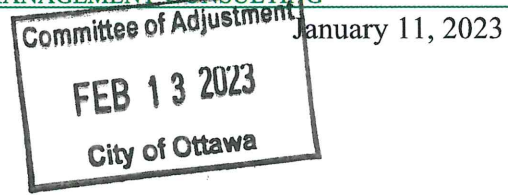




P.O. BOX 13593, STN. KANATA, OTTAWA, ON K2K 1X6
TELEPHONE: (613) 838-5717
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URBAN FORESTRY & FOREST MANAGEMENT CONSULTING

Rod Price
Vice President/General Manager
Demarco Construction
195 Menten Place, Unit 103
Ottawa, ON.
K2H 9C1



RE: TREE INFORMATION REPORT (FULL) FOR 495 DUVERNAY DRIVE, OTTAWA

This report details pre-construction tree information for the above noted property in Ottawa. The need for this report is related to trees protected under the Tree Protection By-law (By-law No. 2020-340). The proposed work for this presently open 0.06-hectare property consists of severing the lot and construction of a single-family dwelling on each new lot.

In the suburban area of Ottawa tree information reports (TIR) are required for infill developments and/or demolitions when a 'distinctive' tree is present (*i.e.* 50 cm in diameter at breast height (DBH) or greater). This includes distinctive trees on adjacent properties which have critical root zones (CRZ) extending onto a property slated for development or demolition. 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. Field work for this report was completed in January 2023.

The attributes of all relevant trees are noted in table 1 on page 2 of this report. Their locations are referenced by the numbers plotted on the tree information plan included on page 3. Pictures 1 and 2 on page 6 of this report show the trees adjacent to the subject property.

The approval of this TIR 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) and condition of the distinctive trees found adjacent to the subject property.

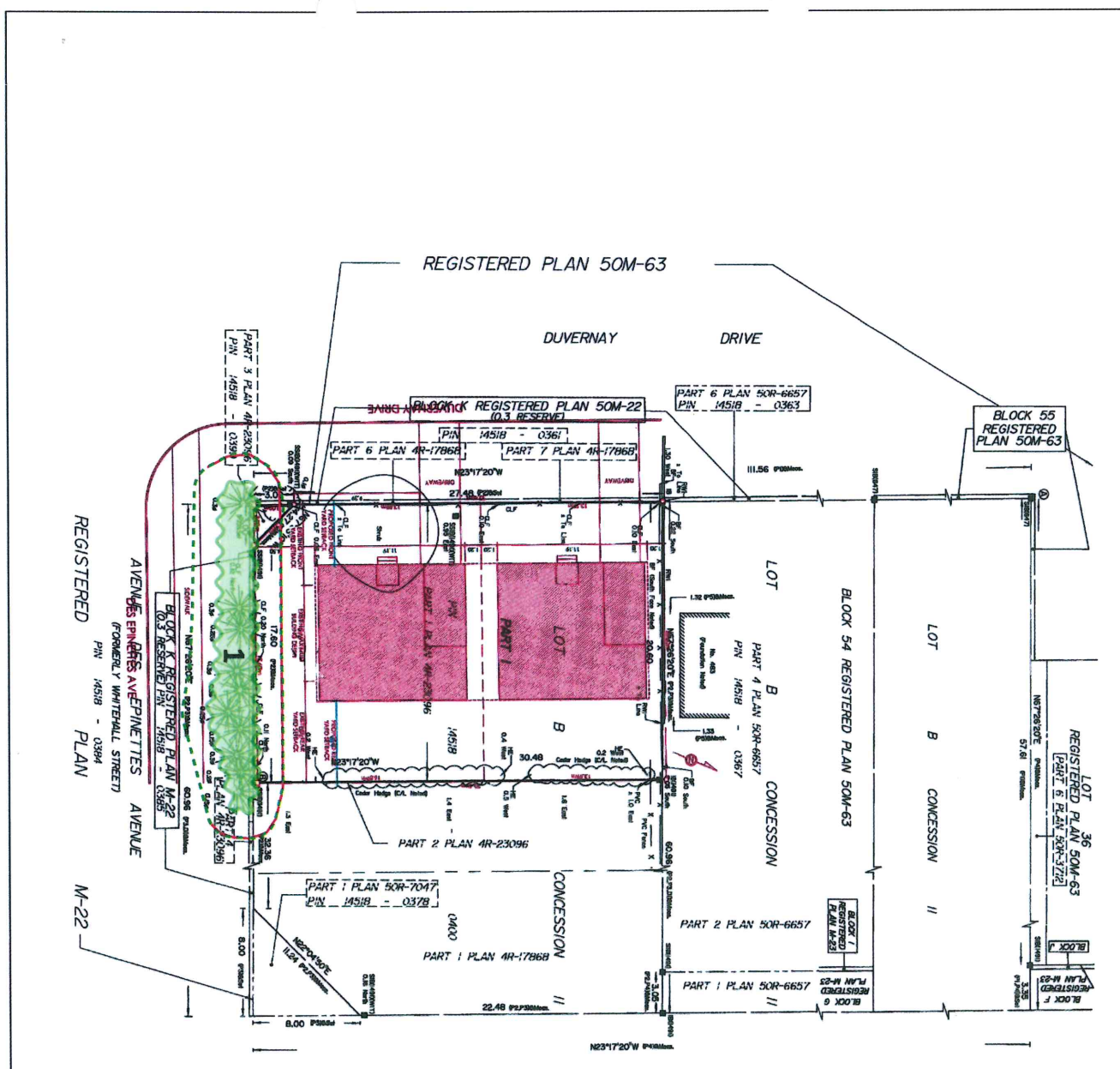
Table 1. Tree information for 495 Duvernay Drive

Tree No.	Tree species/ Tolerance to construction ¹	Owner- ship	DBH ² (cm) avg.	CRZ ³ (m) avg.	Distance to excavation (m) ⁴	Tree condition, age class, condition notes and species origin	Reason for removal	Forester's opinion re. removal
1	White spruce (<i>Picea glauca</i>) / Moderate-Good	City	25 avg.	2.5 avg.	>5	Dead-good; mature; line of 10 planted trees ranging in diameter from 12.7 to 35.5cm; one tree is dead, two are in advanced decline (less than 20 percent living foliage), four are in fair condition and three are in good condition; native species	Not applicable – to be retained	Not applicable

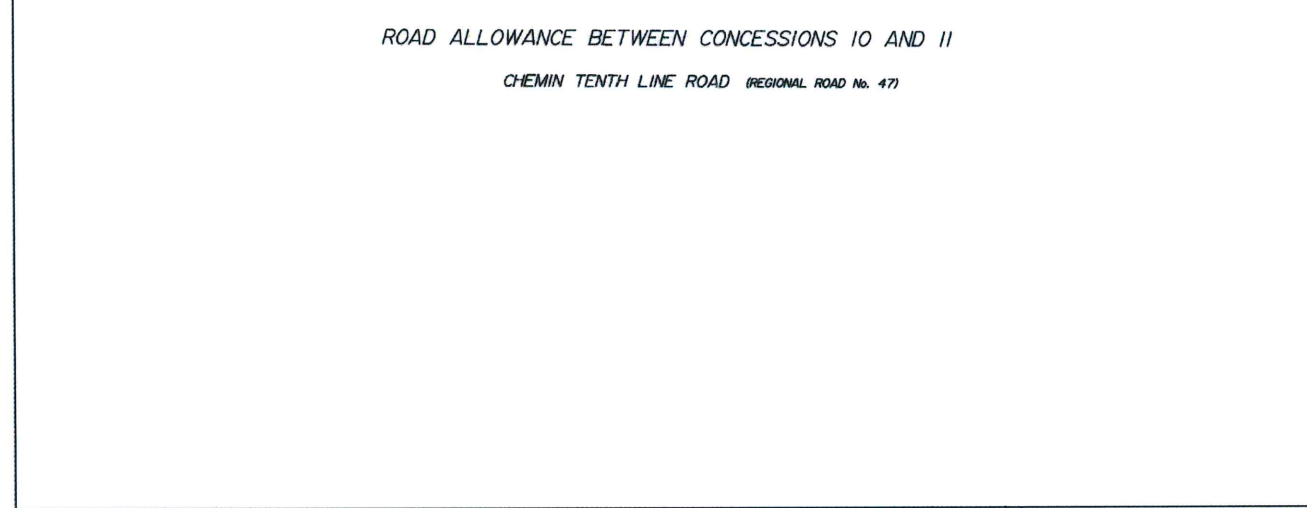
¹As taken from Managing Trees during Construction; 2nd Ed., Fite and Smiley; ²Diameter at breast height, or 1.4m from grade (unless otherwise indicated);

³Critical root zone (CRZ) is established as being 10 centimetres from the trunk of a tree for every centimetre of DBH. The CRZ is calculated as DBH x 10 cm;

⁴Approximate distances only



ROAD ALLOWANCE BETWEEN CONCESSIONS 10 AND 11
 CHEMIN TENTH LINE ROAD (REGIONAL ROAD No. 47)



<p>GENERAL NOTES</p>	
<p>LEGEND</p> <ul style="list-style-type: none"> TREES CRITICAL ROOT ZONE PROTECTIVE FENCING 	
<p>PLANNED DEVELOPMENT BY: ANDRÉ P. GAGLIARDI</p>	
<p>SCALE: 0 2.5 5 10 Meters</p>	
<p>TREE INFORMATION PLAN</p>	
<p>PROJECT: 495 DUVERNAY DRIVE, CITY OF OTTAWA</p>	
<p>DATE: 2023-01-10</p>	
<p>CONTRACT: 55</p>	
<p>PREPARED BY: 1</p>	
<p>DESIGNED BY: ANDRÉ P. GAGLIARDI, P. ENG.</p>	
<p>SCALE: 1:180</p>	
<p>DATE: 2023-01-10</p>	
<p>CONTRACT: 55</p>	
<p>PREPARED BY: 1</p>	
<p>4 9 5 D</p>	



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 PROTECTION MEASURES

Protection measures intended to mitigate damage during construction will be applied for the trees to be retained adjacent to the subject property. 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 (see page 5), erect a fence as close as possible to the CRZ of impacted trees.
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.

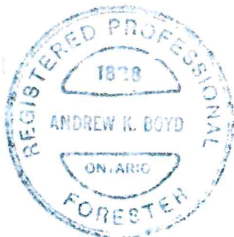
REPLACEMENT TREE PLANTING OR COMPENSATION

As no distinctive trees are to be lost as a result of the proposed construction, no replacement tree planting or compensation is required in this instance.

I trust this report satisfies your requirements. Please do not hesitate to contact the undersigned with any questions or comments you may have.

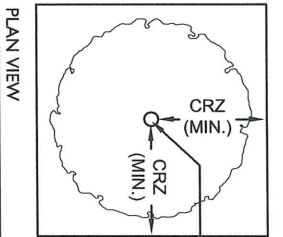
This report is subject to the attached Limitations of Tree Assessments and Liability to which the reader's attention is directed.

Yours,

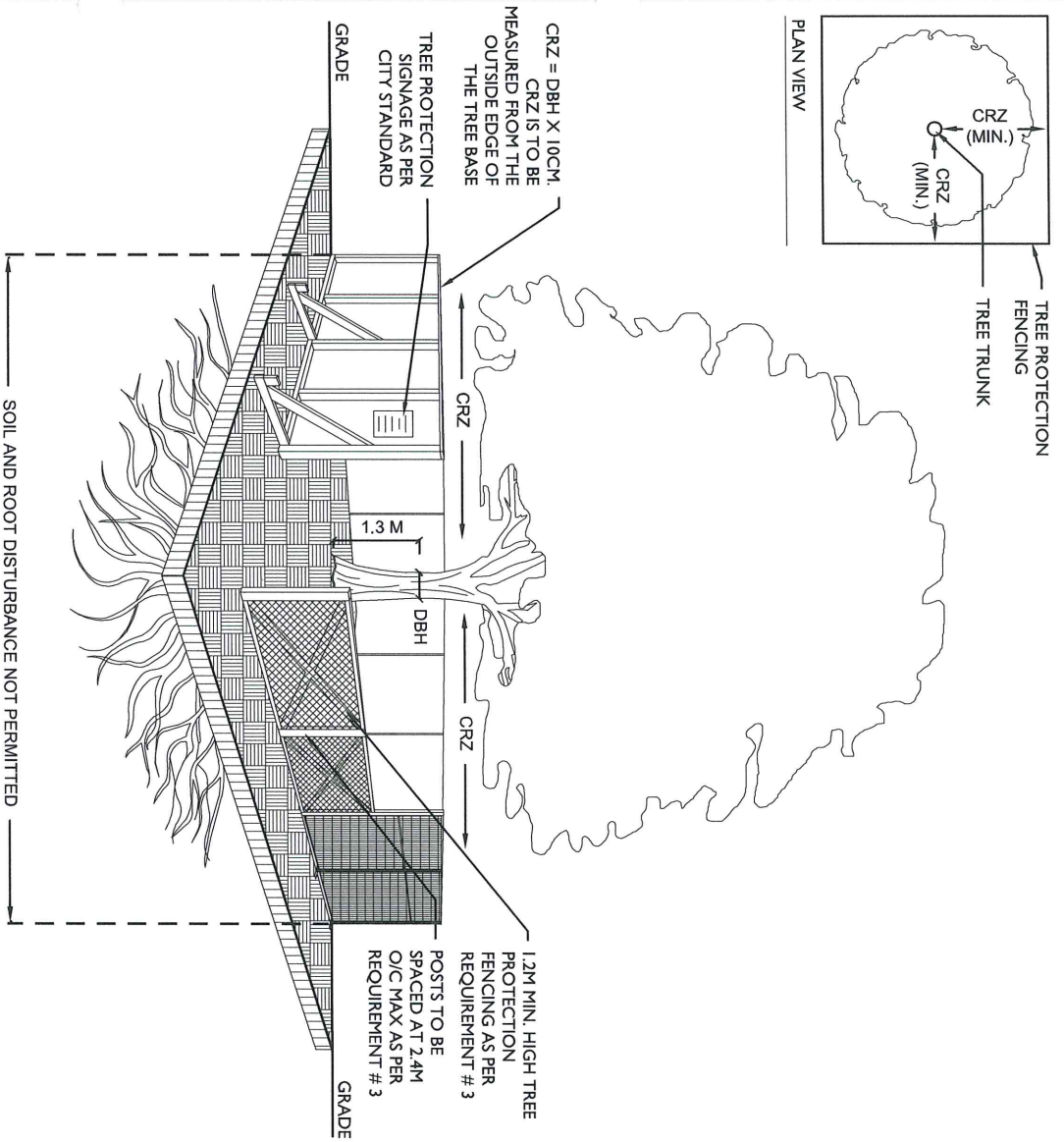


Andrew K. Boyd, B.Sc.F, R.P.F. (#1828)
Certified Arborist #ON-0496A and TRAQualified
Consulting Urban Forester





PLAN VIEW



ACCESSIBLE FORMATS AND COMMUNICATION SUPPORTS ARE AVAILABLE, UPON REQUEST

- 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.



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. Tree grouping #1, line of spruce trees adjacent to 495 Duvernay Drive



Picture 2. Tree grouping #1, line of spruce trees adjacent to 495 Duvernay 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.