species to Eastern Ontario	to be preserved and protected	0.9
37	Honey-locust (Gleditsia triacanthos)	10	Good; juvenile; planted within the last 5 years; introduced species to Eastern Ontario	to be preserved and protected	1
38	Red oak (Quercus rubra)	5	Fair; juvenile; planted within the last 5 years; sweep at 1m; native species	to be preserved and protected	0.5
39	Red oak (Quercus rubra)	5	Good; juvenile; planted within the last 5 years; native species	to be preserved and protected	0.5
40	Red oak (Quercus rubra)	5	Good; juvenile; planted within the last 5 years; native species	to be preserved and protected	0.5
41	Sugar maple (Acer saccharum)	9	Good; juvenile; planted within the last 5 years; some basal damage from mowers; native species	to be preserved and protected	0.9
42	Sugar maple (Acer saccharum)	8	Good; juvenile; planted within the last 5 years; some basal damage from mowers; native species	to be preserved and protected	0.8
43	Sugar maple (Acer saccharum)	9	Good; juvenile; planted within the last 5 years; some basal damage from mowers; native species	to be preserved and protected	0.9
44	White cedar (Thuja occidentalis)	10 avg.	Good; mature hedge; good density, increment and colour; native species	to be preserved and protected	1.0 avg.
45	Colorado spruce (Picea pungens)	33	Fair; mature; poor density, fair increment and colour; crown asymmetric due to influence of nearby hedge (#44); introduced species	to be preserved and protected	3.3
46	Colorado spruce (Picea pungens)	28	Fair; mature; fair density, increment and colour; crown asymmetric towards east due to influence of tree #47; introduced species	to be preserved and protected	2.8
47	Norway maple (Acer platanoides)	33	Poor; mature; branch cluster at 1.75m causing decline of crown center – no central stem; poor form; introduced invasive species	to be preserved and protected	3.3
48	Colorado spruce (Picea pungens)	15	Poor; maturing; lower crown very thin due to influence of trees #47 and 49; fair density, increment and colour elsewhere; introduced species	to be preserved and protected	1.5
49	Norway maple (Acer platanoides)	42	Fair; mature; co-dominant stems at 2.25m with very weak union; multiple suppressed laterals on south at 2-2.5m; poor form; introduced invasive species	to be preserved and protected	4.2
50	Colorado spruce (Picea pungens)	33	Very good; mature; upright symmetric crown; good density, increment and colour; introduced species	to be preserved and protected	3.3
51	Colorado spruce (Picea pungens)	33	Fair; mature; fair density, increment and colour; crown asymmetric due to influence of nearby spruce line (#52); introduced species	to be preserved and protected	3.3
52	White spruce (Picea glauca)	21 avg.	Fair; mature; line of 10 trees; fair density, increment and colour; invasive growth at base thinning lower crowns; native species	to be preserved and protected	2.1 avg.
53	White cedar (Thuja occidentalis)	<10 avg.	Very good; mature hedge; well maintained; 5 and 3m heights; native species	to be preserved and protected	<1.0 avg.

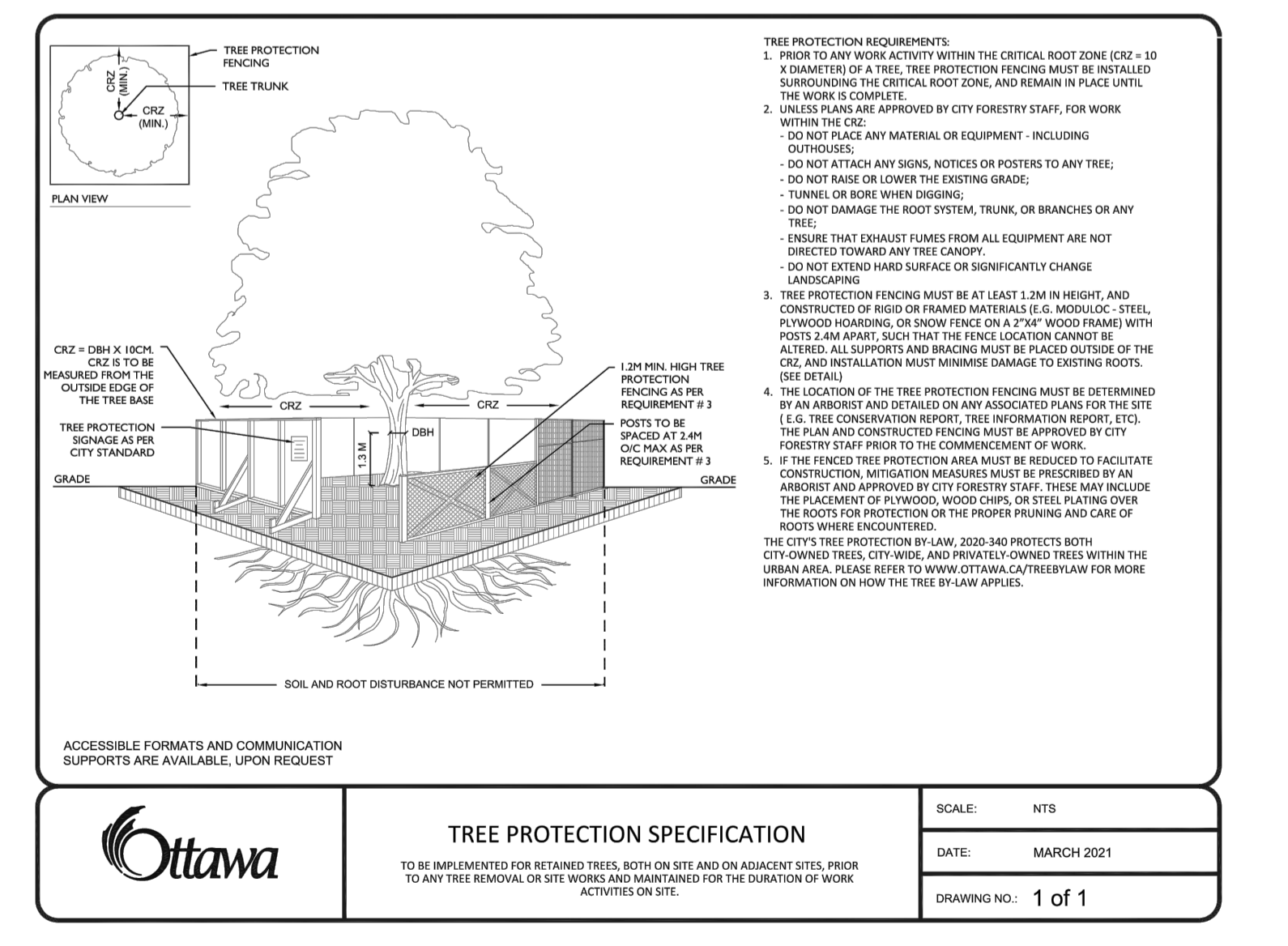
1 D.B.H.: INDICATES DIAMETER (cm) MEASUREMENT AT BREAST HEIGHT (1.3m ABOVE GRADE);
 2 TO BE RETAINED OR REMOVED
 3 CRZ: INDICATES RADIUS OF CRITICAL ROOTING ZONE AND IS ESTABLISHED AS BEING 10 CENTIMETERS FROM THE TRUNK OF A TREE FOR EVERY 1 CENTIMETER OF TRUNK DIAMETER AT BREAST HEIGHT (DBH). THE CRZ IS CALCULATED AS DBH x 10cm
 REFER TO RECOMMENDATIONS IN REPORT PREPARED BY IFS ASSOCIATES FOR TECHNIQUES TO PRESERVE TREES.



1 LANDSCAPE PLAN
 TC1 1:500



2 ROOT PRUNING DETAIL
 TC1 n.t.s



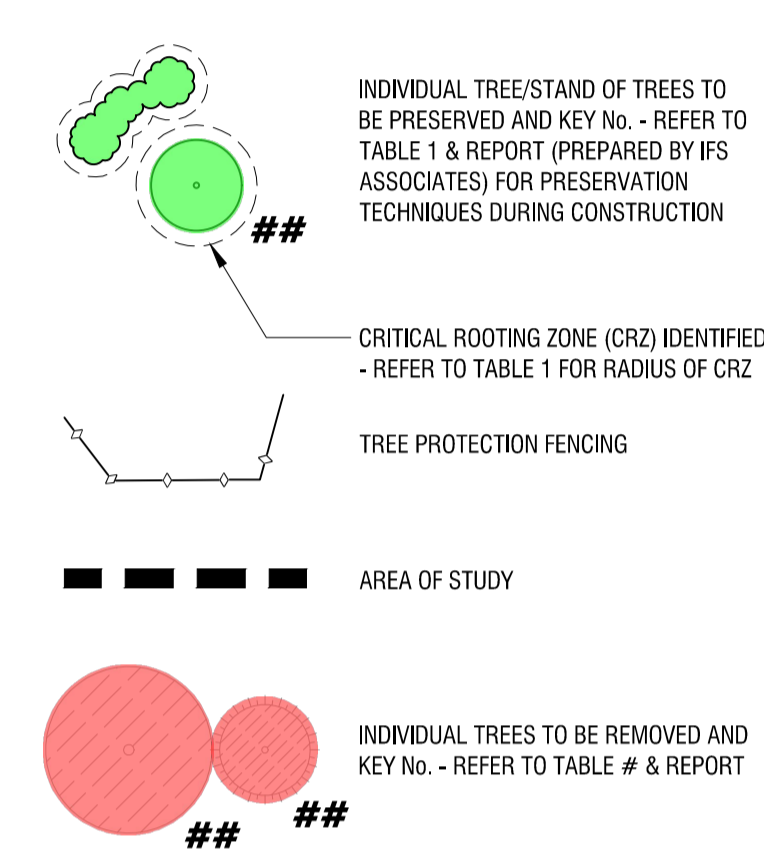
3 CITY STANDARD TREE PROTECTION FENCE
 TC1 n.t.s

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Rideau Non-Profit Housing Inc.

key plan / plan repère

legend / légende



02	issue for tree conservation report	2023-04-11
01	issue for tree conservation report	2023-03-31
00	issue for tree conservation report DRAFT	2022-11-02

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TREE CONSERVATION PLAN

designed / conçu	drawn / dessiné	reviewed / examiné
BM	BM	DF
date	project number / No. du projet	
2022-07-26		
drawing number / No. du dessin		
TC1 of 1		

PLOT INFORMATION: DWG NAME: P:\PROJECTS\2022\5581 Doctor Leach Drive - Landscape\2022-07-26\5581 Doctor Leach Drive - Landscape.dwg PLOT DATE: 2023-04-11 4:01:22 PM SHEET SIZE: 300 x 420 (MM) PLOT BY: Stuart Pearson LAST SAVED BY: sponson



Picture 1. Tree #1-8, private sugar maple located at 5581 Doctor Leach Drive



Picture 2. Trees #11 and 12, private honey-locust at 5581 Doctor Leach Drive



Picture 3. Trees #15, 16, 20 and 19 (right to left), private white spruce and sugar maple at 5581 Doctor Leach Drive



Picture 4. Tree groupings #22 and 23, private white spruce at 5581 Doctor Leach Drive



Picture 5. Tree grouping #25, private European larch at 5581 Doctor Leach Drive



Picture 6. Tree #32, private cottonwood at 5581 Doctor Leach Drive



Picture 7. Trees #43-33, shared trees at 5581 Doctor Leach Drive



Picture 8. Trees #44 and 45, shared cedar hedge and Colorado spruce at 5581 Doctor Leach Drive



Picture 9. Trees #46-49, neighbouring Colorado spruce and Norway maples adjacent to 5581 Doctor Leach Drive



Picture 10. Tree #53, neighbouring cedar hedge adjacent to 5581 Doctor Leach Drive

LIMITATIONS OF TREE ASSESSMENTS & LIABILITY

GENERAL

It is the policy of *IFS Associates Inc.* to attach the following clause regarding limitations. We do this to ensure that our clients are clearly aware of what is technically and professionally realistic in assessing trees for retention.

This report was carried out by *IFS Associates Inc.* at the request of the client. The information, interpretation and analysis expressed in this report are for the sole benefit and exclusive use of the client. Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the client to whom it is addressed. Unless otherwise required by law, neither all or any part of the contents of this report, nor copy thereof, shall be conveyed by anyone, including the client, to the public through public relations, news or other media, without the prior expressly written consent of the author, and especially as to value conclusions, identity of the author, or any reference to any professional society or institute or to any initialed designation conferred upon the author as stated in his qualifications.

This report and any values expressed herein represent the opinion of the author; his fee is in no way contingent upon the reporting of a specified value, a stipulated result, nor upon any finding to be reported. Details obtained from photographs, sketches, *etc.*, are intended as visual aids and are not to scale. They should not be construed as engineering reports or surveys. Although every effort has been made to ensure that this assessment is reasonably accurate, the tree(s) should be reassessed at least annually. The assessment presented in this report is valid at the time of the inspection only. The loss or alteration of any part of this report invalidates the entire report.

LIMITATIONS

The information contained in this report covers only the tree(s) in question and no others. It reflects the condition of the assessed tree(s) at the time of inspection and was limited to a visual examination of the accessible portions only. *IFS Associates Inc.* has prepared this report in a manner consistent with that level of care and skill ordinarily exercised by members of the forestry and arboricultural professions, subject to the time limits and physical constraints applicable to this report. The assessment of the tree(s) presented in this report has been made using accepted arboricultural techniques. These include a visual examination of the above-ground portions of each tree for structural defects, scars, cracks, cavities, external indications of decay such as fungal fruiting bodies, evidence of insect infestations, discoloured foliage, the condition of any visible root structures, the degree and direction of lean (if any), the general condition of the tree(s) and the surrounding site, and the proximity of people and property. Except where specifically noted in the report, the tree(s) examined were not dissected, cored, probed or climbed to gain further evidence of their structural condition. Also, unless otherwise noted, no detailed root collar examinations involving excavation were undertaken.

While reasonable efforts have been made to ensure that the tree(s) proposed for retention are healthy, no warranty or guarantee, expressed or implied, are offered that these trees, or any parts of them, will remain standing. This includes other trees on or off the property not examined as part of this assignment. It is both professionally and practically impossible to predict with absolute certainty the behaviour of any single tree or groups of trees or their component parts in all circumstances, especially when within construction zones. Inevitably, a standing tree will always pose some risk. Most trees have the potential for failure in the event of root loss due to excavation and other construction-related impacts. This risk can only be eliminated through full tree removal.

Notwithstanding the recommendations and conclusions made in this report, it must be realized that trees are living organisms, and their health and vigour constantly change over time. They are not immune to changes in site conditions, or seasonal variations in the weather. It is a condition of this report that *IFS Associates Inc.* be notified of any changes in tree condition and be provided an opportunity to review or revise the recommendations within this report. Recognition of changes to a tree's condition requires expertise and extensive experience. It is recommended that *IFS Associates Inc.* be employed to re-inspect the tree(s) with sufficient frequency to detect if conditions have changed significantly.

ASSUMPTIONS

Statements made to *IFS Associates Inc.* in regards to the condition, history and location of the tree(s) are assumed to be correct. Unless indicated otherwise, all trees under investigation in this report are assumed to be on the client's property. A recent survey prepared by a Licensed Ontario Land Surveyor showing all relevant trees, both on and adjacent to the subject property, will be provided prior to the start of field work. The final version of the grading plan for the project will be provided prior to completion of the report. Any further changes to this plan invalidate the report on which it is based. *IFS Associates Inc.* must be provided the opportunity to revise the report in relation to any significant changes to the grading plan. The procurement of said survey and grading plan, and the costs associated with them both, are the responsibility of the client, not *IFS Associates Inc.*

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INDEMNIFICATION

An applicant for a permit or other approval based on this report shall agree to indemnify and save harmless *IFS Associates Inc.* from any and all claims, demands, causes of action, losses, costs or damages that affected private landowners and/or the City of Ottawa may suffer, incur or be liable for resulting from the issuance of a permit or approval based on this report or from the performance or non-performance of the applicant, whether with or without negligence on the part of the applicant, or the applicant's employees, directors, contractors and agents.

Further, under no circumstances may any claims be initiated or commenced by the applicant against *IFS Associates Inc.* or any of its directors, officers, employees, contractors, agents or assessors, in contract or in tort, more than 12 months after the date of this report.

ONGOING SERVICES

IFS Associates Inc. accepts no responsibility for the implementation of any or all parts of the report, unless specifically requested to supervise the implementation or examine the results of activities recommended herein. In the event that examination or supervision is requested, that request shall be made in writing and the details, including fees, agreed to in advance.