



July 27, 2023

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Associate
CSV Architects
190 O'Connor Street, Suite 100
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K2P 2R3

RE: TREE CONSERVATION REPORT FOR PART 2 OF 56 CAPILANO DRIVE, OTTAWA

This Tree Conservation Report (TCR) was prepared by IFS Associates Inc. (IFS) on behalf of CSV Architects in support of the proposed development of 56 Capilano Drive in Ottawa. 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 development proposed for this property includes the construction of a two-storey townhouse block and a four-storey apartment building. Vehicle and bicycle parking will be at surface.

There are no trees fully on the subject property. Instead, a number of shared trees and one fully on adjacent private property were present. Field work for this report was completed in March 2023. At the time a deep cover of snow was present, obscuring each tree's rooting zones, root collars, etc.

The approval of this tree conservation report by the City and the issuing of a permit authorizes the removal of approved trees. **Importantly, although this report may be used to support the application for a tree removal permit, it does not by itself constitute permission to remove trees or begin site clearing activities. No such work should occur before a tree removal permit is issued authorizing the injury or destruction of a tree in accordance with the By-law. Further, the removal of any trees shared with or fully on neighbouring properties will require written permission of the adjacent landowner.**



TREE SPECIES, CONDITION, SIZE AND STATUS

Table 1 below details the species, ownership, size (diameter), condition and status of the trees adjacent to and shared with adjacent property. Tree locations are referenced by the numbers plotted on the tree conservation plan on page 5 of this report.

Table 1. Species, ownership, diameter, condition and status of trees at 56 Capilano Drive

Tree No.	Tree species	Presumed ownership ¹	DBH ² (cm)	Tree Condition; Age Class; Condition Notes; Species Origin & Preservation Status (to be removed or preserved and protected)
1	Glossy buckthorn (<i>Frangula alnus</i>)	Shared with city property	2 avg.	Fair; immature; introduced invasive species; originated from seed; to be removed (conflicts with fence demolition and construction access)
2	Glossy buckthorn (<i>Frangula alnus</i>)	Shared with city property	5 avg.	Fair; mature; introduced invasive species; originated from seed; to be removed (conflicts with fence demolition and construction access)
3	White cedar (<i>Thuja occidentalis</i>) & White elm (<i>Ulmus americana</i>)	City	< 13 avg.	Good; maturing; cedars planted as part of a hedge, elms originated from seed; both native species; to be preserved and protected
4	Manitoba maple (<i>Acer negundo</i>)	Shared with adjacent private property	14	Fair; immature; single stemmed; naturalized species; originated from seed; to be removed (conflicts with fence demolition and landscape construction)
5	Manitoba maple (<i>Acer negundo</i>)	Shared with adjacent private property	< 10 avg.	Fair; immature; five-stemmed from grade – likely coppicing from stump; naturalized species; originated from seed; to be removed (conflicts with fence demolition and landscape construction)
6	Manitoba maple (<i>Acer negundo</i>)	Shared with adjacent private property	< 10 avg.	Fair; immature; nine-stemmed from grade – likely coppicing from stump; naturalized species; originated from seed; to be removed (conflicts with fence demolition and landscape construction)
7	Ash (<i>Fraxinus</i> spp.)	Shared with adjacent private property	< 10 avg.	Fair; immature; five-stemmed from grade – likely coppicing from stump; native species; originated from seed; to be removed (conflicts with fence demolition and landscape construction)

Table 1. Species, ownership, diameter, condition and status of trees at 56 Capilano Drive

Tree No.	Tree species	Presumed ownership ¹	DBH ² (cm)	Tree Condition; Age Class; Condition Notes; Species Origin & Preservation Status (to be removed or preserved and protected)
8	Ash (<i>Fraxinus</i> spp.), glossy buckthorn (<i>Frangula alnus</i>), little-leaf linden (<i>Tilia cordata</i>) & Manitoba maple (<i>Acer negundo</i>)	Shared with adjacent private property	< 10 avg.	Fair; immature; all multi-stemmed from grade; growing around Hydro pole; native (ash), naturalized (Manitoba maple and linden) and invasive (buckthorn) species; all originated from seed; to be removed (conflicts with construction)
9	Hackberry (<i>Celtis occidentalis</i>)	Private		Very good; immature; planted tree; native species; to be preserved and protected

¹Tree locations are only approximate and, as a result, ownership cannot be fully defined; ² Diameter at breast height, or 1.3m from grade (unless otherwise indicated)

Pictures 1 to 5 on pages 7 through 10 of this report shows the trees shared with and on adjacent property.

PROVINCIAL REGULATIONS

Certain provincial regulations are applicable to trees on private property. In particular, the Endangered Species Act – ESA (2007) mandates that tree species on the Species at Risk in Ontario (SARO) list be identified. Butternut (*Juglans cinerea*) is present in Eastern Ontario and is listed as threatened on the SARO. Because of this it is protected from harm. No trees of this species were found on or nearby to the subject property.

TREE PRESERVATION MEASURES

As excavation will likely be within the CRZs of trees #3 and 9, the following measures will be taken:

1. Hydro excavation along the line of excavation in closest proximity to the trees 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 closest 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 on City property and the private hackberry tree. 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 6), 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.

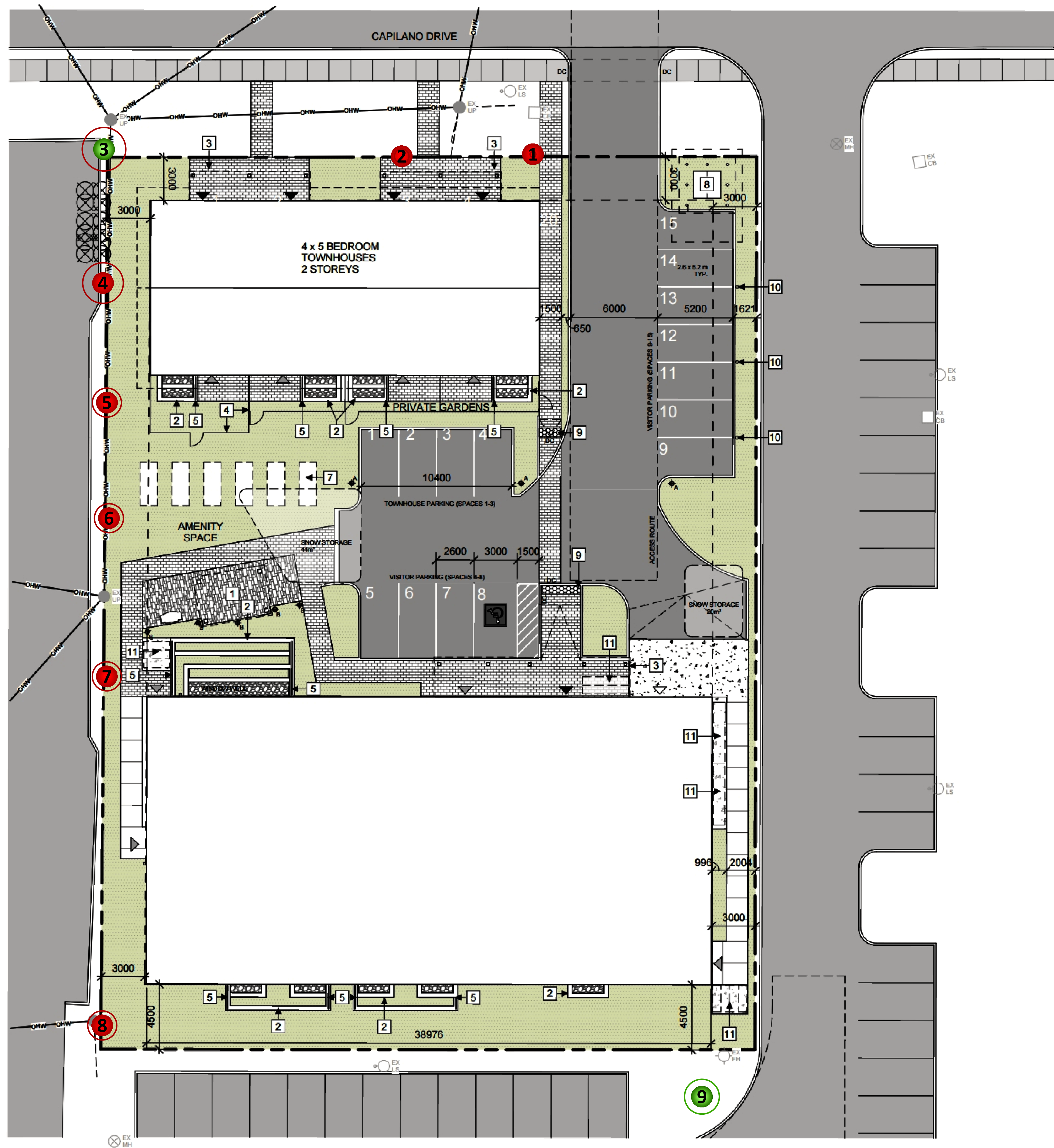
Please do not hesitate to contact me with any questions concerning this report.

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



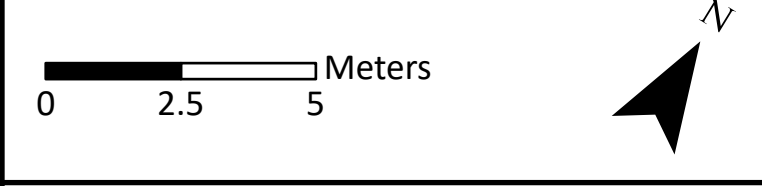
GENERAL NOTES

- SITE PLAN GENERAL NOTES:**
1. ALL GENERAL SITE INFORMATION AND CONDITIONS COMPILED FROM EXISTING PLANS AND SURVEYS
 2. DO NOT SCALE THIS DRAWING
 3. REPORT ANY DISCREPANCIES PRIOR TO COMMENCING WORK. NO RESPONSIBILITY IS BORNE BY THE CONSULTANT FOR UNKNOWN SUBSURFACE CONDITIONS
 4. CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS ON SITE AND REPORT ANY ERRORS AND/OR OMISSIONS TO THE CONSULTANT
 5. REINSTATE ALL AREAS AND ITEMS DAMAGED AS A RESULT OF CONSTRUCTION ACTIVITIES TO THE SATISFACTION OF THE CONSULTANT
 6. CONTRACTOR TO LAYOUT PLANTING BEDS, PATHWAYS ETC. TO APPROVAL OF CONSULTANT PRIOR TO ANY JOB EXCAVATION
 7. THE ACCURACY OF THE POSITION OF UTILITIES IS NOT GUARANTEED - CONTRACTOR TO VERIFY PRIOR TO EXCAVATION
 8. INDIVIDUAL UTILITY COMPANY MUST BE CONTACTED FOR CONFIRMATION OF UTILITY EXISTENCE AND LOCATION PRIOR TO DIGGING
 9. ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONDITION OR BETTER UNLESS OTHERWISE NOTED

- SITE PLAN KEYNOTES:**
- 1] SHADE STRUCTURE
 - 2] TANDEM NEXT CONCRETE BLOCK RETAINING WALL
 - 3] CANOPY STRUCTURE
 - 4] CEDAR FENCE 1800mm HIGH, GATES AS SHOWN
 - 5] 1870mm HIGH METAL GUARD ANCHORED TO CONCRETE BLOCK RETAINING WALL
 - 6] NOT USED
 - 7] GARDEN PLOTS
 - 8] HYDRO TRANSFORMER
 - 9] 800mm DEEP TACTILE INDICATION SURFACE CAST INTO CONCRETE WALKWAY
 - 10] TYPE 2 ELECTRIC CAR CHARGING STATION WITH DUAL CHARGERS
 - 11] 1800x600mm BICYCLE PARKING SPACE OR PARKING RACKING EQUAL TO LANDSCAPE FORM "LOOP" CENTERED BETWEEN EVERY TWO PARKING SPACES.
- PLANS COMPLETED BY CSV ARCHITECTS (03/02/23)

LEGEND

- NEW BUILDING
 - EXISTING ASPHALT PAVING
 - NEW ASPHALT PAVING
 - EXISTING GRASS
 - NEW GRASS AND SOFT LANDSCAPING
 - EXISTING CONCRETE SIDEWALK
 - NEW CONCRETE SIDEWALK
 - CRUSHED STONE
 - NEW CONCRETE PAD
 - BUILDING MAIN ENTRANCE
 - SECONDARY ENTRANCE / EMERGENCY EXIT
 - SERVICE ENTRANCE
 - PROPERTY LINE
 - FENCE PER LANDSCAPE
 - NEW DOMESTIC WATER
 - NEW SANITARY
 - NEW STORM
 - NEW ELECTRICAL SERVICE (BELOW GRADE)
 - GAS
 - OVERHEAD WIRE
 - CATCH BASIN
 - CATCH BASIN
 - LIGHT STANDARD
 - LIGHT STANDARD EXISTING
 - FIRE HYDRANT
 - FIRE HYDRANT EXISTING
 - MANHOLE
 - MANHOLE EXISTING
 - UTILITY POLE EXISTING
 - SIAMISE CONNECTION
 - DROPPED CURB
 - TREE TO BE RETAINED
 - CRITICAL ROOT ZONE (TREES TO BE RETAINED)
 - TREE TO BE REMOVED
 - CRITICAL ROOT ZONE (TREES TO BE REMOVED)
- * TREE LOCATIONS ARE APPROXIMATE



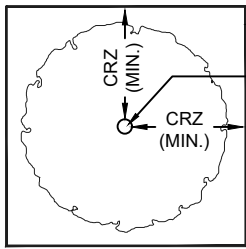
DRAWING: Tree Conservation Plan

PROJECT: 56 CAPILANO DRIVE
CITY OF OTTAWA



Andrew K. Boyd, R.P.F.

SCALE: 1:140	DRAWING NO. 56CA
DATE: 2023-07-27	
DRAWN BY: SS	
SHEET NO. 1	



PLAN VIEW

TREE PROTECTION FENCING

TREE TRUNK

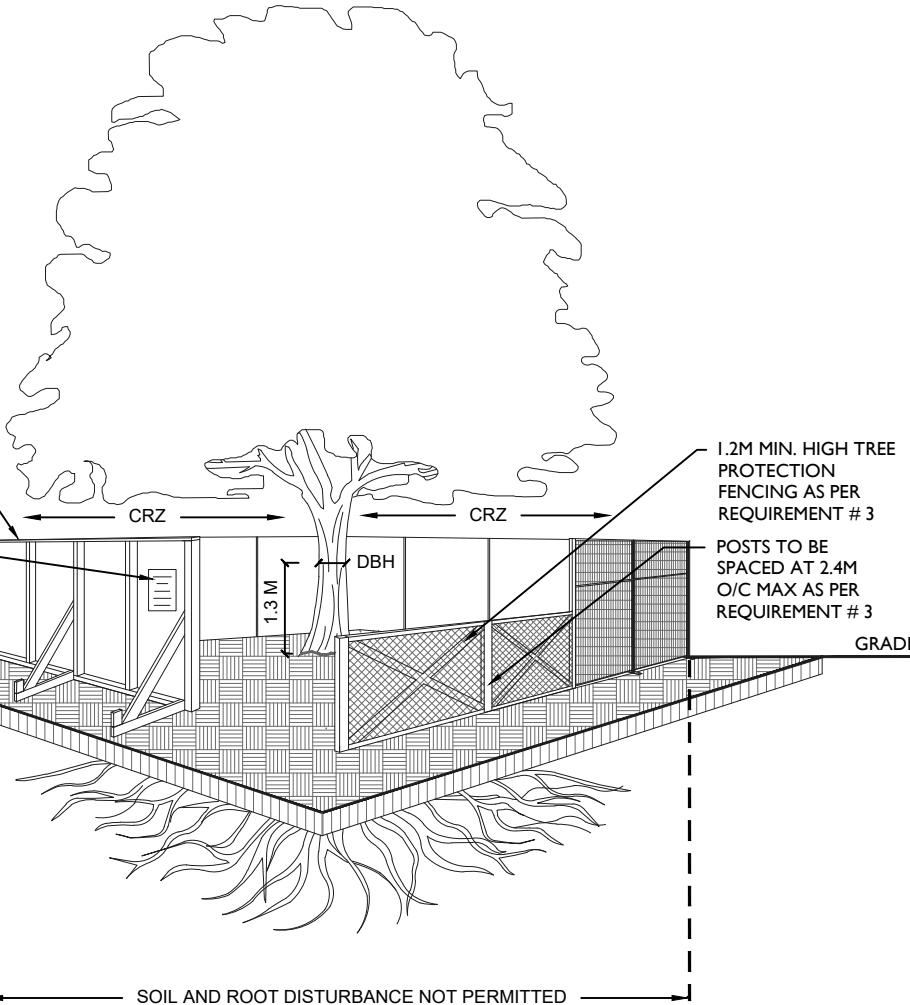
CRZ (MIN.)

CRZ (MIN.)

CRZ = DBH X 10CM.
CRZ IS TO BE MEASURED FROM THE OUTSIDE EDGE OF THE TREE BASE

TREE PROTECTION SIGNAGE AS PER CITY STANDARD

GRADE



1.2M MIN. HIGH TREE PROTECTION FENCING AS PER REQUIREMENT # 3

POSTS TO BE SPACED AT 2.4M O/C MAX AS PER REQUIREMENT # 3

SOIL AND ROOT DISTURBANCE NOT PERMITTED

TREE PROTECTION REQUIREMENTS:

1. PRIOR TO ANY WORK ACTIVITY WITHIN THE CRITICAL ROOT ZONE (CRZ = 10 X DIAMETER) OF A TREE, TREE PROTECTION FENCING MUST BE INSTALLED SURROUNDING THE CRITICAL ROOT ZONE, AND REMAIN IN PLACE UNTIL THE WORK IS COMPLETE.
2. UNLESS PLANS ARE APPROVED BY CITY FORESTRY STAFF, FOR WORK WITHIN THE CRZ:
 - DO NOT PLACE ANY MATERIAL OR EQUIPMENT - INCLUDING OUTHOUSES;
 - DO NOT ATTACH ANY SIGNS, NOTICES OR POSTERS TO ANY TREE;
 - DO NOT RAISE OR LOWER THE EXISTING GRADE;
 - TUNNEL OR BORE WHEN DIGGING;
 - DO NOT DAMAGE THE ROOT SYSTEM, TRUNK, OR BRANCHES OR ANY TREE;
 - ENSURE THAT EXHAUST FUMES FROM ALL EQUIPMENT ARE NOT DIRECTED TOWARD ANY TREE CANOPY.
 - DO NOT EXTEND HARD SURFACE OR SIGNIFICANTLY CHANGE LANDSCAPING
3. TREE PROTECTION FENCING MUST BE AT LEAST 1.2M IN HEIGHT, AND CONSTRUCTED OF RIGID OR FRAMED MATERIALS (E.G. MODULOC - STEEL, PLYWOOD HOARDING, OR SNOW FENCE ON A 2"X4" WOOD FRAME) WITH POSTS 2.4M APART, SUCH THAT THE FENCE LOCATION CANNOT BE ALTERED. ALL SUPPORTS AND BRACING MUST BE PLACED OUTSIDE OF THE CRZ, AND INSTALLATION MUST MINIMISE DAMAGE TO EXISTING ROOTS. (SEE DETAIL)
4. THE LOCATION OF THE TREE PROTECTION FENCING MUST BE DETERMINED BY AN ARBORIST AND DETAILED ON ANY ASSOCIATED PLANS FOR THE SITE (E.G. TREE CONSERVATION REPORT, TREE INFORMATION REPORT, ETC). THE PLAN AND CONSTRUCTED FENCING MUST BE APPROVED BY CITY FORESTRY STAFF PRIOR TO THE COMMENCEMENT OF WORK.
5. IF THE FENCED TREE PROTECTION AREA MUST BE REDUCED TO FACILITATE CONSTRUCTION, MITIGATION MEASURES MUST BE PRESCRIBED BY AN ARBORIST AND APPROVED BY CITY FORESTRY STAFF. THESE MAY INCLUDE THE PLACEMENT OF PLYWOOD, WOOD CHIPS, OR STEEL PLATING OVER THE ROOTS FOR PROTECTION OR THE PROPER PRUNING AND CARE OF ROOTS WHERE ENCOUNTERED.

THE CITY'S TREE PROTECTION BY-LAW, 2020-340 PROTECTS BOTH CITY-OWNED TREES, CITY-WIDE, AND PRIVATELY-OWNED TREES WITHIN THE URBAN AREA. PLEASE REFER TO WWW.OTTAWA.CA/TREEBYLAW FOR MORE INFORMATION ON HOW THE TREE BY-LAW APPLIES.

ACCESSIBLE FORMATS AND COMMUNICATION SUPPORTS ARE AVAILABLE, UPON REQUEST



TREE PROTECTION SPECIFICATION

TO BE IMPLEMENTED FOR RETAINED TREES, BOTH ON SITE AND ON ADJACENT SITES, PRIOR TO ANY TREE REMOVAL OR SITE WORKS AND MAINTAINED FOR THE DURATION OF WORK ACTIVITIES ON SITE.

SCALE: NTS

DATE: MARCH 2021

DRAWING NO.: 1 of 1



Picture 1. Trees #1-2 (left to right), buckthorn shared with City land at 56 Capilano Drive



Picture 2. Trees #4-7 (background to foreground), shared with private property adjacent to 56 Capilano Drive



Picture 3. Trees #3, white elms and white cedars on City property adjacent to 56 Capilano Drive





Picture 4. Tree #4, Manitoba maple shared with private property adjacent to 56 Capilano Drive



Picture 5. Tree #9, hackberry on private property adjacent to 56 Capilano 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.*

LIABILITY

Without limiting the foregoing, no liability is assumed by *IFS Associates Inc.* for: 1) any legal description provided with respect to the property; 2) issues of title and/or ownership with respect to the property; 3) the accuracy of the property line locations or boundaries with respect to the property; 4) the accuracy of any other information provided by the client or third parties; 5) any consequential loss, injury or damages suffered by the client or any third parties, including but not limited to replacement costs, loss of use, earnings and business interruption; and, 6) the unauthorized distribution of the report.

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.