244 Fountain Place
Tree Conservation Report

244 Fountain Place, Ottawa
Proposed Apartment Building
Project 160401234

Prepared for:
TC United Group

Prepared by:
Stantec Consulting Ltd.

Original Submission: October 19, 2016
Revised:
October 13, 2021

Sign-off Sheet

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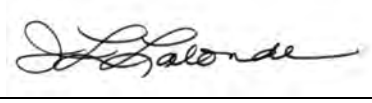
Prepared by 

(signature)

Isabelle Lalonde, Landscape Architect

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Executive Summary

This Tree Conservation Report has been prepared in support of Site Plan Application to permit the development of 244 Fountain Place in Ottawa, Ontario. The site is currently vacant with reclamation vegetation and this project is proposing the construction of a three storey apartment building with associated infrastructure.

The 0.072-hectare property at 244 Fountain Place is located west of the Rideau River and south of Rideau Street. It consists of one parcel of land currently undeveloped with naturalized reclamation vegetation. The site is described legally as Part of Lot "C", Concession "D" (Rideau Front), Geographic Township of Nepean, in the City of Ottawa. The site is currently designated "General Urban Area" in the City of Ottawa Official Plan. The property is designated Residential Fifth Density Zone, subzone B in the 2008 City of Ottawa Comprehensive Zoning By-law.

The northwest property line of the subject land is shared with Besserer Park, a City of Ottawa owned and managed park. Besserer Park provides a pedestrian link between the end of Besserer Street and Rideau Street.

This Tree Conservation Report summarizes the condition of the current vegetation and define trees to be retained and / or removed to permit the development of this project. Tree Assessment Investigations were conducted to review the species and health condition of the existing vegetation growing at and in periphery of 244 Fountain Place in Ottawa and on adjacent land. The construction of this project is planned to occur in 2021-2022.

Glossary

Critical Root Zone (CRZ)	Zone under a tree where there should be no disturbance before, during and after construction. The CRZ is established as being 10 centimetres from the trunk of a tree for every centimetre of trunk diameter.
Diameter at Breast Height (DBH)	Diameter of a tree trunk measured at 1.4 metre above ground, standardized by the Council of Tree and Landscape Appraisers and the International Society of Arboriculture. DBH are generally measured in centimetres.
Dieback	Condition in which the ends of the branches are dying.
Distinctive Tree	Any tree with a DBH of 50 centimetres or greater.
Drip Line	Perimeter of the area under a tree delineated by the crown.
Leader	The primary terminal shoot or trunk of a tree.
Sapling	A young tree measuring one (1) to two (2) metres high and having a DBH of two (2) to four (4) centimetres.
Scaffold Branches	The permanent or structural branches of a tree.
Seedling	A plant grown from a seed with a height of not more than one (1) metre.
Significant Tree	Tree / shrub deemed valuable because it is unusually beautiful or distinctive, comparatively old, distinctive in size or structure for its species, rare or unusual in the subject area, provides a habitat for rare or unusual wildlife species in the subject area, or has an historical, cultural, or landmark significance.
Significant Woodland	Woodland that contain mature stands of trees 80 years or older, have interior forest habitat more than 100 metres from forest edge, and are adjacent to a surface water feature.
Specimen Tree	Individual tree located in the middle of a field or open space. A specimen tree is not automatically a significant tree.
Stress	Any factor that negatively affects the health of a tree.

Structural Defect	Flaws, decay, or other faults in the trunk, branches, or root collar of a tree, which may lead to failure.
Topping (Topped)	Cutting back a tree to buds, stubs, or laterals not large enough to become a new leader on the tree.
Tree Protection Zone (TPZ)	The area surrounding a tree that is marked and fenced off and where there is no storage of materials of any kind, no parking or moving of vehicles, and no disturbance of the soil or grade.
Tree Shoots	Tree shoots are sprouts that emerge from dormant buds along the trunk or branch of a tree. In an urban environment shoots are often associated with stress to the tree. Trees with severe dieback due to winter injury, drought and salt spray often produce many shoots as a means of compensating for the loss of leaf surface due to stress or injury.
Tree Suckers	Tree suckers are sprouts that form from the roots of existing trees and tend to form new trees or shrubs. In an urban environment suckers can be associated with stress to the tree and are prevalent after a disturbance such as when mature trees are cut down. Some tree species have the tendency to sucker.
Vigour	Overall health; capacity to grow and resist stress.

1.0 INTRODUCTION

Stantec Consulting Ltd. was retained by TC United Group to complete a Tree Conservation Report for 244 Fountain Place in support of a Site Plan Application to permit the construction of a three-storey apartment building and affiliated infrastructure.

The site is situated west of the Rideau River and south of Rideau Street within the City of Ottawa. It is abutting Fountain Place, a road leading to residential properties near the Rideau River, and Besserer Street, a dead-end street ending at the northwest corner of the site.

This proposed infill development consists in one three-storey apartment building. The site is described legally as Part of Lot "C", Concession "D" (Rideau Front), Geographic Township of Nepean, in the City of Ottawa. The site is designated "General Urban Area" in the City of Ottawa Official Plan. The property is currently designated Residential Fifth Density Zone, subzone B in the 2008 City of Ottawa Comprehensive Zoning By-law.

The northwest property line of the subject land is shared with Besserer Park, a City of Ottawa owned and managed park. Besserer Park provides a pedestrian link between the end of Besserer Street and Rideau Street.

Figure 1: Location Plan

The objectives of this Tree Conservation Report are:

244 FOUNTAIN PLACE
TREE CONSERVATION REPORT

Introduction
October 13, 2021

- To describe the existing woody vegetation growing on site including trees and large shrubs. The description for each tree and / or large shrubs will include species, size, vigour, and health condition.
- To assess the environmental value and suitability for retention of the woody vegetation.
- To evaluate the anticipated impact of the proposed development on the existing woody vegetation.
- To provide recommendations related to tree protection and mitigation measures to reduce negative impact on the woody vegetation to be retained.
- To provide recommendations for the development of a compensation planting plan.

2.0 TREE ASSESSMENT

Tree Assessment Investigations were conducted on April 20, 2016, and September 19, 2016, by Brad De Vries, Landscape Technologist at Stantec Consulting Ltd., and Isabelle Lalonde, Landscape Architect at Stantec Consulting Ltd., to review the species and health condition of the existing vegetation growing at 244 Fountain Place in Ottawa.

Because butternut trees were observed in Besserer Park, Andrew Boyd, consulting urban forester with IFS Associates Inc., was retained by TC United Group to complete a butternut tree assessment.

When the site plan was revised in 2019, Isabelle Lalonde returned to site on August 9, 2019, to update the Tree Assessment Schedule. Finally, on June 9, 2020, Isabelle Lalonde met with Andrew Boyd and the survey crew to survey and assess additional trees growing in Besserer Park, as requested by the City of Ottawa Forestry Department.

2.1 METHODOLOGY

The complete assessment of every tree growing on the subject land was not possible due to the quantity of trees and their size. Although the tree investigations considered this property as one vegetation grouping, an inventory of selected individual trees was also completed for trees meeting one of the following characteristics:

- Tree bigger than 40 centimetres in DBH;
- Tree species unusual for the site or vegetation grouping;
- Specimen tree.

All individual trees growing along the property lines are indicated on the ***Tree Preservation Plan (TC1)***. The location of all individual trees was established based on the tree investigation visits and the tree surveys completed by J.D. Barnes Limited, the surveyor retained by the owner for this project. The location of these trees and their size should be confirmed by a tree inspector prior to start construction.

The approximate DBH of trees was measured on site during the Tree Assessment Investigations. The species were determined based on bark, bud, and leaves identification. The vigour was assessed based on visible defects only.

2.2 OBSERVATIONS

The property is currently a vacant but treed residential lot. The property is sloping towards Fountain Place with a difference in elevation of approximately 7.50 metres between the back and front property lines.

Besserer Park is situated approximately 7.0 metres above the subject lands. The shared property line between the subject land and Besserer Park is approximately the mid-point on the slope between the general elevations of each site creating a long vegetated slope running towards the subject land.

2.2.1 Existing Vegetation

In general, the trees inventoried on the subject land and in Besserer Park appeared in good to fair to poor health condition, are a mix of young and mature trees, and show limited signs of disease. It should be noted that a general decline in the overall health conditions of the trees was observed between the assessments conducted in 2016 and 2020 with a number of natural damages to mature trees observed in 2020. This revised Tree Conservation Report illustrates on the ***Tree Preservation Plan (TC1)*** accompanying this report a visual distinction of the health condition of each individual tree inventoried. This visual distinction of tree health conditions indicates the larger trees are generally in fair to poor health conditions compared to younger trees. In addition, the trees located in the vegetated slope between Besserer Park and the subject land are showing more damages to their trunk or branches.

Tree species composition on the subject land included deciduous species only. Two (2) planted pines are growing in Besserer Park. The complete list of all trees located on the subject land and in the area of Besserer Park adjacent to the subject land is indicated in the ***Existing Vegetation Schedule*** of drawing TC2. This table shall be read in conjunction with the ***Tree Preservation Plan (TC1)*** accompanying this report.

2.2.2 Species-at-Risk

Butternut trees are growing in Besserer Park. The Butternut Health Assessment was completed by Andrew Boyd and is included in Appendix B of this report.

2.3 VEGETATION QUALITY AND SUITABILITY FOR RETENTION

Although a quantity of trees growing on this property show good health conditions, other factors should be evaluated when establishing the suitability for retention of a tree. These factors include the following:

- Structural condition;
- Age and expected longevity of the tree;
- Species invasiveness; and
- Species response and tolerance to disturbance.

By considering all the factors listed above, trees recommended for retention will have a higher chance to respond positively to new site conditions for an extended period of time providing a safe environment for the property users.

In addition to the factors listed above, ***Table 1 – Retention Qualities*** describes the suitability for each tree species for retention. The suitability for retention considers the capacity of the trees to survive to stress and changes in their environment. As noted above, the suitability for retention should also study the proposed development of the property including grading works around the Critical Root Zones (CRZ) of trees and the proximity to construction, access roads, and / or built structures. This type of analysis will be completed in the following section of this report.

Table 1 Retention Qualities

Tree Species (Botanical Name / Common Name)	Remarks	Suitability for Retention
Acer negundo / Manitoba maple	Invasive species. Branches have tendency to lean and break easily.	Moderate to Poor
Acer platanoides / Norway maple	Invasive species. Tolerant to poor soils, compaction and pollution. Once established, Norway maples form a dense forest canopy that shades out other species. The seedlings, which are shade tolerant, can form a thick mat on the forest floor that will further limit regeneration of other species.	High
Rhamnus spp. / Buckthorn	Invasive species.	Not recommended
Ulmus americana / American elm	Tolerate to some fill. Root system is tolerant of excavation works. Sensitive to Dutch elm disease.	Moderate to Poor

3.0 PROPOSED DEVELOPMENT & TREE RETENTION RECOMMENDATIONS

3.1 PROPOSED DEVELOPMENT

The project for 244 Fountain Place proposes the construction of a three-storey high apartment building with associated parking spaces, walkways, and landscaping. The construction of the new apartment building will necessitate the construction of retaining walls to transition the grades from Besserer Park to Fountain Place. The proposed development shown on the ***Tree Preservation Plan (TC1)*** illustrates the location of the proposed building and affiliated infrastructure. The September 2021 revised site plan requires minor works in Besserer Park; the main impacts along the share property line between the subject land and Besserer Park will be the new grading associated to the development of 244 Fountain Place.

For the development of the site plan, Isabelle Lalonde, Stantec, and Andrew Boyd, IFS Associates Inc., met on site with City representatives on March 12, 2020 to discuss the impacts on trees growing on the slope between the park and subject land. The following City representatives attended the March 12, 2020, site meeting: Andrew McCreight, Matthew Hayley, Adam Palmer, Nancy Young.

Furthermore, on August 5, 2020, Isabelle Lalonde and Andrew Boyd, met again on site with Adam Palmer and Nancy Young to specifically review the proposed tree removals. Following this meeting, the City Foresters provided their approval on tree removal with some recommended tree compensation. The following Tree Retention and Removal Recommendations are based on discussion with City Foresters.

3.2 TREE RETENTION RECOMMENDATIONS

3.2.1 Tree Retention

The difference in elevation between the back and front property line will make it difficult to retain a large number of trees inside the study area. The Site Plan developed for this application proposes a site development that will not permit the retention of any trees growing at 244 Fountain Place. Additionally, and as indicated on the Tree Preservation Plan, the trees recommended for retention are those located on or adjacent to the lateral property lines where limited regrading works are required. These trees will provide shade and naturally integrate the proposed development into the neighbourhood.

To ensure tree survival during and after construction, mitigation measures should be considered during construction. Adequate protection of the trees to be retained and their immediate

environment is crucial for the survival of these trees. As such, the Contractor shall apply the following measures to prevent damages to these trees.

3.2.1.1 Tree Health Monitoring

Trees located adjacent to construction works will experience change in their immediate environment. As a result, tree health should be monitored. Photographs of trees to remain should be taken prior to construction, if possible when the trees are in full leaf, as a record of their condition. Monitoring tree health both during and after construction should be made a priority. Actions should be taken as early as possible if / when the health of a protected tree declines. Damages may include:

- Physical damage on tree bark;
- Broken branches;
- Compaction of root systems due to equipment and materials stored within the protected areas;
- Cutting of the roots; and
- Root exposure following excavation adjacent to trees to be preserved.

Services of an arborist should be used in order to give adequate care to damaged trees.

Trees that have died or have been damaged beyond repair by the Contractor during construction shall be removed and replaced by the Contractor as directed by the project landscape architect.

3.2.1.2 Temporary Tree Protection Fencing

The roots of a tree are located in the top 150 to 250 millimetres of soil and can very easily be inadvertently damaged. To ensure protection of the root system of trees to remain, temporary tree protection fencing shall be installed at the critical root zone (CRZ) of trees located inside or adjacent to the construction area. **The CRZ of a tree is the zone around the trunk where there should be no disturbance before, during, and after construction. The CRZ is established as being 10 centimetres from the trunk for every centimetre of trunk diameter.**

Temporary tree protection fencing shall be installed according to information indicated on the Proposed Development and Conserved Vegetation Plan inserted in Appendix A of this report. Fencing shall be maintained in good repair at all times during construction operations, and shall only be removed upon completion and when agreed by the contract administrator. Temporary removal of fencing shall not be permitted without the approval from the contract administrator.

Within the CRZ of trees, as delineated by temporary tree protection fencing there should be:

- No disturbance or alteration of the existing grade without approval including addition of fill, excavation, or scraping of the soil;
- No installation of signs, notices or posters on trees;

- No storage of construction materials, surplus soil, construction waste, or equipment;
- No disposal (dumping or flushing) of contaminants or liquids; and,
- No movement of vehicles (personal or business), equipment or pedestrians.

Section 3.2.1.3 addresses mitigation strategies should disturbances or alterations within the tree protection zone be unavoidable.

3.2.1.3 Work within Protected Areas

3.2.1.3.1 Excavation Work

To ensure the roots are not disturbed more than necessary and where excavation works are unavoidable within the CRZ of trees, the following mitigation measures shall be used:

- **All excavation within the CRZ of trees shall be by hand or hydro excavation using the smallest tools.** Root cutting shall be made using a sharp spade or knife at the limit of disturbance prior to any construction activities.
- **The Contractor shall only tunnel or bore within the CRZ,** instead of creating a trench.
- **Any roots that are exposed by construction activities must be covered with native topsoil immediately,** to ensure that the roots do not dry out or have any further damage occur to them.

In all those instances where root pruning is required, the service of a Certified Arborist or Qualified Tree Worker under the supervision of a Certified Arborist shall be retained. In addition, all remedial works must be conducted by a certified care professional to ensure proper care is administered in order to enable the continued health of the trees.

3.2.1.3.2 Grading Work

Where re-grading is required within the CRZ, it should be performed by hand under the supervision of a Certified Arborist.

3.2.1.4 Additional Protection Measures

The following mitigation measures shall also be respected:

- When working near vegetation, **the Contractor shall ensure that exhaust fumes from all equipment are NOT directed towards any tree's canopy.**
- **Where limbs or portions of trees are removed to accommodate construction work, they will be removed carefully in accordance with accepted arboricultural practices**.
- **Where necessary, the trees will be given an overall pruning to restore their appearance**. Not more than one-third of the total branching shall be removed during a single operation. The services of a Certified Arborist shall be retained for this task.

3.2.2 Tree Removal

To permit the development of this property, the majority of the treed area at 244 Fountain Place will be removed. Additionally, some trees growing in Besserer Park along the property line with

the subject land will require removal to permit this development. The limits of tree removal are based on not only the footprint of the development but also on the health conditions of the trees taking into consideration their ability to survive the changes to their environment. A total of 8 trees in fair to poor health condition are proposed for removal; an additional 9 trees in good health condition are also proposed for removal due to their proximity to the development area.

3.2.2.1 Clearing and Grubbing of Trees

It should be noted that no tree shall be removed without the City of Ottawa written approval as deemed under By-law number 2009-200.

Any trees designated for removal and located outside a protected area will have the stumps completely excavated and removed unless such removal will adversely affect existing trees / ecology to remain. **When removing the Manitoba maple located at the back of the property, special consideration shall be taken to prevent damages to adjacent trees to be retained.**

3.2.2.2 Wildlife Protection

Clearing operations are prohibited during the breeding migratory bird period which extends from April 1 to August 28 of any year for most migratory birds. Should tree removal during this period be unavoidable, the contractor is required to retain the services of a qualified Avian Biologist who will conduct a breeding migratory bird screening. This screening will identify and ensure there is no evidence of breeding migratory bird activities. Tree removal will be allowed within five days of conducting the screening.

3.2.3 Compensation Planting

Due to the nature of the development proposed for this property and its existing condition, full compensation for the loss of vegetation will not be attainable. We recommend the planting of deciduous trees and shrubs to integrate the development into the neighbourhood. In addition, we recommend the following:

- Planting only non-invasive tree species.
- Revegetation of the regraded slope between Besserer Park and proposed apartment building.
- Tree planting in Besserer Park.

4.0 CONCLUSION

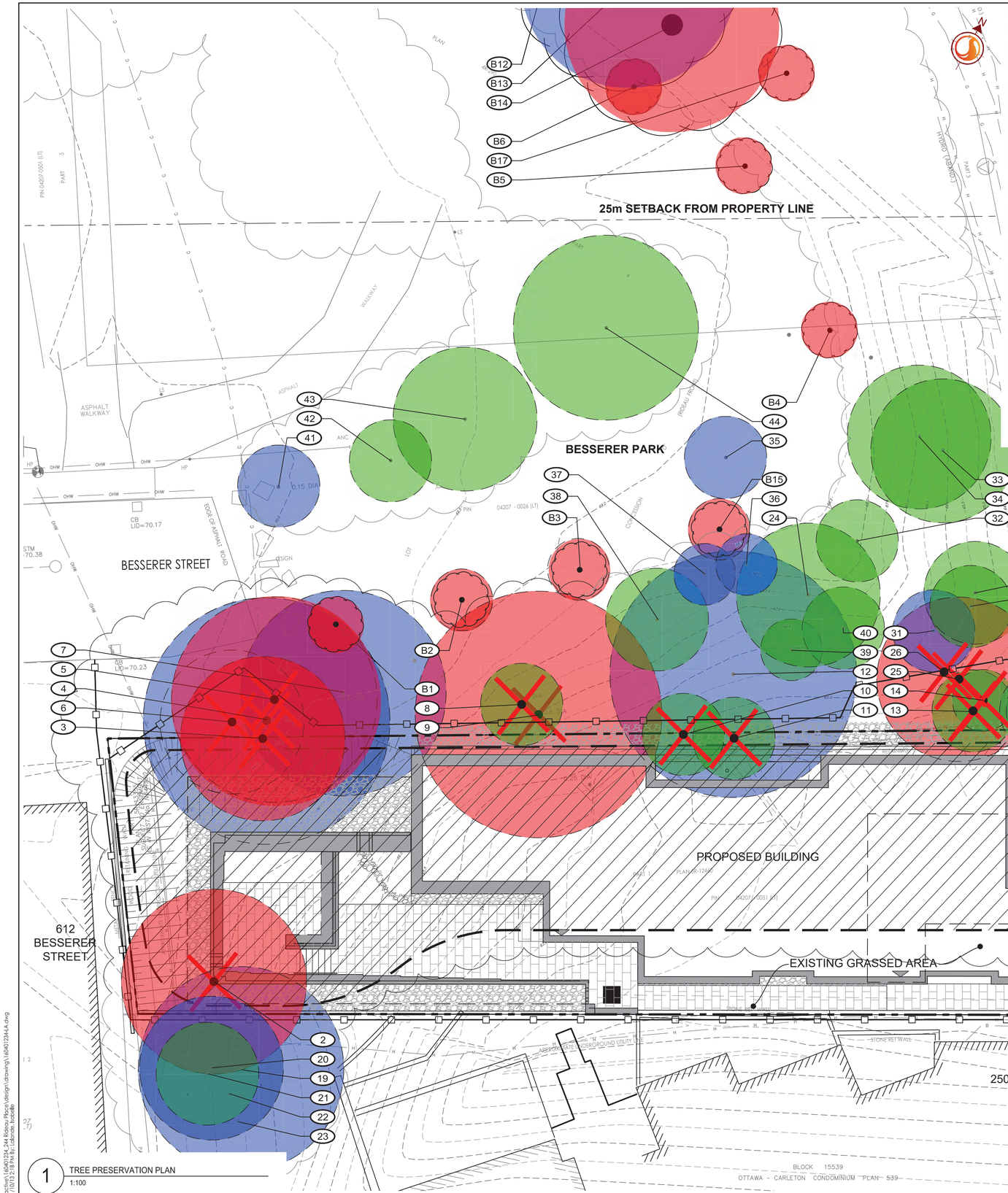
In summary, none of the vegetation growing on the subject land is proposed for retention. To ensure survival of the trees to be retained, protection measures recommended in this report shall be applied. Preservation of those trees will be possible by ***limiting the footprint of the work area and visually delineating the protected zones from the construction zones***. By installing a tree protection fence, damages to trunks, branches, and root systems will be limited. In addition, we also recommend the planting of trees and shrubs to compensate for a portion of the loss of vegetation.

By following the mitigation recommendations outlined in this report and ***ensuring compensation planting is included as part of this development,*** we believe this development respond to the character of the community.

5.0 REFERENCES

City of Ottawa Tree Protection By-law 2020-340.

APPENDIX A - DRAWINGS



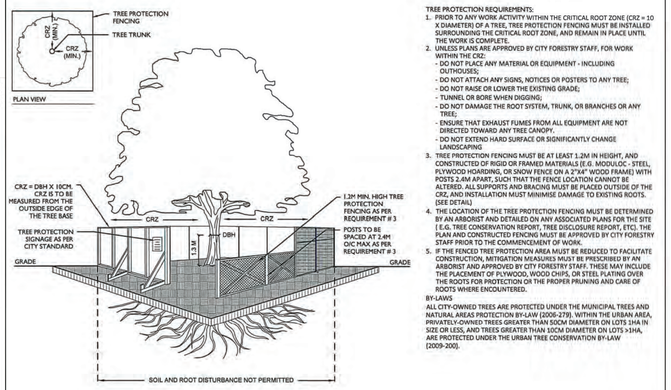
1 TREE PRESERVATION PLAN
1:100

NOTE:
1. REFER TO DRAWING TC2 FOR EXISTING VEGETATION SCHEDULE.

Ottawa

TITLE: TREE PRESERVATION PROTECTION FENCE

DWG No: F7 | REV: JAN 2020 | DATE: FEB 2013



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 DISCLOSURE 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.

BY-LAWS
ALL CITY-OWNED TREES ARE PROTECTED UNDER THE MUNICIPAL TREES AND NATURAL AREAS PROTECTION BY-LAW (2006-279), WITHIN THE URBAN AREA. PRIVATELY-OWNED TREES GREATER THAN 50CM DIAMETER ON LOTS 1HA IN SIZE OR LESS, AND TREES GREATER THAN 10CM DIAMETER ON LOTS >1HA, ARE PROTECTED UNDER THE URBAN TREE CONSERVATION BY-LAW (2009-200).

ACCESSIBLE FORMATS AND COMMUNICATION SUPPORTS ARE AVAILABLE, UPON REQUEST

2 TEMPORARY TREE PROTECTION FENCE - SECTION
N.T.S.

TREE PRESERVATION NOTES

1. NO TREES SHALL BE REMOVED WITHOUT THE CITY OF OTTAWA WRITTEN APPROVAL AS DEEMED UNDER BY-LAW NUMBER 2009-200.
2. NO VEGETATION REMOVAL SHALL OCCUR BETWEEN APRIL 15 AND AUGUST 15 OF ANY YEARS TO PROTECT BREEDING MIGRATORY BIRDS, AS WELL AS AT RISK BAT SPECIES. SHALL TREE REMOVAL DURING THIS PERIOD BY UNAVOIDABLE, THE CONTRACTOR IS REQUIRED TO CONDUCT A NESTING SURVEY BY A REGISTERED PROFESSIONAL AVIAN BIOLOGIST TO IDENTIFY AND ENSURE NO NESTING ACTIVITIES ARE PRESENT. TREE REMOVAL WILL BE ALLOWED WITHIN FIVE (5) DAYS OF CONDUCTING THE SURVEY.
3. CONTRACTOR SHALL ENSURE THE PROTECTION OF MATURE TREES IDENTIFIED TO BE RETAINED. TREE PROTECTION FENCING SHALL BE INSTALLED AT THE CRITICAL ROOT ZONE (CRZ) OF TREES WHERE THE CRZ IS ESTABLISHED AS BEING 10 CENTIMETRES FROM THE TRUNK OF A TREE FOR EVERY CENTIMETRE OF TRUNK DIAMETER AT BREAST HEIGHT (DBH). THE CRZ IS CALCULATED AS DBH X 10 CM. TREE PROTECTION FENCING SHALL BE INSTALLED AS SPECIFIED ON DETAIL 2/TC1 AS OUTLINED IN PLAN VIEW.
4. TREES TO BE REMOVED AND LOCATED INSIDE BESSERER PARK SHALL ONLY BE CUT AT GRADE AND STUMP RETAINED. THIS WILL LIMIT DAMAGES TO THE SOIL AND ROOT SYSTEMS OF OTHER TREES TO BE PRESERVED IN THE PARK.
5. JAPANESE KNOTWEED PRESENT ON SUBJECT LAND AND ADJACENT CITY LAND MUST BE COMPLETELY REMOVED MANUALLY BY CONTRACTOR. MANUAL REMOVAL INCLUDES DIGGING AND FULL EXCAVATION OF THE PLANT ROOT SYSTEMS. TREES TO REMAIN SHALL NOT BE IMPACTED BY THE REMOVAL OF JAPANESE KNOTWEED. CONTRACTOR TO PROVIDE A CONTROL PLAN TO CITY FORESTRY FOR REVIEW AND APPROVAL PRIOR TO PROCEED.
6. DURING EXCAVATION EQUIPMENT MUST BE MAINTAINED WITHIN THE CONFINES OF THE WORK AREA SO AS NOT TO DISRUPT ANY TURF OR TREE ROOTS UNNECESSARILY. DO NOT PLACE ANY MATERIAL OR EQUIPMENT WITHIN THE CRITICAL ROOT ZONE (CRZ) OF ANY TREE TO BE RETAINED.
7. CONTRACTOR SHALL ENSURE THAT NO FILL WILL BE ALLOWED TO OCCUR ON THE SURFACE ABOVE THE CRITICAL ROOT ZONE (CRZ) OF TREES.
8. ALL EXCAVATED MATERIAL, INCLUDING IMPORTED MATERIAL, MUST BE REMOVED IMMEDIATELY AND NOT PLACED ON GRASS OR NEAR TREES IN ORDER TO PREVENT ROOT DAMAGE. ACCIDENTAL HITTING OF ADJACENT TREES, AND TURF DAMAGE OUTSIDE OF WORK AREA.
9. CONTRACTOR SHALL MINIMIZE SOIL COMPACTION BY KEEPING OPERATION OF MACHINERY AND EQUIPMENT CONFINED TO DESIGNATED WORK AREA.
10. CONTRACTOR SHALL KEEP A SPILL KIT ON SITE.
11. CONTRACTOR SHALL DEVELOP AN EMERGENCY RESPONSE PLAN.
12. CONTRACTOR SHALL AVOID SOIL CONTAMINATION AND FUTURE LIABILITY BY CONFINING THE OILING AND REFUELING OF MACHINERY AND EQUIPMENT TO DESIGNATED STAGING AREA.
13. NO FUEL IS TO BE STORED WITHIN THE CRITICAL ROOT ZONE (CRZ) OF ANY TREE AND EXHAUST FUMES FROM ALL EQUIPMENT MUST NOT BE DIRECTED TOWARDS ANY TREE'S CANOPY.
14. CONTRACTOR SHALL PREVENT ANY DAMAGE TO THE ROOT SYSTEM, TRUNK OR BRANCHES OF ANY TREES TO BE RETAINED ON SITE AND ON ADJACENT PROPERTIES.
15. STORAGE OF EQUIPMENT AND VEHICLES WITHIN THE CRITICAL ROOT ZONE (CRZ) OF EXISTING TREES IS STRICTLY PROHIBITED.

WORK WITHIN PROTECTED AREAS

1. EXCAVATION WORK:
   - TO ENSURE THE ROOTS ARE NOT DISTURBED MORE THAN NECESSARY AND WHERE EXCAVATION WORKS ARE UNAVOIDABLE WITHIN THE CRZ OF TREES, THE FOLLOWING MITIGATION MEASURES SHALL BE USED:
     - ALL EXCAVATION WITHIN THE CRZ OF TREES SHALL BE BY HAND OR HYDRO EXCAVATION USING THE SMALLEST TOOLS. ROOT CUTTING SHALL BE MADE USING A SHARP SPADE OR KNIFE AT THE LIMIT OF DISTURBANCE PRIOR TO ANY CONSTRUCTION ACTIVITIES.
     - THE CONTRACTOR SHALL ONLY TUNNEL OR BORE WITHIN THE CRZ, INSTEAD OF CREATING A TRENCH.
     - ANY ROOTS THAT ARE EXPOSED BY CONSTRUCTION ACTIVITIES MUST BE COVERED WITH NATIVE TOPSOIL IMMEDIATELY, TO ENSURE THAT THE ROOTS DO NOT DRY OUT OR HAVE ANY FURTHER DAMAGE OCCUR TO THEM.
   - IN ALL THOSE INSTANCES WHERE ROOT PRUNING IS REQUIRED, THE SERVICE OF A CERTIFIED ARBORIST OR QUALIFIED TREE WORKER UNDER THE SUPERVISION OF A CERTIFIED ARBORIST SHALL BE RETAINED. IN ADDITION, ALL REMEDIAL WORKS MUST BE CONDUCTED BY A CERTIFIED CARE PROFESSIONAL TO ENSURE PROPER CARE IS ADMINISTERED IN ORDER TO ENABLE THE CONTINUED HEALTH OF THE TREES.
2. GRADING WORK
   - WHERE RE-GRADING IS REQUIRED WITHIN THE CRZ, IT SHOULD BE PERFORMED BY HAND UNDER THE SUPERVISION OF A CERTIFIED ARBORIST.

Stantec

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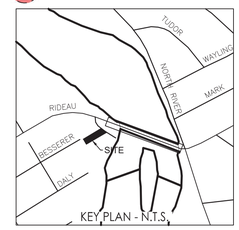
www.stantec.com

Legend
- EXISTING TREE
- EXISTING BUTTERNUT TREE
- EXISTING WOODED AREA
- 33 EXISTING TREE ID
- CRITICAL ROOT ZONE
- EXISTING TREE TO BE REMOVED
- EXISTING VEGETATION GROUPING TO BE REMOVED
- PROPOSED CONCRETE UNIT PAVERS
- PROPOSED CONCRETE
- PROPOSED RIVERSTONE
- PROPOSED TEMPORARY TREE PROTECTION FENCE REFER TO DETAILS 2/TC1
- PROPERTY LINE

TREE HEALTH CONDITION
- GOOD
- FAIR
- POOR



KEY PLAN - N.T.S.

10	REVISED SITE PLAN	IL	IL	21.10.13
4	REVISED SITE PLAN	LZ	IL	18.10.26
3	ADDED BUTTERNUT TREE LOCATION	IL	IL	17.06.23
2	REVISED SITE PLAN	IL	IL	17.01.23
1	ISSUED TO SITE PLAN CONTROL APPROVAL	BD	IL	16.10.19
Revision		By	Appd.	YY.MM.DD
File Name: 160401234-LB		BD	IL	IL	16.08.24
		Dwn.	Chkd.	Dsgn.	YY.MM.DD

Permit-Seal
ASSOCIATION OF LANDSCAPE DESIGNERS OF ONTARIO — ISABELLE LALONDE — CALA — 2021-10-13 — MEMBER

Client/Project
TC UNITED GROUP

244 FOUNTAIN PLACE

OTTAWA, ON

Title
TREE PRESERVATION PLAN

Project No. 160401234
Scale 1:100 (0, 1, 3, 5m)
Drawing No. TC1
Sheet 1of 2
Revision 10

D07-12-16-0150
#18362

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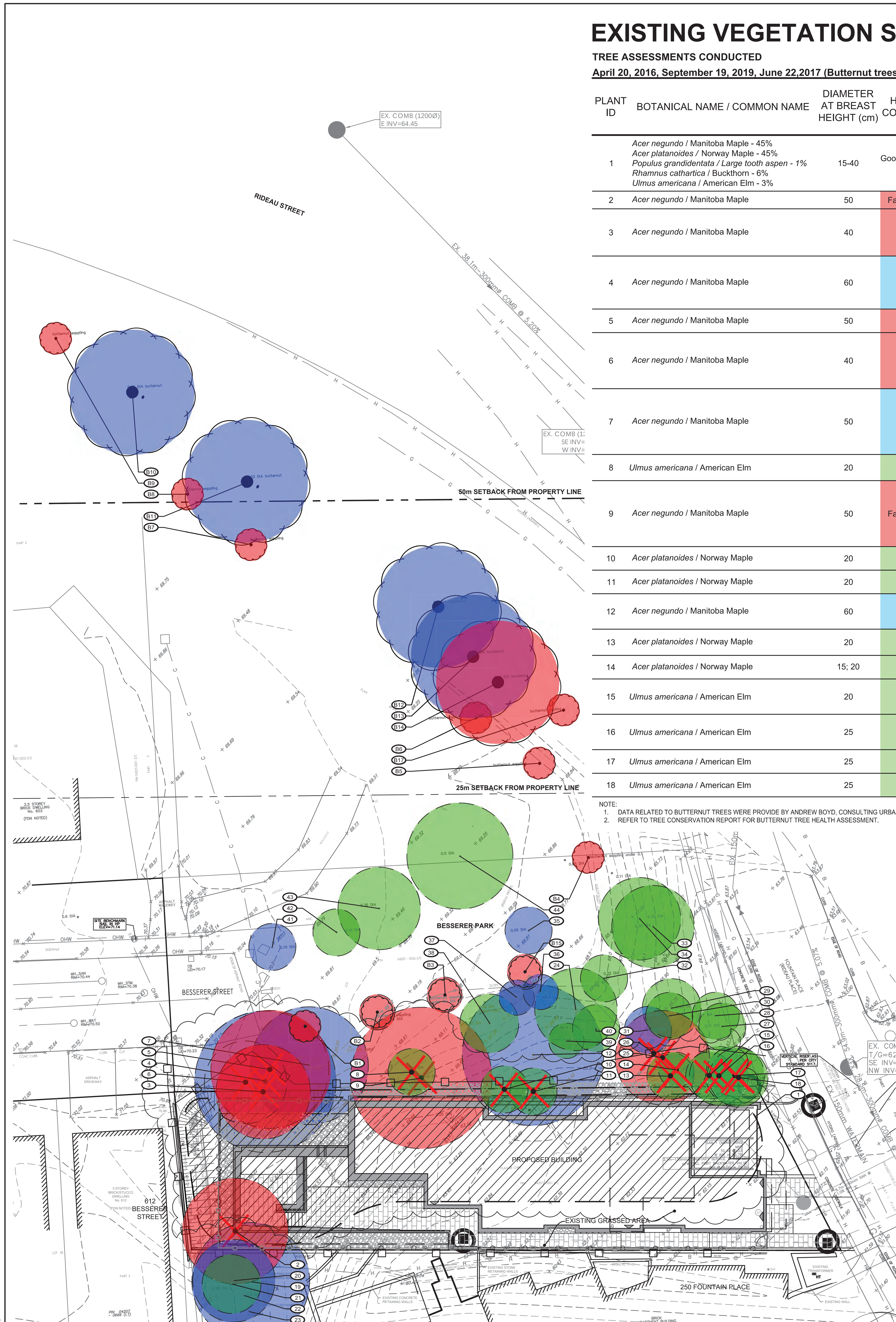
2021/10/13 2:18:14 PM by Lalonde, Isabelle

ORIGINAL SHEET - ARCH D



1 BUTTERNUT TREES IN BESSERER PARK
1:200

EXISTING VEGETATION SCHEDULE

TREE ASSESSMENTS CONDUCTED

April 20, 2016, September 19, 2019, June 22,2017 (Butternut trees), August 9, 2019, and June 9, 2020.

PLANT ID	BOTANICAL NAME / COMMON NAME	DIAMETER AT BREAST HEIGHT (cm)	HEALTH CONDITION	REMARKS
1	*Acer negundo* / Manitoba Maple - 45% *Acer platanoides* / Norway Maple - 45% *Populus grandidentata / Large tooth aspen - 1%* *Rhamnus cathartica* / Buckthorn - 6% *Ulmus americana* / American Elm - 3%	15-40	Good to Poor to Dead	Grouping of trees; A number of trees are dead or in poor condition; GROUPING TO BE REMOVED TO ALLOW FOR CONSTRUCTION OF BUILDING
2	*Acer negundo* / Manitoba Maple	50	Fair to Poor	TO BE REMOVED DUE TO REGRADING WORKS
3	*Acer negundo* / Manitoba Maple	40	Poor	Growing on the slope; Tree is falling towards 244 Fountain Place with large crack in the trunk; TO BE REMOVED DUE TO REGRADING WORKS
4	*Acer negundo* / Manitoba Maple	60	Fair	Municipal tree (Besserer Park); Tree growing on top of slope; Tree is standing with some pruning; tree is leaning towards Hydro Pole; TO BE REMOVED DUE TO REGRADING WORKS
5	*Acer negundo* / Manitoba Maple	50	Dead	Municipal tree (Besserer Park); Tree fell inside the park (spring 2020); TO BE REMOVED
6	*Acer negundo* / Manitoba Maple	40	Poor	Municipal tree (Besserer Park); Growing on top of slope; Bark is pealing; Rotted; Damaged by wildlife; Leader was pruned in the past approximately 6m above ground; TO BE REMOVED DUE TO REGRADING WORKS
7	*Acer negundo* / Manitoba Maple	50	Fair	Municipal tree (Besserer Park); Growing on top of slope; Tree is leaning towards 244 Fountain Place; Tree opens up into 2 leaders at approximately 2m above ground; large stem at 1m from base was pruned back in the past; TO BE PROTECTED
8	*Ulmus americana* / American Elm	20	Good	Municipal tree (Besserer Park); Growing on a slope; TO BE REMOVED DUE TO REGRADING
9	*Acer negundo* / Manitoba Maple	50	Fair to Poor	Municipal tree (Besserer Park); Growing on a slope; Large 40cm branch broke naturally and fell inside 244 Fountain Place with lenght of branch extending entire width of property; Other smaller branches are broken due to this failure; Other dead branches are visible at top of tree; TO BE REMOVED DUE TO REGRADING
10	*Acer platanoides* / Norway Maple	20	Good	Tree on property line; Growing on a slope; TO BE REMOVED
11	*Acer platanoides* / Norway Maple	20	Good	Growing on slope adjacent to existing stone retaining wall to be removed; TREE TO BE REMOVED
12	*Acer negundo* / Manitoba Maple	60	Fair	Municipal tree (Besserer Park); Growing on slope; Broken branches; Leaning towards park; TREE TO BE PROTECTED
13	*Acer platanoides* / Norway Maple	20	Good	Municipal tree (Besserer Park); Adjacent to existing stone wall to be removed; TREE TO BE REMOVED
14	*Acer platanoides* / Norway Maple	15; 20	Good	Municipal tree (Besserer Park); 2 trunks; TREE TO BE REMOVED
15	*Ulmus americana* / American Elm	20	Good	Municipal tree (Besserer Park); Adjacent on/in existing stone wall to be removed; TREE TO BE REMOVED
16	*Ulmus americana* / American Elm	25	Good	Municipal tree (Besserer Park); Adjacent on/in existing stone wall to be removed; 2 trunks; TREE TO BE REMOVED
17	*Ulmus americana* / American Elm	25	Good	Municipal tree (Besserer Park); Adjacent on/in existing stone wall to be removed; TREE TO BE REMOVED
18	*Ulmus americana* / American Elm	25	Good	Municipal tree (Besserer Park); Adjacent on/in existing stone wall to be removed; TREE TO BE REMOVED
19	*Acer negundo* / Manitoba Maple	50	Fair	250 Fountain Place; TO BE PROTECTED
20	*Acer negundo* / Manitoba Maple	35	Fair	250 Fountain Place; TO BE PROTECTED
21	*Acer negundo* / Manitoba Maple	20	Good	250 Fountain Place; TO BE PROTECTED
22	*Acer negundo* / Manitoba Maple	40	Good	250 Fountain Place; TO BE PROTECTED
23	*Acer negundo* / Manitoba Maple	25	Good	250 Fountain Place; TO BE PROTECTED
24	*Acer platanoides* / Norway Maple	35	Good	Municipal tree (Besserer Park); TREE TO BE PROTECTED
25	*Acer platanoides* / Norway Maple	40	Fair to Poor	Municipal tree (Besserer Park); Growing on slope; Cankered tree; TO BE REMOVED
26	*Acer platanoides* / Norway Maple	40	Dead	Municipal tree (Besserer Park); TO BE REMOVED
27	*Acer platanoides* / Norway Maple	11	Good	Municipal tree (Besserer Park); Growing on slope facing Fountain Place; TO REMAIN
28	*Acer platanoides* / Norway Maple	11	Good	Municipal tree (Besserer Park); Growing on slope facing Fountain Place; TO REMAIN
29	*Ulmus americana* / American Elm	25	Good	Municipal tree (Besserer Park); TO REMAIN
30	*Ulmus americana* / American Elm	20	Good	Municipal tree (Besserer Park); TO REMAIN
31	*Acer platanoides* / Norway Maple	20	Fair	Municipal tree (Besserer Park); Dead branches; TO REMAIN
32	*Acer negundo* / Manitoba Maple	20	Good	Municipal tree (Besserer Park); Leaning towards Rideau; TO REMAIN
33	*Acer negundo* / Manitoba Maple	35	Good	Municipal tree (Besserer Park); TO REMAIN
34	*Acer negundo* / Manitoba Maple	35	Good	Municipal tree (Besserer Park); TO REMAIN
35	*Pinus strobus* / White Pine	N/A	Fair	Municipal tree (Besserer Park); 2.5m high; Signs of pine blister rust canker; TO REMAIN
36	*Ulmus americana* / American Elm	15	Fair	Municipal tree (Besserer Park); TO REMAIN
37	*Ulmus americana* / American Elm	15	Fair	Municipal tree (Besserer Park); TO REMAIN
38	*Ulmus americana* / American Elm	30	Good	Municipal tree (Besserer Park); TO REMAIN
39	*Acer platanoides* / Norway Maple	10	Good	Municipal tree (Besserer Park); TO REMAIN
40	*Acer platanoides* / Norway Maple	20	Good	Municipal tree (Besserer Park); TO REMAIN
41	*Ulmus americana* / American Elm	15	Fair	Municipal tree (Besserer Park); Broken branches; TO REMAIN
42	*Ulmus americana* / American Elm	15	Good	Municipal tree (Besserer Park); TO REMAIN
43	*Acer rubrum* / Red Maple	35	Good	Municipal tree (Besserer Park); TO REMAIN
44	*Acer rubrum* / Red Maple	60	Good	Municipal tree (Besserer Park); TO REMAIN
B1 to B3	*Juglans cinerea* / Butternut	n/a	Dead or Missing	Municipal trees (Besserer Park); Planted saplings; TO REMAIN
B4	*Juglans cinerea* / Butternut	1	Poor	Municipal trees (Besserer Park); Planted saplings; Tree#2 of the Butternut Health Assessor's Report dated July 27, 2020; Excavation within 50m of tree; Category 1
B5 to B9	*Juglans cinerea* / Butternut	n/a	Dead or Missing	Municipal trees (Besserer Park); Planted saplings
B10	*Juglans cinerea* / Butternut	6	Fair	Municipal tree (Besserer Park); Located more than 50m from proposed development
B11	*Juglans cinerea* / Butternut	3	Fair	Municipal tree (Besserer Park); Located more than 50m from proposed development
B12	*Juglans cinerea* / Butternut	25	Fair	Municipal tree (Besserer Park); Tree #3 of the Butternut Health Assessor's Report dated July 27, 2020; Excavation within 50m of tree; Category 3
B13	*Juglans cinerea* / Butternut	17	Fair	Municipal tree (Besserer Park); Tree #4 of the Butternut Health Assessor's Report dated July 27, 2020; Excavation within 50m of tree; Category 1
B14	*Juglans cinerea* / Butternut	11	Dead	Municipal tree (Besserer Park)
B15	*Juglans cinerea* / Butternut	1	Poor	Municipal trees (Besserer Park); Planted saplings; Tree#1 of the Butternut Health Assessor's Report dated July 27, 2020; Excavation within 50m of tree; Category 1
B16 to B17	*Juglans cinerea* / Butternut	n/a	Dead or Missing	Municipal trees (Besserer Park); Planted saplings

NOTE:
1. DATA RELATED TO BUTTERNUT TREES WERE PROVIDE BY ANDREW BOYD, CONSULTING URBAN FORESTER WITH IFS ASSOCIATES INC.
2. REFER TO TREE CONSERVATION REPORT FOR BUTTERNUT TREE HEALTH ASSESSMENT.

Stantec

Stantec Consulting Ltd.
400 - 1331 Clyde Avenue
Ottawa ON
Tel. 613.722.4420
www.stantec.com

Legend

- EXISTING TREE
- EXISTING BUTTERNUT TREE
- EXISTING WOODED AREA
- EXISTING TREE ID
- CRITICAL ROOT ZONE
- EXISTING TREE TO BE REMOVED
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TREE HEALTH CONDITION

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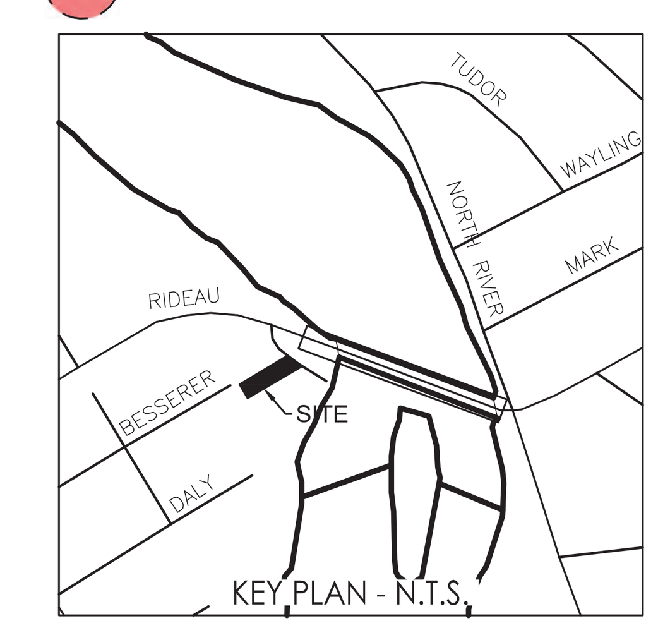
- FAIR
- POOR



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Revision		By	Appd.	YY.MM.DD

File Name: 160401234-LB	BD	IL	IL	16.08.24
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

Permit-Seal

ONTARIO ASSOCIATION OF LANDSCAPE ARCHITECTS
ISABELLE L LALONDE
OALA
2021-10-13
MEMBER

Client/Project

TC UNITED GROUP

244 FOUNTAIN PLACE

OTTAWA, ON

Title

TREE PRESERVATION SCHEDULE AND BUTTERNUT TREE SURVEY PLAN

Project No. 160401234

Scale 1:100 (0, 1, 3, 5m)

Drawing No. TC2

Sheet 2of 2

Revision 10

D07-12-16-0150
#18362

ORIGINAL SHEET - ARCH D

APPENDIX B – BUTTERNUT TREES HEALTH ASSESSMENT

IFS ASSOCIATES

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

July 27, 2020

Billy Triantafilos
Principal, Co-Founder
TCU Development Corporation
150 Isabella Street, Unit 1207
Ottawa, ON
K1S 5H3

RE: BUTTERNUT HEALTH ASSESSMENT – 244 FOUNTAIN PLACE, OTTAWA

Butternut Health Assessor Report Number: 20-11
Date of Butternut Health Assessment: July 23, 2020

Dear Billy,

This letter is in regard to my assessment of butternut trees within the City of Ottawa's Besserer Park adjacent to the above noted development property. Originally, there were a total 19 butternuts within the park, five pre-existing (presumed planted) and 14 planted within the last five years as compensation under the Endangered Species Act, 2007 (ESA). As of the date of this report, only two of the 14 trees planted as compensation are alive (five are no longer present and seven are fully dead). Of the five pre-existing trees, two are further than 50m from the proposed development (and so will not be harmed), two are alive and one is dead. This report details the four living butternuts within 50m of the development property.

Butternut is listed as an endangered species on the Species at Risk in Ontario List, and as such, it is protected under the ESA from being killed, harmed, or removed. If you are planning to undertake an activity that may affect butternut, you may be eligible to follow the requirements set out in section 23.7 of Ontario Regulation 242/08 under the ESA, or you may need to seek an authorization under the ESA (e.g., a permit). Please visit e-laws at the link provided below for the legal requirements of eligible activities under section 23.7 of Ontario Regulation 242/08 and conditions that must be fulfilled. Information about Butternut is also available at: http://www.ontario.ca/environment-and-energy/butternut-trees-your-property.

Links:

Endangered Species Act, 2007:
http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_07e06_e.htm

Ontario Regulation 242/08 (refer to section 23.7):
http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_080242_e.htm

Summary of changes related to Butternut:
http://www.ontario.ca/environment-and-energy/butternut-trees-your-property

MECP office locations:
https://www.ontario.ca/environment-and-energy/ministry-environment-district-locator

If you are eligible to kill, harm or take butternut under section 23.7 of the regulation, your first step is to submit the Butternut Health Assessor (BHA) report and the data forms enclosed in this package to the Ontario Ministry of Environment, Conservation and Parks (MECP). If you wish, I will submit them on your behalf. The BHA Report must be submitted at least 30 days prior to registering to kill, harm, or remove a butternut tree. During this 30 day period no butternut tree (of any category) may be killed, harmed, or removed and MECP may contact you for an opportunity to examine your tree.

If the MECP chooses to examine the trees, a representative will contact you using the information you supplied when I completed the BHA report. After the examination has been completed, the MECP will notify you if the examination results change whether you are eligible for the regulation.

If you are eligible to follow the rules in regulation under section 23.7, you may register your activity using the "Notice of Butternut Impact" form on the MECP Registry **after** the 30 day period has elapsed.

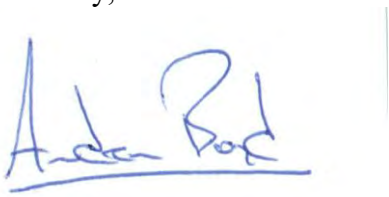
If you are **not** eligible to follow the rules in regulation under section 23.7, please contact the local MECP office to determine whether you will need to seek a permit. A link to the directory of MECP offices is provided in the text box on the previous page.

As a designated BHA, I am providing the following BHA report for the trees located adjacent to 244 Fountain Place, for which I completed an assessment during the site visit on the date noted above. If there are other butternut trees at the site that may be affected by the activity and they are not identified in this report, they too must be assessed by a BHA.

Note that municipal by-laws and legislation other than the ESA may also be applicable to the removal or harming of trees.

Please retain this letter and a copy of the BHA report along with any other documentation you may receive from the MECP should an examination of the trees occur. If you have any questions, please do not hesitate to contact me or the local District MECP office.

Sincerely,



Andrew K. Boyd, B.Sc.F, R.P.F. (#1828)
ISA Certified Arborist #ON-0496A and TRAQualified
Butternut Health Assessor #513
aboyd@ifsassociates.ca

Enclosures:

1. Butternut Health Assessor's (BHA) Report
2. Copied data forms 1 and 2.
3. Electronic copy of the Excel data spreadsheet (BHA Tree Analysis)

Butternut Health Assessor's Report

Andrew Boyd, R.P.F. (BHA #513)
IFS Associates Inc.
PO Box 13593
Ottawa, ON
K2K 1X6

Billy Triantafilos
Principal, Co-Founder
TCU Development Corporation
150 Isabella Street, Unit 1207
Ottawa, ON
K1S 5H3

Property description: Besserer Park, Ottawa
BHA Report Number: 20-11
Date(s) of Butternut health assessment: July 23, 2020
Date BHA Report prepared: July 27, 2020

Map datum used: ☒ NAD83 ☐ WGS84

Total number of trees in this BHA Report: 4

This BHA Report includes the following tables:

- Table 1: Butternut trees proposed to be killed, harmed, or taken
- Table 2: Butternut trees that are **not** proposed to be killed, harmed or taken
- Table 3: Trees determined to be hybrid Butternuts
- Table 4: Summary of Assessment Results

Table 1: Butternut trees proposed to be killed, harmed, or taken

Tree #	UTM coordinates	Category[1] *(1, 2, or 3[2])*	dbh[3] (cm)	Cultivated? *(Y/N)*	Proposed to be: *(enter one: killed, harmed or taken)*	Reason tree is proposed to be killed, harmed or taken:
1	E0447371 N5031319	1	1	N	Harmed	Excavation within 50m of tree.
2	E0447371 N5031310	1	1	N	Harmed	Excavation within 50m of tree.
3	E0447353 N5031329	3	25	Y	Harmed	Excavation within 50m of tree.
4	E0447352 N5031332	1	17	Y	Harmed	Excavation within 50m of tree.

[1] The extent to which the tree is affected by Butternut Canker is presented in the Excel document titled, "BHA Tree Analysis" that accompanies this BHA Report.
[2] The rules in regulation under section 23.7 of O. Reg. 242/08 are not applicable to Category 3 trees.
[3] dbh: diameter at breast height, rounded to nearest cm (if tree is shorter than breast height, enter zero)

Table 2: Butternut trees that are **not** proposed to be killed, harmed or taken

Tree #	UTM coordinates	Category (1, 2, or 3)	dbh[4] (cm)	Cultivated? (Y/N)

Table 3: Trees determined to be hybrid Butternuts

Tree #	UTM coordinates

Table 4: Summary of Assessment Results

Result:	**Total #:**	**Important information for persons planning activities that may affect Butternut:**
Category 1	3	• A Category 1 tree is one that is affected by butternut canker to such an advanced degree that retaining the tree would not support the protection or recovery of butternut in the area in which the tree is located; and is considered "non-retainable". • During the 30 day period that follows your submission of this BHA Report to the MNR District Manager, no Butternut trees (of Category 1, 2, or 3) may be killed, harmed, or taken, and MNR may contact you for an opportunity to examine the trees. • Category 1 trees may be killed, harmed or taken **after** the 30 day period that follows submission of this BHA Report to the MNR District Manager, unless the results of an MNR examination indicate that the assessment has not been conducted in accordance with the document entitled "Butternut Assessment Guidelines: Assessment of Butternut Tree Health for the Purposes of the *Endangered Species Act, 2007"*.
Category 2	0	• A Category 2 tree is one that is not affected by Butternut Canker, or is affected by Butternut Canker but the degree to which it is affected is not too advanced and retaining the tree could support the protection or recovery of butternut in the area in which the tree is located, and is considered "retainable". • During the 30 day period that follows your submission of this BHA Report to the MNR District Manager, no Butternut trees (of Category 1, 2, or 3) may be killed, harmed, or taken, and MNR may contact you for an opportunity to examine the trees. • Activities that may kill, harm or take up to a maximum of ten (10) Category 2 trees may be eligible to follow the rules in section 23.7 of Ontario Regulation 242/08, in accordance with the conditions and requirements set out in the regulation. • Refer to e-Laws for the legal requirements of eligible activities under section 23.7 of Ontario Regulation 242/08 and conditions that must be fulfilled: http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_080242_e.htm
Category 3	1	• A Category 3 tree is one that may be useful in determining sources of resistance to Butternut Canker, and is considered "archivable". • Category 3 trees are not eligible to be killed, harmed or taken under section 23.7 of Ontario Regulation 242/08. • Visit the MNR website using the link below for information on how to seek an ESA authorization, or consider an alternative that will avoid killing, harming or taking any Category 3 trees: https://www.ontario.ca/page/how-get-endangered-species-act-permit-or-authorization

[4] dbh: diameter at breast height, rounded to nearest cm (if tree is shorter than breast height, enter zero)

Result:	Total #:	Important information for persons planning activities that may affect Butternut:
Cultivated	0	• An activity that involves killing, harming, or taking a cultivated Butternut tree that was not required to be planted to fulfill a condition of an ESA permit or a condition of a regulation, may be eligible for the exemption provided by subsection 23.7 (11) of O. Reg. 242/08. • Prior to undertaking the activity, the owner or occupier of the land on which the Butternut is located (or person acting on their behalf) will need to determine whether the exemption for cultivated trees is applicable by determining whether or not the tree was cultivated as a result of the requirements for an exemption under O. Reg. 242/08 or a condition of a permit issued under the ESA. This information can be accessed by contacting the local MECP district office: https://www.ontario.ca/page/ministry-environment-conservation-parks • The owner or occupier of the land on which the Butternut is located (or person acting on their behalf) is encouraged to append the details regarding whether the tree was planted to satisfy a requirement (e.g., the permit number or registration number) to this BHA Report for their records.
Hybrid	0	• Hybrid Butternut trees are not protected under the ESA, but their removal may be subject to municipal by-laws and other legislation.

NOTE: This concludes the summary of the BHA report. A complete BHA report must include the original (hard copy) data forms (i.e., all completed sets of Form 1 and Form 2) and an electronic copy of the Excel data analysis spreadsheet.

BHA Tree Analysis (version: December 2013)

This table is to be completed by a designated Butternut Health Assessor (BHA).

BHA Report #	20-11	Assessment Date(s)	23/07/20	Total # Butternut Trees in BHA Report	4
BHA ID #	513	BHA Name	Andrew Boyd		
Landowner / Client Name			City of Ottawa/TCU Development Corp		
Property Location			244 Fountain, Ottawa		

input field data										automatic calculations from field data						Categories: 1: non-retainable, 2: retainable, 3: archivable				
			# bole cankers				# root flare (RF) cankers													
Tree #	Live Crown %	Tree dbh (cm)	sooty (S) (will be assigned 2.5 cm per canker)		open (O) (will be assigned 5 cm per canker)				<40 m from cankered tree? (Y or N)	**Circ.** (cm) = Pi x dbh	total **bole canker width** (sooty x 2.5 + open x 5)	total **RF canker width** (sooty x 2.5 + open x 5)	bole canker **%** of circ.	RF canker **%** of circ.	total bole & root canker % of 2xCirc	LC% >/= 50 & BC% = 0	LC% >70 & BRC % <20	LC% >70 & BC % <20	Preliminary tree call	**FINAL TREE CALL** a Cat 2, dbh>20cm <40m from a Cat 1
			S <2 m	S >2 m	O <2 m	O >2 m	RF S	RF O		**Circ** (cm)	**BC** (cm)	**RC** (cm)	**BC%**	**RC%**	**BRC%**					
1	20	1	0	0	0	0	0	0	y	3.14	0.0	0.0	**0.0**	**0.0**	**0.0**	1	1	1	**1**	**1**
2	40	1	1	0	0	0	0	0	y	3.14	2.5	0.0	**79.6**	**0.0**	**39.8**	1	1	1	**1**	**1**
3	90	25	0	0	1	1	1	1	y	78.5	10.0	7.5	**12.7**	**9.6**	**11.1**	1	2	2	**2**	**3**
4	90	17	4	0	2	0	1	4	y	53.38	20.0	22.5	**37.5**	**42.2**	**39.8**	1	1	1	**1**	**1**
5										0	0.0	0.0	#####	#####	#####	####	###	###	##	#DIV/0!
6										0	0.0	0.0	#####	#####	#####	####	###	###	##	#DIV/0!
7										0	0.0	0.0	#####	#####	#####	####	###	###	##	#DIV/0!
8										0	0.0	0.0	#####	#####	#####	####	###	###	##	#DIV/0!
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10										0	0.0	0.0	#####	#####	#####	####	###	###	##	#DIV/0!
11										0	0.0	0.0	#####	#####	#####	####	###	###	##	#DIV/0!
12										0	0.0	0.0	#####	#####	#####	####	###	###	##	#DIV/0!
13										0	0.0	0.0	#####	#####	#####	####	###	###	##	#DIV/0!
14										0	0.0	0.0	#####	#####	#####	####	###	###	##	#DIV/0!
15										0	0.0	0.0	#####	#####	#####	####	###	###	##	#DIV/0!
16										0	0.0	0.0	#####	#####	#####	####	###	###	##	#DIV/0!
17										0	0.0	0.0	#####	#####	#####	####	###	###	##	#DIV/0!
18										0	0.0	0.0	#####	#####	#####	####	###	###	##	#DIV/0!
19										0	0.0	0.0	#####	#####	#####	####	###	###	##	#DIV/0!
20										0	0.0	0.0	#####	#####	#####	####	###	###	##	#DIV/0!
21										0	0.0	0.0	#####	#####	#####	####	###	###	##	#DIV/0!
22										0	0.0	0.0	#####	#####	#####	####	###	###	##	#DIV/0!
23										0	0.0	0.0	#####	#####	#####	####	###	###	##	#DIV/0!
24										0	0.0	0.0	#####	#####	#####	####	###	###	##	#DIV/0!
25										0	0.0	0.0	#####	#####	#####	####	###	###	##	#DIV/0!
26										0	0.0	0.0	#####	#####	#####	####	###	###	##	#DIV/0!
27										0	0.0	0.0	#####	#####	#####	####	###	###	##	#DIV/0!
28										0	0.0	0.0	#####	#####	#####	####	###	###	##	#DIV/0!
29										0	0.0	0.0	#####	#####	#####	####	###	###	##	#DIV/0!
30										0	0.0	0.0	#####	#####	#####	####	###	###	##	#DIV/0!
31										0	0.0	0.0	#####	#####	#####	####	###	###	##	#DIV/0!