



Tree Conservation Report

1600 James Naismith Drive

May 10, 2022

Prepared for:

1600 James Naismith LP

Prepared by:

Stantec Consulting Ltd.
1331 Clyde Avenue
Ottawa ON K2C 3G4
Project No. 160410414



TREE CONSERVATION REPORT

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Prepared by *Isabelle Lalonde*
(signature)

Isabelle Lalonde



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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, growing on a private property with a <ul style="list-style-type: none">• DBH of 30 centimetres or greater, within the City of Ottawa Inner Urban Area (City of Ottawa Tree Protection By-law 2020-340); and• DBH of 50 centimetres or greater, within the City of Ottawa Suburban Area (City of Ottawa Tree Protection By-law 2020-340).
Drip Line	Perimeter of the area under a tree delineated by the crown.
Health Condition	Tree Health Condition of each trees is defined as one of the following: <ul style="list-style-type: none">• Good: Defects, if present, are minor (i.e., twig dieback, small wounds) and canopy foliage is full with limited defective parts (i.e. limb up to 5cm in diameter). Overall colour and terminal shoot growth appear normal for the species.• Fair: Defects are visually present (i.e., dead scaffold limbs) and canopy foliage may be thinner than normal compared to the species with defective parts considered moderate in size



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(i.e. limb greater than 5cm in diameter). Overall colour and terminal shoot growth appear abnormal for the species.

- Poor: Defects are visually severe (i.e. trunk cavities) and canopy foliage is thin with significant defective parts (i.e. majority of crown). Overall colour appear abnormal for the species with minimal terminal shoot growth.
- Declining / Dead: Tree is dead or in severe decline with low chance for recovery. Canopy foliage is sparse, if present.

Leader

The primary terminal shoot or trunk of a tree.

Ownership (Tree)

As defined by the City of Ottawa Tree Protection By-law 2020-340:

- Private: Tree growing on the subject site.
- Boundary: Tree of which any part of the trunk is growing across one of more property lines.
- Adjacent: Tree whose trunk is growing on a property sharing a boundary with the subject site.
- City / Municipal: Tree municipally owned.

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.



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Significant Woodland	Woodland that contains 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.



TREE CONSERVATION REPORT

INTRODUCTION

1.0 INTRODUCTION

1.1 BACKGROUND AND OBJECTIVES

Stantec Consulting Ltd. was retained by 1600 James Naismith LP to complete a Tree Conservation Report in support of the redevelopment of the property located at 1600 James Naismith Drive transforming an existing eight-storey commercial / office tower building to a residential apartment building with associated parking. This project is Phase 1 of the overall site redevelopment which is planned to include a medium-density development featuring several blocks of stacked townhouses in the existing western parking area as part of Phase 2, and two (2) apartment building towers north of the existing building during Phase 3 of this property redevelopment.

This Tree Conservation Report provides a review of the site redevelopment and anticipated impacts to trees growing on this property for the development of Phase 1 of the redevelopment. The objectives of this report are to:

- Describe the existing trees growing on site. The description of the trees includes species, size, and health condition.
- Assess the environmental value and tolerance to site disturbances for retention of the existing trees based on construction clearances.
- Evaluate the anticipated impact(s) of the proposed development on the existing trees.
- Provide recommendations related to tree protection and mitigation measures to reduce negative impacts on the trees to be retained.
- Provide recommendations for the development of a compensation planting plan.

1.2 SUBJECT SITE

The Subject Site, or 1600 James Naismith Drive, is located at the cul-de-sac of Telesat Court, south of Regional Road 174, west of Blair Road, and north of Queensway Park. The Subject Site is also connected to the Blair LRT Station and Blair commercial area via a pedestrian bridge over Regional Road 174 as illustrated on **Figure 1** below. Currently, the site is landscaped with a mix of mature deciduous and coniferous trees, shrub beds, and accent stone walls.



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INTRODUCTION



Figure 1 Study Area

The property is 3.64 hectares (8.99 acres) in size. By its location within the City of Ottawa, the project site is situated within the City of Ottawa Inner Urban Area as defined by Schedule F of the *City of Ottawa's Tree Protection By-law* (By-law No. 2020-340) (City of Ottawa 2021a). Under this by-law, "all trees 10 cm or more in diameter at breast height on private properties with the urban area that are over 1 hectare in size" are considered "protected trees" and may not be injured or removed without a Tree Removal Permit issued by the City of Ottawa. The *City of Ottawa's Tree Protection By-law* was used to framework the tree assessment and tree retention mitigation recommendations for this project. Trees 10 centimetres (cm) DBH or greater have been assessed in terms of species, sizes, and overall health conditions; as required by the City of Ottawa.



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TREE ASSESSMENT

2.0 TREE ASSESSMENT

On March 22, 2022, Stantec carried out an inventory of trees found within the identified study area for the Phase 1 redevelopment of 1600 James Naismith Drive in Ottawa. The tree inventory was completed using the framework outlined by the *City of Ottawa's Tree Protection By-law* (By-law No. 2020-340) (City of Ottawa 2021a) for tree assessments. Tree species were determined, diameter at breast height (DBH) were measured, and overall health conditions were assessed during this tree assessment investigation.

2.1 METHODOLOGY

The assessment of trees growing within the identified Phase 1 redevelopment area of 1600 James Naismith was completed as part of this tree investigation. In addition, trees growing on the north edge of Queensway Park (within 4 metres (m) of the property line) and western edge of the property to the east were also assessed. All trees with a DBH of 10 cm or greater were assessed as required by the *City of Ottawa's Tree Protection By-law*. Additional trees planted in the last 10 years and with a DBH of less than 10 cm were also assessed considering some work required for Phase 1 of the redevelopment may extend to these trees.

Trees were measured using a metric measuring tape. Tree locations was determined using general information provided in the topographical survey prepared by Stantec Geomatics Ltd dated January 2022 and site observations. Although some trees are shown on the topographical survey not all trees on this Subject Site have been surveyed by a surveyor; as a result all trees should be confirmed on site at time of the layout of the new site features. In total, 139 individual trees were assessed for this Phase 1 redevelopment project including four (4) trees growing in Queensway Park, three (3) trees growing on the property to the east, and 20 trees with a DBH of less than 10 cm.

During the tree assessment investigation, the species were determined based on bark and buds identification. Furthermore, a visual assessment was conducted of their health condition where the vigor was assessed based on visible defects only.

2.2 OBSERVATIONS

Currently, the site is landscaped with a mix of mature deciduous and coniferous trees, shrub beds, and accent stone walls. Within the tree assessment area for this project, a total of 119 trees with a DBH equal to or greater than 10 cm were assessed with an additional 20 trees having a DBH smaller than 10 cm assessed because they may be impacted by construction works. On site, Stantec identified 14 different tree species. A total of 41 trees or 34.5% of the trees are considered Distinctive Trees (i.e. tree 30cm DBH or greater (City of Ottawa 2021a)) by the *City of Ottawa's Tree Protection By-law* and were surveyed on site and on the adjacent properties. The tree health for all trees in this surveyed area varied from good to fair with limited presence of trees in poor conditions.



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TREE ASSESSMENT

The Tree Assessment Table (i.e. species, DBH, and health conditions) is provided in **Appendix A** of this report with photographs depicting the general existing treed areas provided in **Appendix B**. The locations of all trees inventoried as part of this tree investigation are provided on the accompanying **Current Vegetation Plan (TC01)** included in **Appendix C** of this report. The following sections provide the description of the qualities of the trees growing on the Subject Site; only the trees with a DBH of 10 cm or greater are included in the review of the qualities of the trees.

2.2.1 Tree Species Distribution

Overall, the Subject Site offers a good diversity of tree species, including a mix of deciduous and coniferous trees. The trees growing on the Subject Site also include a mix of native and non-native species with more than 85% of the tree species being non-native. The breadth and frequency of species inventoried is depicted in **Table 1 Tree Species Summary** below.

Table 1 Tree Species Summary

Species - Botanical Name	Species – Common Name	Quantity	Distribution (%)
<i>Tilia cordata</i>	Littleleaf Linden	31	26.1
<i>Pinus nigra</i>	Black Pine	27	22.7
<i>Picea pungens</i>	Colorado Spruce	19	16.0
<i>Gleditsia triacanthos</i>	Honeylocust	13	10.9
<i>Acer ginnala</i>	Amur Maple	7	5.9
<i>Malus spp.</i>	Crabapple	6	5.0
<i>Acer saccharum</i>	Sugar Maple	5	4.2
<i>Picea glauca</i>	White Spruce	3	2.5
<i>Acer rubrum</i>	Red Maple	2	1.7
<i>Pinus resinosa</i>	Red Pine	2	1.7
<i>Betula papyrifera</i>	White Birch	1	0.8
<i>Picea abies</i>	Norway Spruce	1	0.8
<i>Populus tremuloides</i>	Trembling Aspen	1	0.8
<i>Quercus macrocarpa</i>	Bur Oak	1	0.8
TOTAL		119	100%

2.2.2 Tree Size Distribution

Overall, the predominant size of trees growing within the study area included 65.5% of trees with a DBH of less than 30 cm. Based on the *City of Ottawa's Tree Protection By-law* (By-law No. 2020-340) (City of Ottawa 2021a), the remaining 34.5% of the trees (41 trees) are considered Distinctive Trees.



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TREE ASSESSMENT

The size distribution for the trees inventoried and growing within the study area is depicted in **Table 2** below. It should be noted all trees in declining health are also included in the Tree Size Summary Table below.

Table 2 Tree Size Summary (based on DBH)

	10 to 29cm DBH	30 to 49 cm DBH	Equal or Over 50cm DBH	TOTAL
No. of Trees	78	39	2	119
Distribution (%)	65.5	32.8	1.7	100%

2.2.3 Tree Health Condition Distribution

The condition or health of trees growing within the study area was found to be generally good, with more than 65% of the trees being in good to good/fair conditions. Some common health observations include the following:

- The Distinctive Trees (i.e. tree 30cm DBH or greater (City of Ottawa 2021a)) as defined by the *City of Ottawa's Tree Protection By-law* and accounting for 34.5% (41 trees) of the trees assessed are generally in good conditions with only two (2) being considered as "poor/declining" and two (2) considered in poor health conditions.
- No dead trees were observed within the study area.

The health condition distribution for the trees inventoried within the study area is depicted in **Table 3** below.

Table 3 Tree Health Condition Distribution

	Good to Good/Fair	Fair to Fair/Poor	Poor to Poor/Declining	Dead	TOTAL
No. of Trees	82	24	13	0	119
Distribution (%)	68.9	20.2	10.9	0	100%

2.2.4 Species-at-Risk and Other Trees of Interest

No Species-at-Risk tree (i.e., Butternut trees and Black Ash) were observed on site during the tree assessment investigation.

2.3 VEGETATION QUALITY AND SUITABILITY FOR RETENTION

Although a good portion 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:

- Location of the tree within the construction area;
- Structural condition of the tree;



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TREE ASSESSMENT

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

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



3.0 PROPOSED DEVELOPMENT & TREE PROTECTION RECOMMENDATIONS

3.1 PROPOSED DEVELOPMENT

For this project, the property owner intends to redevelop the property located at 1600 James Naismith, at the end of Telesat Court, transforming an existing eight-storey commercial / office tower building to a residential apartment building with associated parking. This project is considered Phase 1 of the overall site redevelopment which is planned to include a medium-density development featuring several blocks of stacked townhouses in the existing western parking area as part of Phase 2, and two (2) apartment building towers north of the existing building during Phase 3 of this property redevelopment.

The site plan and civil design developed for this project were used to determine tree retention and recommendations for tree removals where impacts to trees are anticipated as a result of the Phase 1 redevelopment of the Subject Site. A copy of the Site Plan and civil design are included in **Appendix D** of this report. The proposed Phase 1 redevelopment site works include the realignment of James Naismith Drive, the addition of a parking area in front of the converted office building into residential apartments, and new walkways and terraces to provide public and private amenity spaces for the residents. The conversion of this office building into residential units will also require updates to underground services.

3.1.1 IMPACTS OF PROPOSED DEVELOPMENT

The following is a summary of the anticipated impacts on existing trees as a result of the proposed Phase 1 redevelopment of the Subject Site. All trees impacted by the proposed development on the subject sites are illustrated on drawing *TC03 – Proposed Development and Conserved Vegetation*, inserted in Appendix C.

3.1.1.1 Excavation Requirements

The excavation approach for the Phase 1 redevelopment project is anticipated to be limited considering there is no proposed construction for a new building. The excavation requirements during Phase 1 are associated to new stairs and retaining walls to provide access to basement units located at the back of the building.

3.1.1.2 Site Works and Tree Removals

Tree removals will be required in the areas requiring excavation as indicated above and for the provision of the new residential parking lot to be located east of the existing building. Trees proposed for removal are predominantly located along the drive aisles to the east of the building. A total of 53 private trees are proposed for removal to allow for the Phase 1 redevelopment of the Subject Site including four (4) trees



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PROPOSED DEVELOPMENT & TREE PROTECTION RECOMMENDATIONS

with a DBH of less than 10 cm. The list of all trees to be removed is provided on drawing **TC04 – Tree Protection Table** inserted in Appendix C.

The following provides general characteristics of the trees to be removed to allow for the site improvements:

- More than 65% of the trees to be removed have a DBH of 29 cm or less.
- A total of 16 Distinctive Trees (34% of all trees to be removed) are proposed to be removed. From these 16 Distinctive Trees, three (3) are in poor/declining health.
- From all 13 trees inventoried and assessed to be in poor to poor/declining health, seven (7) (15% of all trees to be removed) trees are to be removed.
- A total of 35 trees (74.5% of the trees to be removed) are considered in good to good/fair health conditions.

3.2 TREE PROTECTION RECOMMENDATIONS

To ensure tree survival of the trees to be retained during and after construction, mitigation measures should be in place 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 the trees to be retained.

3.2.1 Monitoring Tree Health

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 a Certified 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 Contract Administrator at no cost for the owner.

3.2.2 Protecting Trees to be Retained

All trees to remain shall be preserved and protected using a temporary tree protection fence. The roots of a tree are located in the top 150 to 250 millimetres of soil and can very easily be inadvertently damaged.



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PROPOSED DEVELOPMENT & TREE PROTECTION RECOMMENDATIONS

To support 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. For trees with a DBH of less than 10 centimetres, the CRZ is established as 1.5 metre from the trunk.**

Temporary tree protection fencing shall be installed according to the Tree Protection Fence detail inserted on drawing **TC-05 – Tree Conservation Details**. Fencing shall always be maintained in good repair 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.

Should disturbances or alterations within the tree protection zone be unavoidable, the following additional mitigation strategies are recommended:

3.2.3 Clearing and Grubbing of Trees

Any trees designated for removal and located outside a tree protected area will have the stumps completely excavated and removed unless such removal will adversely affect existing trees / ecology to remain. Utility locates should be completed prior to initiate any clearing and grubbing works.

3.2.3.1 Wildlife Protection

Clearing operations are prohibited between April 8 to August 28 of any year to protect breeding migratory birds and at-risk bat species. Should tree removal during this period be unavoidable, the contractor is required to retain the services of a qualified 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 (5) days of conducting the screening and confirming the absence of breeding migratory bird activities.



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PROPOSED DEVELOPMENT & TREE PROTECTION RECOMMENDATIONS

3.2.4 Working within Protected Areas

3.2.4.1 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.

3.2.4.2 Grading Work

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

3.2.4.3 Root Protection

If any tree roots of trees to remain are exposed during construction, they should be immediately reburied with soil or temporarily covered with burlap, filter cloth, or woodchips and kept moist (i.e watering with a soft-spray nozzle at least three times a week). A covering plastic should be used in order to retain moisture during an extended period when watering may not be possible (i.e. over weekends).

3.2.5 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.



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PROPOSED DEVELOPMENT & TREE PROTECTION RECOMMENDATIONS

3.3 COMPENSATION PLANTINGS

Proposed plantings for this project should consider the phasing of the Subject Site redevelopments. New trees should be proposed wherever possible, with preferred locations being softscape areas surrounding the existing building.

In general, it is recommended to plant a mix of native deciduous and coniferous trees that are non-invasive to Ottawa. A variety of trees will integrate the property with its surrounding context. Tree species selected to compensate tree loss shall not necessarily correspond to tree species removed from site. New trees should be a minimum of 50mm in caliper for all deciduous trees planted and minimum 200cm in height for all new coniferous trees planted. Proposed planting locations should be strategic based on site features with a goal to provide shade to site users. The planting of shrubs and perennials shall also be included as part of this site redevelopment. A mix of ornamental and native species shall be used to reflect the residential character of the neighbourhood and the type of development. New planting material shall be planted following horticultural planting standards.



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CONCLUSION

4.0 CONCLUSION

This Tree Conservation Report was intended to provide a detailed description of the quality, diversity, and sizes of the trees growing within areas to be impacted by the proposed Phase 1 redevelopment works at 1600 James Naismith Drive. The Subject Site is located within the Inner Urban area of the City of Ottawa as defined by Schedule F of the *City of Ottawa's Tree Protection By-law*. Tree removals will be required to allow for the realignment of James Naismith Drive, the addition of a parking area in front of the converted office building into residential apartments, and new walkways and terraces to provide public and private amenity spaces for the residents. A total of 53 private trees are proposed for removal to allow for the Phase 1 redevelopment of the Subject Site including 16 Distinctive Trees as defined by the *City of Ottawa' Tree Protection By-law*.

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, it is recommended to plant new trees in all softscape areas to provide greenery to the Subject Site; plantings of new trees should follow horticultural planting standards.

By following the mitigation recommendations outlined in this report and ensuring new plantings are included as part of this development, we believe this development will respond and blend in with the surrounding context.



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REFERENCES

5.0 REFERENCES

City of Ottawa. 2021a. Tree Protection By-law No. 2020-340. Available: www.ottawa.ca/en/living-ottawa/laws-licences-and-permits/laws/law-z/tree-protection-law-no-2020-340.



APPENDICES

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Appendix A TREE INVENTORY TABLE

Appendix A TREE INVENTORY TABLE



EXISTING TREE SCHEDULE

TREE ASSESSMENT CONDUCTED: March 22, 2022

PLANT ID	BOTANICAL NAME	COMMON NAME	DBH (CM)	HEALTH/CONDITION	OWNERSHIP	REMARKS
1	<i>Pinus nigra</i>	Black Pine	48	Good	Private	
2	<i>Pinus nigra</i>	Black Pine	42	Good	Private	
3	<i>Acer ginnala</i>	Amur Maple	10; 10;	Good	Private	Multistem (4 stems).
4	<i>Acer ginnala</i>	Amur Maple	15; 12; 11; 17	Good	Private	Multistem (4 stems).
5	<i>Acer ginnala</i>	Amur Maple	15; 12; 12; 13; 14; 11; 15	Good	Private	Multistem (7 stems).
6	<i>Gletitsia triacanthos</i>	Honeylocust	18	Good	Private	
7	<i>Gletitsia triacanthos</i>	Honeylocust	15	Good	Private	
8	<i>Acer rubrum</i>	Red Maple	32	Good	Private	
9	<i>Malus spp.</i>	Crab Apple	27	Good	Private	
10	<i>Malus spp.</i>	Crab Apple	26	Good	Private	
11	<i>Gletitsia triacanthos</i>	Honeylocust	23	Good	Private	
12	<i>Gletitsia triacanthos</i>	Honeylocust	27	Good	Private	
13	<i>Gletitsia triacanthos</i>	Honeylocust	25	Good	Private	
14	<i>Acer ginnala</i>	Amur Maple	17; 14; 19; 20	Fair	Private	Multistem (4 stems). Visible abrasions and scars on trunk.
15	<i>Malus spp.</i>	Crab Apple	22	Good	Private	
16	<i>Malus spp.</i>	Crab Apple	24	Good	Private	
17	<i>Malus spp.</i>	Crab Apple	26	Good	Private	
18	<i>Pinus nigra</i>	Black Pine	33	Fair	Private	Some dead branches and dieback possibly due to reduced quantity of sunlight.
19	<i>Pinus nigra</i>	Black Pine	33	Fair	Private	Some dead branches and dieback possibly due to reduced quantity of sunlight.
20	<i>Pinus nigra</i>	Black Pine	24	Fair	Private	Some dead branches and dieback possibly due to reduced quantity of sunlight.
21	<i>Picea glauca</i>	White Spruce	30	Poor/Declining	Private	Many dead branches and dieback possibly due to reduced quantity of sunlight.
22	<i>Picea abies</i>	Norway Spruce	34	Good	Private	
23	<i>Picea pungens</i>	Colorado Spruce	36	Good	Private	
24	<i>Pinus nigra</i>	Black Pine	36	Good	Private	
25	<i>Pinus nigra</i>	Black Pine	45	Good	Private	
26	<i>Pinus nigra</i>	Black Pine	30	Good	Private	
27	<i>Pinus nigra</i>	Black Pine	30	Good	Private	
28	<i>Pinus nigra</i>	Black Pine	42	Good	Private	
29	<i>Pinus nigra</i>	Black Pine	37	Good	Private	
30	<i>Pinus nigra</i>	Black Pine	22; 15	Fair	Private	Multistem (2 stems). Some dead branches and dieback possibly due to reduced quantity of sunlight.
31	<i>Pinus nigra</i>	Black Pine	41	Good	Private	
32	<i>Gletitsia triacanthos</i>	Honeylocust	25	Good	Private	
33	<i>Gletitsia triacanthos</i>	Honeylocust	19	Good	Private	
34	<i>Tilia cordata</i>	Littleleaf Linden	32	Poor/Declining	Private	Many dead branches and dieback possibly due to reduced quantity of sunlight. Visible
35	<i>Tilia cordata</i>	Littleleaf Linden	23	Poor/Declining	Private	Many dead branches and dieback possibly due to reduced quantity of sunlight and
36	<i>Tilia cordata</i>	Littleleaf Linden	26	Poor	Private	Many dead branches and dieback possibly due to reduced quantity of sunlight. Leader
37	<i>Gletitsia triacanthos</i>	Honeylocust	11	Good	Private	

EXISTING TREE SCHEDULETREE ASSESSMENT CONDUCTED: March 22, 2022

PLANT ID	BOTANICAL NAME	COMMON NAME	DBH (CM)	HEALTH/CONDITION	OWNERSHIP	REMARKS
38	<i>Tilia cordata</i>	Littleleaf Linden	27	Good	Private	
39	<i>Gletitsia triacanthos</i>	Honeylocust	15	Good	Private	
40	<i>Gletitsia triacanthos</i>	Honeylocust	15	Good	Private	
41	<i>Tilia cordata</i>	Littleleaf Linden	30	Good	Private	
42	<i>Tilia cordata</i>	Littleleaf Linden	15	Good	Private	
43	<i>Tilia cordata</i>	Littleleaf Linden	30	Good	Private	
44	<i>Tilia cordata</i>	Littleleaf Linden	32	Good	Private	
45	<i>Tilia cordata</i>	Littleleaf Linden	32	Good	Private	
46	<i>Pinus nigra</i>	Black Pine	39	Good	Private	Few dead branches and dieback possibly due to reduced quantity of sunlight.
47	<i>Pinus nigra</i>	Black Pine	31	Poor/Fair	Private	Some dead branches and dieback possibly due to reduced quantity of sunlight.
48	<i>Pinus nigra</i>	Black Pine	44	Good	Private	Few dead branches and dieback possibly due to reduced quantity of sunlight.
49	<i>Pinus nigra</i>	Black Pine	32	Fair	Private	Some dead branches and dieback possibly due to reduced quantity of sunlight.
50	<i>Picea pungens</i>	Colorado Spruce	36	Good	Private	
51	<i>Picea glauca</i>	White Spruce	10	Good	Private	
52	<i>Picea glauca</i>	White Spruce	10	Good	Private	
53	<i>Tilia cordata</i>	Littleleaf Linden	30	Fair	Private	Leader have been cut.
54	<i>Tilia cordata</i>	Littleleaf Linden	16	Poor/Declining	Private	Crown is dead.
55	<i>Tilia cordata</i>	Littleleaf Linden	23	Fair	Private	Leader have been cut.
56	<i>Tilia cordata</i>	Littleleaf Linden	16	Good	Private	
57	<i>Tilia cordata</i>	Littleleaf Linden	14	Fair/Good	Private	Leader have been cut.
58	<i>Tilia cordata</i>	Littleleaf Linden	28	Poor	Private	Leader is cut.
59	<i>Tilia cordata</i>	Littleleaf Linden	14	Fair	Private	Leader have been cut.
60	<i>Tilia cordata</i>	Littleleaf Linden	15	Fair	Private	Leader have been cut and visible abrasion on trunk.
61	<i>Tilia cordata</i>	Littleleaf Linden	17	Poor	Private	Leader is cut and visible abrasion on trunk.
62	<i>Tilia cordata</i>	Littleleaf Linden	16	Good	Private	
63	<i>Tilia cordata</i>	Littleleaf Linden	14	Good	Private	
64	<i>Tilia cordata</i>	Littleleaf Linden	40	Good	Private	
65	<i>Tilia cordata</i>	Littleleaf Linden	15	Good	Private	
66	<i>Tilia cordata</i>	Littleleaf Linden	15	Good	Private	
67	<i>Tilia cordata</i>	Littleleaf Linden	14	Good	Private	
68	<i>Tilia cordata</i>	Littleleaf Linden	14	Poor	Private	Many dead branches and dieback possibly due to reduced quantity of sunlight. Leader
69	<i>Tilia cordata</i>	Littleleaf Linden	14	Fair	Private	Leader is dead and visible abrasion on trunk.
70	<i>Tilia cordata</i>	Littleleaf Linden	24	Fair	Private	Leader is dead.
71	<i>Tilia cordata</i>	Littleleaf Linden	28	Fair	Private	Leader is dead.
72	<i>Tilia cordata</i>	Littleleaf Linden	26; 11; 22	Good	Private	Multistem (3 stems).
73	<i>Quercus macrocarpa</i>	Bur Oak	25	Good	Private	
74	<i>Betula papyrifera</i>	White Birch	38	Poor	Private	Visible abrasion on trunk and small canopy.
75	<i>Picea pungens</i>	Colorado Spruce	11	Good	Private	
76	<i>Picea pungens</i>	Colorado Spruce	10	Good	Private	
77	<i>Picea pungens</i>	Colorado Spruce	27	Fair	Private	Some dead branches and dieback possibly due to reduced quantity of sunlight.
78	<i>Picea pungens</i>	Colorado Spruce	10	Good	Private	
79	<i>Picea pungens</i>	Colorado Spruce	26	Poor	Private	Many dead branches and dieback possibly due to reduced quantity of sunlight.

EXISTING TREE SCHEDULETREE ASSESSMENT CONDUCTED: March 22, 2022

PLANT ID	BOTANICAL NAME	COMMON NAME	DBH (CM)	HEALTH/CONDITION	OWNERSHIP	REMARKS
80	<i>Picea pungens</i>	Colorado Spruce	28	Poor	Private	Many dead branches and dieback possibly due to reduced quantity of sunlight.
81	<i>Picea pungens</i>	Colorado Spruce	24	Fair	Private	Some dead branches and dieback possibly due to reduced quantity of sunlight.
82	<i>Picea pungens</i>	Colorado Spruce	23	Fair	Private	Some dead branches and dieback possibly due to reduced quantity of sunlight.
83	<i>Picea pungens</i>	Colorado Spruce	22	Fair	Private	Some dead branches and dieback possibly due to reduced quantity of sunlight.
84	<i>Picea pungens</i>	Colorado Spruce	30	Fair	Private	Some dead branches and dieback possibly due to reduced quantity of sunlight.
85	<i>Picea pungens</i>	Colorado Spruce	21	Fair	Private	Some dead branches and dieback possibly due to reduced quantity of sunlight.
86	<i>Picea pungens</i>	Colorado Spruce	21	Fair	Private	Some dead branches and dieback possibly due to reduced quantity of sunlight.
87	<i>Picea pungens</i>	Colorado Spruce	27	Fair	Private	Some dead branches and dieback possibly due to reduced quantity of sunlight.
88	<i>Picea pungens</i>	Colorado Spruce	32	Fair	Private	Some dead branches and dieback possibly due to reduced quantity of sunlight.
89	<i>Pinus nigra</i>	Black Pine	23	Good	Private	
90	<i>Pinus nigra</i>	Black Pine	30	Good	Private	
91	<i>Pinus nigra</i>	Black Pine	26	Good	Private	
92	<i>Pinus nigra</i>	Black Pine	35	Good	Private	
93	<i>Gletitsia triacanthos</i>	Honeylocust	50	Good	Private	
94	<i>Acer ginnala</i>	Amur Maple	10; 9; 13; 9	Good	Private	Multistem (4 stems).
95	<i>Acer ginnala</i>	Amur Maple	11; 10	Good	Private	Multistem (2 stems).
96	<i>Acer ginnala</i>	Amur Maple	10; 8; 7	Good	Private	Multistem (3 stems).
97	<i>Gletitsia triacanthos</i>	Honeylocust	35	Fair	Private	Visible abrasion on trunk.
98	<i>Gletitsia triacanthos</i>	Honeylocust	33	Good	Private	
99	<i>Populus tremuloides</i>	Trembling Aspen	55	Poor	Municipal	Majority of crown is dead.
100	<i>Pinus nigra</i>	Black Pine	45	Good	Private	
101	<i>Pinus resinosa</i>	Red Pine	24	Good	Municipal	
102	<i>Pinus resinosa</i>	Red Pine	21	Good	Municipal	
103	<i>Malus spp.</i>	Crab Apple	23	Good	Private	
104	<i>Pinus nigra</i>	Black Pine	21	Good	Private	
105	<i>Pinus nigra</i>	Black Pine	16	Good	Private	
106	<i>Pinus nigra</i>	Black Pine	21	Good	Private	
107	<i>Acer rubrum</i>	Red Maple	30	Good	Municipal	
108	<i>Pinus nigra</i>	Black Pine	24	Good	Private	
109	<i>Pinus nigra</i>	Black Pine	27	Good	Private	
110	<i>Tilia cordata</i>	Littleleaf Linden	28	Good	Private	
111	<i>Tilia cordata</i>	Littleleaf Linden	32	Poor/Declining	Private	Leader and crown are missing.
112	<i>Acer saccharum</i>	Sugar Maple	30; 23	Good	Private	Multistem (2 stems).
113	<i>Acer saccharum</i>	Sugar Maple	35	Good	Private	
114	<i>Acer saccharum</i>	Sugar Maple	22	Good	Adjacent	
115	<i>Acer saccharum</i>	Sugar Maple	29	Good	Adjacent	
116	<i>Acer saccharum</i>	Sugar Maple	24	Good	Adjacent	
117	<i>Acer ginnala</i>	Amur Maple	<10	Good	Private	Multistem.
118	<i>Acer ginnala</i>	Amur Maple	<10	Good	Private	Multistem.
119	<i>Acer ginnala</i>	Amur Maple	<10	Good	Private	Multistem.
120	<i>Acer ginnala</i>	Amur Maple	<10	Good	Private	Multistem.

EXISTING TREE SCHEDULETREE ASSESSMENT CONDUCTED: March 22, 2022

PLANT ID	BOTANICAL NAME	COMMON NAME	DBH (CM)	HEALTH/CONDITION	OWNERSHIP	REMARKS
121	<i>Amelanchier canadensis</i>	Serviceberry	<10	Good	Private	Tree stakes and rubber hoses were not removed. Rubber hoses are starting to impact tree health.
122	<i>Amelanchier canadensis</i>	Serviceberry	<10	Good	Private	Tree stakes and rubber hoses were not removed. Rubber hoses are starting to impact tree health.
123	<i>Amelanchier canadensis</i>	Serviceberry	<10	Good	Private	Tree stakes and rubber hoses were not removed. Rubber hoses are starting to impact tree health.
124	<i>Amelanchier canadensis</i>	Serviceberry	<10	Good	Private	Tree stakes and rubber hoses were not removed. Rubber hoses are starting to impact tree health.
125	<i>Acer ginnala</i>	Amur Maple	<10	Good	Private	Multistem.
126	<i>Acer ginnala</i>	Amur Maple	<10	Good	Private	Multistem.
127	<i>Acer ginnala</i>	Amur Maple	<10	Good	Private	Multistem.
128	<i>Picea pungens</i>	Colorado Spruce	18	Good	Private	
129	<i>Picea pungens</i>	Colorado Spruce	13	Good	Private	
130	<i>Picea pungens</i>	Colorado Spruce	15	Good	Private	
131	<i>Amelanchier canadensis</i>	Serviceberry	<10	Good	Private	Tree stakes and rubber hoses were not removed. Rubber hoses are starting to impact tree health.
132	<i>Amelanchier canadensis</i>	Serviceberry	<10	Good	Private	Tree stakes and rubber hoses were not removed. Rubber hoses are starting to impact tree health.
133	<i>Amelanchier canadensis</i>	Serviceberry	<10	Good	Private	Tree stakes and rubber hoses were not removed. Rubber hoses are starting to impact tree health.
134	<i>Amelanchier canadensis</i>	Serviceberry	<10	Good	Private	Tree stakes and rubber hoses were not removed. Rubber hoses are starting to impact tree health.
135	<i>Amelanchier canadensis</i>	Serviceberry	<10	Good	Private	Tree stakes and rubber hoses were not removed. Rubber hoses are starting to impact tree health.
136	<i>Malus spp.</i>	Crab Apple	<10	Good	Private	Tree stakes and rubber hoses were not removed. Rubber hoses are starting to impact tree health.
137	<i>Malus spp.</i>	Crab Apple	<10	Good	Private	Tree stakes and rubber hoses were not removed. Rubber hoses are starting to impact tree health.
138	<i>Thuja occidentalis</i>	Pyramidal white cedar	<10	Good	Private	
139	<i>Malus spp.</i>	Crab Apple	<10	Good	Private	

TREE CONSERVATION REPORT

Appendix B PHOTOGRAPHS

Appendix B PHOTOGRAPHS



TREE CONSERVATION REPORT

Appendix B PHOTOGRAPHS



Photograph 1 – Main walkway leading to East Entrance



Photograph 2 – Trees and planting beds to the south



TREE CONSERVATION REPORT

Appendix B PHOTOGRAPHS



Photograph 3 – Trees and planting beds to the north



Photograph 4 – Trees and plantings beds bordering the loading ramp



TREE CONSERVATION REPORT

Appendix B PHOTOGRAPHS



Photograph 5 – West entrance and ramp



Photograph 6 – Plantings at the western terrace



TREE CONSERVATION REPORT

Appendix C TREE CONSERVATION DRAWINGS

Appendix C TREE CONSERVATION DRAWINGS



- Legend**
- TREE IDENTIFICATION NUMBER
 - EXISTING DECIDUOUS TREE
 - EXISTING CONIFEROUS TREE
 - EXISTING PLANTING BEDS
 - CRITICAL ROOT ZONE
 - EXISTING TREE STUMP
 - PROPERTY LINE

- Notes**
- LOCATION OF TREES, AS SHOWN ON DRAWING IS FOR REFERENCE ONLY. TREE LOCATIONS TO BE REVIEWED ON SITE AND SURVEYED BY SURVEYOR PRIOR TO DO ANY WORKS.
 - TOPOGRAPHIC SURVEY PLAN BY STANTEC GEOMATICS LTD. AND DATED JANUARY 2022.
 - REFER TO DRAWING TC02 FOR EXISTING TREE SCHEDULE.
 - REFER TO DRAWING TC03 FOR PROPOSED DEVELOPMENT AND CONSERVED VEGETATION PLAN.

3	RE-ISSUED FOR MUNICIPAL REVIEW	CA	ILL	22.05.10
2	ISSUED FOR MUNICIPAL REVIEW	CA	ILL	22.05.03
1	ISSUED FOR COORDINATION	CA	ILL	22.04.14
Revision		By	Appd.	YY.MM.DD
File Name:	160410414_LB.dwg	CA	ILL	22.03.21
		Dwn.	Chkd.	Dgn.
				YY.MM.DD

Permit-Seal

Client/Project
1600 JAMES NAISMITH LP
1600 JAMES NAISMITH DRIVE
OTTAWA, ON
Title
CURRENT VEGETATION PLAN

Project No.	Scale	0 5 15 25m
160410414	1:500	
Drawing No.	Sheet	Revision
TC01	1 of 4	3



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EXISTING TREE SCHEDULE

TREE ASSESSMENT CONDUCTED: March 22, 2022					
PLANT ID	BOTANICAL NAME	COMMON NAME	DBH (CM)	HEALTH/CONDITION	OWNERSHIP REMARKS
1	<i>Pinus nigra</i>	Black Pine	48	Good	Private
2	<i>Pinus nigra</i>	Black Pine	42	Good	Private
3	<i>Acer ginnala</i>	Amur Maple	10; 10;	Good	Private Multistem (4 stems).
4	<i>Acer ginnala</i>	Amur Maple	15; 12; 11; 17	Good	Private Multistem (4 stems).
5	<i>Acer ginnala</i>	Amur Maple	15; 12; 12; 13; 14; 11; 15	Good	Private Multistem (7 stems).
6	<i>Gleitsia triacanthos</i>	Honeylocust	18	Good	Private
7	<i>Gleitsia triacanthos</i>	Honeylocust	15	Good	Private
8	<i>Acer rubrum</i>	Red Maple	32	Good	Private
9	<i>Malus spp.</i>	Crab Apple	27	Good	Private
10	<i>Malus spp.</i>	Crab Apple	26	Good	Private
11	<i>Gleitsia triacanthos</i>	Honeylocust	23	Good	Private
12	<i>Gleitsia triacanthos</i>	Honeylocust	27	Good	Private
13	<i>Gleitsia triacanthos</i>	Honeylocust	25	Good	Private
14	<i>Acer ginnala</i>	Amur Maple	17; 14; 19; 20	Fair	Private Multistem (4 stems). Visible abrasions and scars on trunk.
15	<i>Malus spp.</i>	Crab Apple	22	Good	Private
16	<i>Malus spp.</i>	Crab Apple	24	Good	Private
17	<i>Malus spp.</i>	Crab Apple	26	Good	Private
18	<i>Pinus nigra</i>	Black Pine	33	Fair	Private Some dead branches and dieback possibly due to reduced quantity of sunlight.
19	<i>Pinus nigra</i>	Black Pine	33	Fair	Private Some dead branches and dieback possibly due to reduced quantity of sunlight.
20	<i>Pinus nigra</i>	Black Pine	24	Fair	Private Some dead branches and dieback possibly due to reduced quantity of sunlight.
21	<i>Picea glauca</i>	White Spruce	30	Poor/Declining	Private Many dead branches and dieback possibly due to reduced quantity of sunlight.
22	<i>Picea abies</i>	Norway Spruce	34	Good	Private
23	<i>Picea pungens</i>	Colorado Spruce	36	Good	Private
24	<i>Pinus nigra</i>	Black Pine	36	Good	Private
25	<i>Pinus nigra</i>	Black Pine	45	Good	Private
26	<i>Pinus nigra</i>	Black Pine	30	Good	Private
27	<i>Pinus nigra</i>	Black Pine	30	Good	Private
28	<i>Pinus nigra</i>	Black Pine	42	Good	Private
29	<i>Pinus nigra</i>	Black Pine	37	Good	Private
30	<i>Pinus nigra</i>	Black Pine	22; 15	Fair	Private Multistem (2 stems). Some dead branches and dieback possibly due to reduced quantity of sunlight.
31	<i>Pinus nigra</i>	Black Pine	41	Good	Private
32	<i>Gleitsia triacanthos</i>	Honeylocust	25	Good	Private
33	<i>Gleitsia triacanthos</i>	Honeylocust	19	Good	Private
34	<i>Tilia cordata</i>	Littleleaf Linden	32	Poor/Declining	Private Many dead branches and dieback possibly due to reduced quantity of sunlight.
35	<i>Tilia cordata</i>	Littleleaf Linden	23	Poor/Declining	Private Many dead branches and dieback possibly due to reduced quantity of sunlight.
36	<i>Tilia cordata</i>	Littleleaf Linden	26	Poor	Private Many dead branches and dieback possibly due to reduced quantity of sunlight.
37	<i>Gleitsia triacanthos</i>	Honeylocust	11	Good	Private
38	<i>Tilia cordata</i>	Littleleaf Linden	27	Good	Private
39	<i>Gleitsia triacanthos</i>	Honeylocust	15	Good	Private
40	<i>Gleitsia triacanthos</i>	Honeylocust	15	Good	Private
41	<i>Tilia cordata</i>	Littleleaf Linden	30	Good	Private
42	<i>Tilia cordata</i>	Littleleaf Linden	15	Good	Private
43	<i>Tilia cordata</i>	Littleleaf Linden	30	Good	Private
44	<i>Tilia cordata</i>	Littleleaf Linden	32	Good	Private
45	<i>Tilia cordata</i>	Littleleaf Linden	32	Good	Private
46	<i>Pinus nigra</i>	Black Pine	39	Good	Private Few dead branches and dieback possibly due to reduced quantity of sunlight.
47	<i>Pinus nigra</i>	Black Pine	31	Poor/Fair	Private Some dead branches and dieback possibly due to reduced quantity of sunlight.
48	<i>Pinus nigra</i>	Black Pine	44	Good	Private Few dead branches and dieback possibly due to reduced quantity of sunlight.
49	<i>Pinus nigra</i>	Black Pine	32	Fair	Private Some dead branches and dieback possibly due to reduced quantity of sunlight.
50	<i>Picea pungens</i>	Colorado Spruce	36	Good	Private
51	<i>Picea glauca</i>	White Spruce	10	Good	Private
52	<i>Picea glauca</i>	White Spruce	10	Good	Private
53	<i>Tilia cordata</i>	Littleleaf Linden	30	Fair	Private Leader have been cut.
54	<i>Tilia cordata</i>	Littleleaf Linden	16	Poor/Declining	Private Crown is dead.
55	<i>Tilia cordata</i>	Littleleaf Linden	23	Fair	Private Leader have been cut.
56	<i>Tilia cordata</i>	Littleleaf Linden	16	Good	Private
57	<i>Tilia cordata</i>	Littleleaf Linden	14	Fair/Good	Private Leader have been cut.
58	<i>Tilia cordata</i>	Littleleaf Linden	28	Poor	Private Leader is cut.
59	<i>Tilia cordata</i>	Littleleaf Linden	14	Fair	Private Leader have been cut.
60	<i>Tilia cordata</i>	Littleleaf Linden	15	Fair	Private Leader have been cut and visible abrasion on trunk.
61	<i>Tilia cordata</i>	Littleleaf Linden	17	Poor	Private Leader is cut and visible abrasion on trunk.
62	<i>Tilia cordata</i>	Littleleaf Linden	16	Good	Private
63	<i>Tilia cordata</i>	Littleleaf Linden	14	Good	Private
64	<i>Tilia cordata</i>	Littleleaf Linden	40	Good	Private
65	<i>Tilia cordata</i>	Littleleaf Linden	15	Good	Private
66	<i>Tilia cordata</i>	Littleleaf Linden	15	Good	Private
67	<i>Tilia cordata</i>	Littleleaf Linden	14	Good	Private
68	<i>Tilia cordata</i>	Littleleaf Linden	14	Poor	Private Many dead branches and dieback possibly due to reduced quantity of sunlight.
69	<i>Tilia cordata</i>	Littleleaf Linden	14	Fair	Private Leader is dead and visible abrasion on trunk.
70	<i>Tilia cordata</i>	Littleleaf Linden	24	Fair	Private Leader is dead.
71	<i>Tilia cordata</i>	Littleleaf Linden	28	Fair	Private Leader is dead.
72	<i>Tilia cordata</i>	Littleleaf Linden	26; 11; 22	Good	Private Multistem (3 stems).
73	<i>Quercus macrocarpa</i>	Bur Oak	25	Good	Private
74	<i>Betula papyrifera</i>	White Birch	38	Poor	Private Visible abrasion on trunk and small canopy.
75	<i>Picea pungens</i>	Colorado Spruce	11	Good	Private
76	<i>Picea pungens</i>	Colorado Spruce	10	Good	Private
77	<i>Picea pungens</i>	Colorado Spruce	27	Fair	Private Some dead branches and dieback possibly due to reduced quantity of sunlight.
78	<i>Picea pungens</i>	Colorado Spruce	10	Good	Private
79	<i>Picea pungens</i>	Colorado Spruce	26	Poor	Private Many dead branches and dieback possibly due to reduced quantity of sunlight.
80	<i>Picea pungens</i>	Colorado Spruce	28	Poor	Private Many dead branches and dieback possibly due to reduced quantity of sunlight.
81	<i>Picea pungens</i>	Colorado Spruce	24	Fair	Private Some dead branches and dieback possibly due to reduced quantity of sunlight.
82	<i>Picea pungens</i>	Colorado Spruce	23	Fair	Private Some dead branches and dieback possibly due to reduced quantity of sunlight.
83	<i>Picea pungens</i>	Colorado Spruce	22	Fair	Private Some dead branches and dieback possibly due to reduced quantity of sunlight.
84	<i>Picea pungens</i>	Colorado Spruce	30	Fair	Private Some dead branches and dieback possibly due to reduced quantity of sunlight.
85	<i>Picea pungens</i>	Colorado Spruce	21	Fair	Private Some dead branches and dieback possibly due to reduced quantity of sunlight.
86	<i>Picea pungens</i>	Colorado Spruce	21	Fair	Private Some dead branches and dieback possibly due to reduced quantity of sunlight.
87	<i>Picea pungens</i>	Colorado Spruce	27	Fair	Private Some dead branches and dieback possibly due to reduced quantity of sunlight.
88	<i>Picea pungens</i>	Colorado Spruce	32	Fair	Private Some dead branches and dieback possibly due to reduced quantity of sunlight.
89	<i>Pinus nigra</i>	Black Pine	23	Good	Private
90	<i>Pinus nigra</i>	Black Pine	30	Good	Private
91	<i>Pinus nigra</i>	Black Pine	26	Good	Private
92	<i>Pinus nigra</i>	Black Pine	35	Good	Private
93	<i>Gleitsia triacanthos</i>	Honeylocust	30	Good	Private
94	<i>Acer ginnala</i>	Amur Maple	10; 9; 13; 9	Good	Private Multistem (4 stems).
95	<i>Acer ginnala</i>	Amur Maple	11; 10	Good	Private Multistem (2 stems).
96	<i>Acer ginnala</i>	Amur Maple	10; 8; 7	Good	Private Multistem (3 stems).
97	<i>Gleitsia triacanthos</i>	Honeylocust	35	Fair	Private Visible abrasion on trunk.
98	<i>Gleitsia triacanthos</i>	Honeylocust	33	Good	Private
99	<i>Populus tremuloides</i>	Trembling Aspen	55	Poor	Municipal Majority of crown is dead.
100	<i>Pinus nigra</i>	Black Pine	45	Good	Private
101	<i>Pinus resinosa</i>	Red Pine	24	Good	Municipal
102	<i>Pinus resinosa</i>	Red Pine	21	Good	Municipal
103	<i>Malus spp.</i>	Crab Apple	23	Good	Private
104	<i>Pinus nigra</i>	Black Pine	21	Good	Private
105	<i>Pinus nigra</i>	Black Pine	16	Good	Private
106	<i>Pinus nigra</i>	Black Pine	21	Good	Private
107	<i>Acer rubrum</i>	Red Maple	30	Good	Municipal
108	<i>Pinus nigra</i>	Black Pine	24	Good	Private
109	<i>Pinus nigra</i>	Black Pine	27	Good	Private
110	<i>Tilia cordata</i>	Littleleaf Linden	28	Good	Private
111	<i>Tilia cordata</i>	Littleleaf Linden	32	Poor/Declining	Private Leader and crown are missing.
112	<i>Acer saccharum</i>	Sugar Maple	30; 23	Good	Private Multistem (2 stems).
113	<i>Acer saccharum</i>	Sugar Maple	35	Good	Private
114	<i>Acer saccharum</i>	Sugar Maple	22	Good	Adjacent
115	<i>Acer saccharum</i>	Sugar Maple	29	Good	Adjacent
116	<i>Acer saccharum</i>	Sugar Maple	24	Good	Adjacent

EXISTING TREE SCHEDULE

TREE ASSESSMENT CONDUCTED: March 22, 2022					
PLANT ID	BOTANICAL NAME	COMMON NAME	DBH (CM)	HEALTH/CONDITION	OWNERSHIP REMARKS
117	<i>Acer ginnala</i>	Amur Maple	<10	Good	Private Multistem.
118	<i>Acer ginnala</i>	Amur Maple	<10	Good	Private Multistem.
119	<i>Acer ginnala</i>	Amur Maple	<10	Good	Private Multistem.
120	<i>Acer ginnala</i>	Amur Maple	<10	Good	Private Multistem.
121	<i>Amelanchier canadensis</i>	Serviceberry	<10	Good	Private Tree stakes and rubber hoses were not removed. Rubber hoses are starting to impact tree health.
122	<i>Amelanchier canadensis</i>	Serviceberry	<10	Good	Private Tree stakes and rubber hoses were not removed. Rubber hoses are starting to impact tree health.
123	<i>Amelanchier canadensis</i>	Serviceberry	<10	Good	Private Tree stakes and rubber hoses were not removed. Rubber hoses are starting to impact tree health.
124	<i>Amelanchier canadensis</i>	Serviceberry	<10	Good	Private Tree stakes and rubber hoses were not removed. Rubber hoses are starting to impact tree health.
125	<i>Acer ginnala</i>	Amur Maple	<10	Good	Private Multistem.
126	<i>Acer ginnala</i>	Amur Maple	<10	Good	Private Multistem.
127	<i>Acer ginnala</i>	Amur Maple	<10	Good	Private Multistem.
128	<i>Picea pungens</i>	Colorado Spruce	18	Good	Private
129	<i>Picea pungens</i>	Colorado Spruce	13	Good	Private
130	<i>Picea pungens</i>	Colorado Spruce	15	Good	Private
131	<i>Amelanchier canadensis</i>	Serviceberry	<10	Good	Private Tree stakes and rubber hoses were not removed. Rubber hoses are starting to impact tree health.
132	<i>Amelanchier canadensis</i>	Serviceberry	<10	Good	Private Tree stakes and rubber hoses were not removed. Rubber hoses are starting to impact tree health.
133	<i>Amelanchier canadensis</i>	Serviceberry	<10	Good	Private Tree stakes and rubber hoses were not removed. Rubber hoses are starting to impact tree health.
134	<i>Amelanchier canadensis</i>	Serviceberry	<10	Good	Private Tree stakes and rubber hoses were not removed. Rubber hoses are starting to impact tree health.
135	<i>Amelanchier canadensis</i>	Serviceberry	<10	Good	Private Tree stakes and rubber hoses were not removed. Rubber hoses are starting to impact tree health.
136	<i>Malus spp.</i>	Crab Apple	<10	Good	Private Tree stakes and rubber hoses were not removed. Rubber hoses are starting to impact tree health.
137	<i>Malus spp.</i>	Crab Apple	<10	Good	Private Tree stakes and rubber hoses were not removed. Rubber hoses are starting to impact tree health.
138	<i>Thuja occidentalis fastigiata</i>	Pyramidal white cedar	<10	Good	Private
139	<i>Malus spp.</i>	Crab Apple	<10	Good	Private



Stantec Consulting Ltd.
300 - 1331 Clyde Avenue
Ottawa ON
Tel. 613.722.4420
www.stantec.com

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Legend

3	RE-ISSUED FOR MUNICIPAL REVIEW	CA	ILL	22.05.10	
2	ISSUED FOR MUNICIPAL REVIEW	CA	ILL	22.05.03	
1	ISSUED FOR COORDINATION	CA	ILL	22.04.14	
Revision		By	Appd.	YY.MM.DD	
File Name: 160410414_LB.dwg		CA	ILL	ILL	22.03.21
		Dwn.	Chkd.	Dgn.	YY.MM.DD

Notes

- REFER TO DRAWING TC01 FOR CURRENT VEGETATION PLAN.

Permit-Seal



Client/Project
1600 JAMES NAISMITH LP

1600 JAMES NAISMITH DRIVE

OTTAWA, ON

Title
CURRENT VEGETATION SURVEY CHART

Project No. Scale
160410414 N.T.S.

Drawing No. Sheet Revision
TC02 2 of 4 3

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22/05/2022 10:18 AM by: Acar, Christel

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Legend

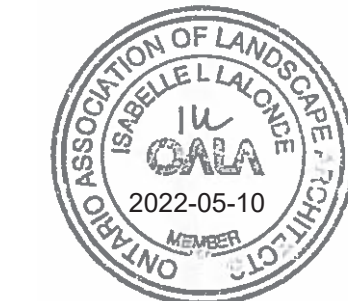
- TREE IDENTIFICATION NUMBER
- EXISTING DECIDUOUS TREE
- EXISTING CONIFEROUS TREE
- EXISTING PLANTING BEDS
- CRITICAL ROOT ZONE AND INDIVIDUAL TREE PROTECTION FENCE. REFER TO DETAIL 1/TC04.
- EXISTING TREE STUMP
- EXISTING VEGETATION GROUPING TO BE REMOVED
- EXISTING TREE TO BE REMOVED
- CONTINUOUS TREE PROTECTION FENCE REFER TO DETAIL 1/TC04
- PROPOSED SOFTSCAPE
- PROPOSED HARDSCAPE
- EXISTING ORNAMENTAL FENCE
- PROPOSED FENCE
- PROPERTY LINE

Notes

1. LOCATION OF TREES, AS SHOWN ON DRAWING IS FOR REFERENCE ONLY. TREE LOCATIONS TO BE REVIEWED ON SITE AND SURVEYED BY SURVEYOR PRIOR TO DO ANY WORKS.
2. TOPOGRAPHIC SURVEY PLAN BY STANTEC GEOMATICS LTD. AND DATED JANUARY 2022.
3. REFER TO SITE PLAN PREPARED BY FIGUR & DATED APRIL 2022 FOR PROPOSED DETAILS ON SITE DEVELOPMENT.
4. REFER TO CIVIL DRAWINGS PREPARED BY IRL ASSOCIATES LTD. AND DATED APRIL 2022 FOR PROPOSED GRADING AND SERVICES.
5. REFER TO DRAWING TC01 FOR CURRENT VEGETATION PLAN.
6. REFER TO DRAWING TC02 FOR EXISTING TREE SCHEDULE.
7. REFER TO DRAWING TC04 FOR TREE PROTECTION TABLE & TREE CONSERVATION DETAILS.

3	RE-ISSUED FOR MUNICIPAL REVIEW	CA	ILL	22.05.10
2	ISSUED FOR MUNICIPAL REVIEW	CA	ILL	22.05.03
1	ISSUED FOR COORDINATION	CA	ILL	22.04.14
Revision		By	Appd.	YY.MM.DD
File Name:	160410414_LB.dwg	CA	ILL	22.03.21
		Dwn.	Chkd.	Dgn.
				YY.MM.DD

Permit-Seal



Client/Project
1600 JAMES NAISMITH LP

1600 JAMES NAISMITH DRIVE

OTTAWA, ON

Title
PROPOSED DEVELOPMENT AND CONSERVED VEGETATION PLAN

Project No.	Scale	0 5 15 25m
160410414	1:500	
Drawing No.	Sheet	Revision
TC03	3 of 4	3



TREE PRESERVATION NOTES

1. NO VEGETATION SHALL BE REMOVED WITHOUT MUNICIPAL WRITTEN APPROVAL.
2. LOCATION OF EXISTING TREES IS FOR REFERENCE ONLY AND SHALL BE CONFIRMED BY AN ARBORIST AND SURVEYOR.
3. NO VEGETATION REMOVAL SHALL OCCUR BETWEEN APRIL 8 AND AUGUST 28 OF ANY YEAR TO PROTECT BREEDING MIGRATORY BIRDS, AS WELL AS AT RISK BIRD 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.
4. 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 CENTIMETERS 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.
5. 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.
6. CONTRACTOR SHALL ENSURE THAT NO RILL WILL BE ALLOWED TO OCCUR ON THE SURFACE ABOVE THE CRITICAL ROOT ZONE (CRZ) OF TREES.
7. 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.
8. CONTRACTOR SHALL MINIMIZE SOIL COMPACTION BY KEEPING OPERATION OF MACHINERY AND EQUIPMENT CONFINED TO DESIGNATED WORK AREA.
9. CONTRACTOR SHALL KEEP A SPILL KIT ON SITE.
10. CONTRACTOR SHALL DEVELOP AN EMERGENCY RESPONSE PLAN.
11. CONTRACTOR SHALL AVOID SOIL CONTAMINATION AND FUTURE LIABILITY BY CONFINING THE OILING AND REBUNDING OF MACHINERY AND EQUIPMENT TO DESIGNATED STAGING AREA.
12. NO RILL 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 TREES CANOPY.
13. CONTRACTOR SHALL PREVENT ANY DAMAGE TO THE ROOT SYSTEM, TRUNK OR BRANCHES OF ANY TREES TO BE RETAINED ON SITE AND ON ADJACENT PROPERTIES.
14. STORAGE OF EQUIPMENT AND VEHICLES WITHIN THE CRITICAL ROOT ZONE (CRZ) OF EXISTING TREES IS STRICTLY PROHIBITED.
15. WHERE LIMBS OR PORTIONS OF TREES ARE REMOVED TO ACCOMMODATE CONSTRUCTION WORK, THEY WILL BE REMOVED CAREFULLY IN ACCORDANCE WITH ACCEPTED ARBORICULTURAL PRACTICES.
16. 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.

WORK WITHIN PROTECTED AREAS

1. EXCAVATION WORK:
 - a. 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:
 - i. 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.
 - ii. THE CONTRACTOR SHALL ONLY TUNNEL OR BORE WITHIN THE CRZ, INSTEAD OF CREATING A TRENCH.
 - iii. 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.
 - b. 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 COORDINATED 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.

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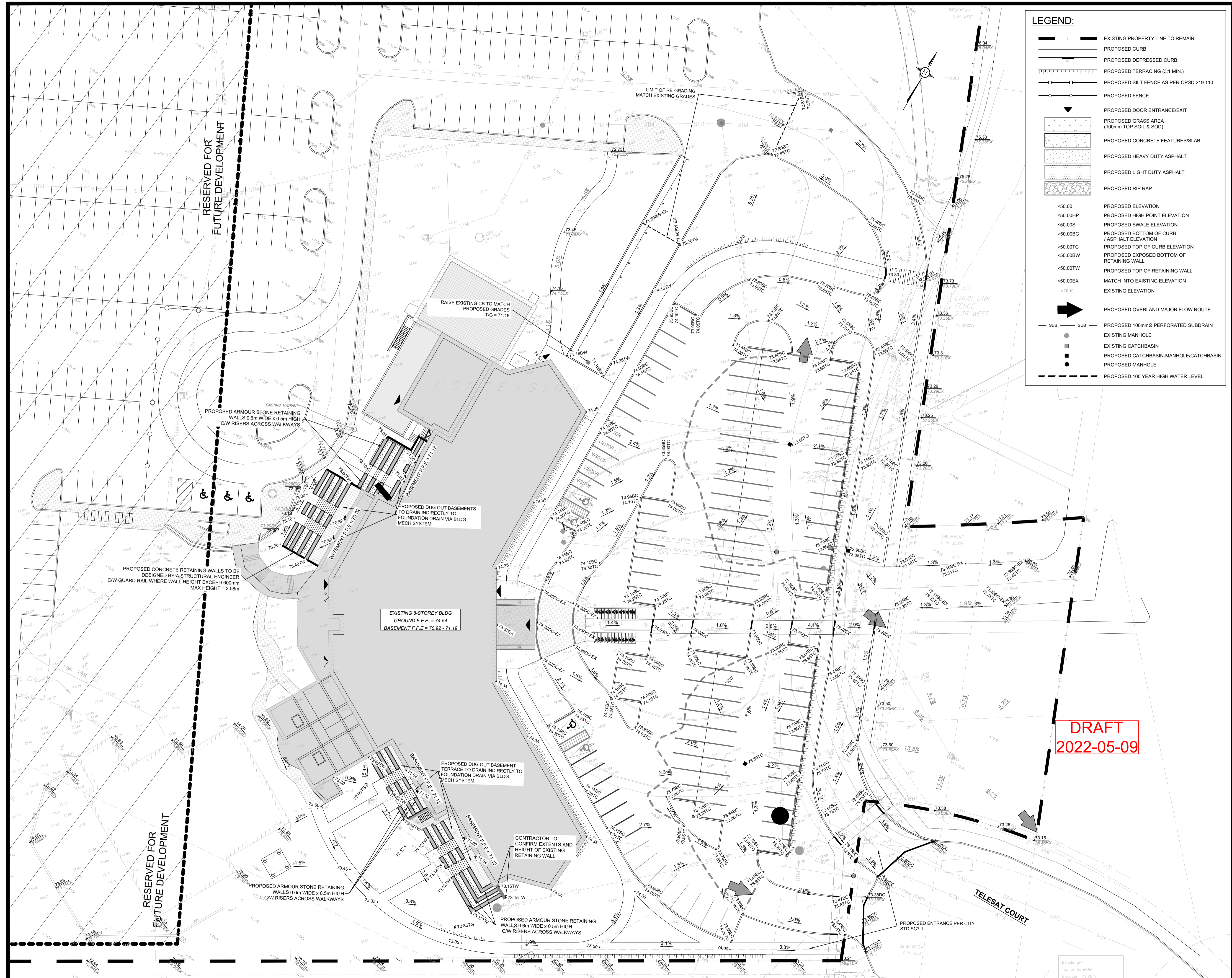
EXISTING TREE SCHEDULE							EXISTING TREE SCHEDULE								
TREE ASSESSMENT CONDUCTED: March 22, 2022							TREE ASSESSMENT CONDUCTED: March 22, 2022								
PLANT ID	BOTANICAL NAME	COMMON NAME	DBH (CM)	HEALTH/CONDITION	OWNERSHIP	REMARKS	RECOMMENDATIONS	PLANT ID	BOTANICAL NAME	COMMON NAME	DBH (CM)	HEALTH/CONDITION	OWNERSHIP	REMARKS	RECOMMENDATIONS
1	<i>Pinus nigra</i>	Black Pine	48	Good	Private		TO BE REMOVED DUE TO PROPOSED PARKING LOT AND HARD SURFACES.	117	<i>Acer ginnala</i>	Amur Maple	<10	Good	Private	Multistem.	TO REMAIN AND BE PROTECTED.
2	<i>Pinus nigra</i>	Black Pine	42	Good	Private		TO BE REMOVED DUE TO PROPOSED PARKING LOT AND HARD SURFACES.	118	<i>Acer ginnala</i>	Amur Maple	<10	Good	Private	Multistem.	TO REMAIN AND BE PROTECTED.
3	<i>Acer ginnala</i>	Amur Maple	10; 10;	Good	Private	Multistem (4 stems).	TO BE REMOVED DUE TO PROPOSED PARKING LOT AND HARD SURFACES.	119	<i>Acer ginnala</i>	Amur Maple	<10	Good	Private	Multistem.	TO REMAIN AND BE PROTECTED.
4	<i>Acer ginnala</i>	Amur Maple	15; 12; 11; 17	Good	Private	Multistem (4 stems).	TO BE REMOVED DUE TO PROPOSED PARKING LOT AND HARD SURFACES.	120	<i>Acer ginnala</i>	Amur Maple	<10	Good	Private	Multistem.	TO REMAIN AND BE PROTECTED.
5	<i>Acer ginnala</i>	Amur Maple	15; 12; 13; 14; 11; 15	Good	Private	Multistem (7 stems).	TO BE REMOVED DUE TO PROPOSED PARKING LOT AND HARD SURFACES.	121	<i>Amelanchier canadensis</i>	Serviceberry	<10	Good	Private	Tree stakes and rubber hoses were not removed. Rubber hoses are starting to impact tree health.	TO REMAIN AND BE PROTECTED.
6	<i>Gleitsia triacanthos</i>	Honeylocust	18	Good	Private		TO BE REMOVED DUE TO PROPOSED PARKING LOT AND HARD SURFACES.	122	<i>Amelanchier canadensis</i>	Serviceberry	<10	Good	Private	Tree stakes and rubber hoses were not removed. Rubber hoses are starting to impact tree health.	TO REMAIN AND BE PROTECTED.
7	<i>Gleitsia triacanthos</i>	Honeylocust	15	Good	Private		TO BE REMOVED DUE TO PROPOSED PARKING LOT AND HARD SURFACES.	123	<i>Amelanchier canadensis</i>	Serviceberry	<10	Good	Private	Tree stakes and rubber hoses were not removed. Rubber hoses are starting to impact tree health.	TO REMAIN AND BE PROTECTED.
8	<i>Acer rubrum</i>	Red Maple	32	Good	Private		TO BE REMOVED DUE TO PROPOSED PARKING LOT AND HARD SURFACES.	124	<i>Amelanchier canadensis</i>	Serviceberry	<10	Good	Private	Tree stakes and rubber hoses were not removed. Rubber hoses are starting to impact tree health.	TO REMAIN AND BE PROTECTED.
9	<i>Malus spp.</i>	Crab Apple	27	Good	Private		TO REMAIN AND BE PROTECTED.	125	<i>Acer ginnala</i>	Amur Maple	<10	Good	Private	Multistem.	TO BE REMOVED DUE TO PROPOSED TERRACED WALL.
10	<i>Malus spp.</i>	Crab Apple	26	Good	Private		TO BE REMOVED DUE TO PROPOSED WALKWAY AND PARKING LOT.	126	<i>Acer ginnala</i>	Amur Maple	<10	Good	Private	Multistem.	TO BE REMOVED DUE TO PROPOSED WALKWAY.
11	<i>Gleitsia triacanthos</i>	Honeylocust	23	Good	Private		TO BE REMOVED DUE TO PROPOSED PARKING LOT AND HARD SURFACES.	127	<i>Acer ginnala</i>	Amur Maple	<10	Good	Private	Multistem.	TO BE REMOVED DUE TO PROPOSED TERRACED WALL.
12	<i>Gleitsia triacanthos</i>	Honeylocust	27	Good	Private		TO REMAIN AND BE PROTECTED.	128	<i>Picea pungens</i>	Colorado Spruce	18	Good	Private		TO BE REMOVED DUE TO PROPOSED TERRACED WALL.
13	<i>Gleitsia triacanthos</i>	Honeylocust	25	Good	Private		TO REMAIN AND BE PROTECTED.	129	<i>Picea pungens</i>	Colorado Spruce	13	Good	Private		TO BE REMOVED DUE TO PROPOSED TERRACED WALL.
14	<i>Acer ginnala</i>	Amur Maple	17; 14; 15; 20	Fair	Private	Multistem (4 stems). Visible abrasions and scars on trunk.	TO BE REMOVED DUE TO PROPOSED WALKWAY AND PARKING LOT.	130	<i>Picea pungens</i>	Colorado Spruce	15	Good	Private		TO BE REMOVED DUE TO PROPOSED TERRACE.
15	<i>Malus spp.</i>	Crab Apple	22	Good	Private		TO BE REMOVED DUE TO PROPOSED PARKING LOT.	131	<i>Amelanchier canadensis</i>	Serviceberry	<10	Good	Private	Tree stakes and rubber hoses were not removed. Rubber hoses are starting to impact tree health.	TO REMAIN AND BE PROTECTED.
16	<i>Malus spp.</i>	Crab Apple	24	Good	Private		TO BE REMOVED DUE TO PROPOSED PARKING LOT.	132	<i>Amelanchier canadensis</i>	Serviceberry	<10	Good	Private	Tree stakes and rubber hoses were not removed. Rubber hoses are starting to impact tree health.	TO BE REMOVED DUE TO PROPOSED TERRACED WALL.
17	<i>Malus spp.</i>	Crab Apple	26	Good	Private		TO BE REMOVED DUE TO PROPOSED PARKING LOT.	133	<i>Amelanchier canadensis</i>	Serviceberry	<10	Good	Private	Tree stakes and rubber hoses were not removed. Rubber hoses are starting to impact tree health.	TO REMAIN AND BE PROTECTED.
18	<i>Pinus nigra</i>	Black Pine	33	Fair	Private	Some dead branches and dieback possibly due to reduced quantity of sunlight.	TO BE REMOVED DUE TO PROPOSED WALKWAY.	134	<i>Amelanchier canadensis</i>	Serviceberry	<10	Good	Private	Tree stakes and rubber hoses were not removed. Rubber hoses are starting to impact tree health.	TO REMAIN AND BE PROTECTED.
19	<i>Pinus nigra</i>	Black Pine	33	Fair	Private	Some dead branches and dieback possibly due to reduced quantity of sunlight.	TO BE REMOVED DUE TO PROPOSED WALKWAY.	135	<i>Amelanchier canadensis</i>	Serviceberry	<10	Good	Private	Tree stakes and rubber hoses were not removed. Rubber hoses are starting to impact tree health.	TO REMAIN AND BE PROTECTED.
20	<i>Pinus nigra</i>	Black Pine	24	Fair	Private	Some dead branches and dieback possibly due to reduced quantity of sunlight.	TO BE REMOVED DUE TO PROPOSED WALKWAY.	136	<i>Malus spp.</i>	Crab Apple	<10	Good	Private	Tree stakes and rubber hoses were not removed. Rubber hoses are starting to impact tree health.	TO REMAIN AND BE PROTECTED.
21	<i>Picea glauca</i>	White Spruce	30	Poor/Declining	Private	Many dead branches and dieback possibly due to reduced quantity of sunlight.	TO BE REMOVED DUE TO PROPOSED WALKWAY.	137	<i>Malus spp.</i>	Crab Apple	<10	Good	Private	Tree stakes and rubber hoses were not removed. Rubber hoses are starting to impact tree health.	TO REMAIN AND BE PROTECTED.
22	<i>Picea abies</i>	Norway Spruce	34	Good	Private		TO BE REMOVED DUE TO PROPOSED WALKWAY.	138	<i>Thuja occidentalis</i>	Pyramidal white cedar	<10	Good	Private		TO REMAIN AND BE PROTECTED.
23	<i>Picea pungens</i>	Colorado Spruce	36	Good	Private		TO BE REMOVED DUE TO PROPOSED WALKWAY.	139	<i>Malus spp.</i>	Crab Apple	<10	Good	Private		TO REMAIN AND BE PROTECTED.
24	<i>Pinus nigra</i>	Black Pine	36	Good	Private		TO BE REMOVED DUE TO PROPOSED WALKWAY.								
25	<i>Pinus nigra</i>	Black Pine	45	Good	Private		TO BE REMOVED DUE TO PROPOSED WALKWAY.								
26	<i>Pinus nigra</i>	Black Pine	30	Good	Private		TO BE REMOVED DUE TO PROPOSED WALKWAY.								
27	<i>Pinus nigra</i>	Black Pine	30	Good	Private		TO BE REMOVED DUE TO PROPOSED WALKWAY.								
28	<i>Pinus nigra</i>	Black Pine	42	Good	Private		TO BE REMOVED DUE TO PROPOSED WALKWAY.								
29	<i>Pinus nigra</i>	Black Pine	37	Good	Private		TO REMAIN AND BE PROTECTED.								
30	<i>Pinus nigra</i>	Black Pine	22; 15	Fair	Private	Multistem (2 stems). Some dead branches and dieback possibly due to reduced quantity of sunlight.	TO REMAIN AND BE PROTECTED.								
31	<i>Pinus nigra</i>	Black Pine	41	Good	Private		TO REMAIN AND BE PROTECTED.								
32	<i>Gleitsia triacanthos</i>	Honeylocust	25	Good	Private		TO BE REMOVED DUE TO PROPOSED PARKING LOT.								
33	<i>Gleitsia triacanthos</i>	Honeylocust	19	Good	Private		TO BE REMOVED DUE TO PROPOSED PARKING LOT.								
34	<i>Tilia cordata</i>	Littleleaf Linden	32	Poor/Declining	Private	Many dead branches and dieback possibly due to reduced quantity of sunlight.	TO BE REMOVED DUE TO PROPOSED PARKING LOT AND HARD SURFACES.								
35	<i>Tilia cordata</i>	Littleleaf Linden	23	Poor/Declining	Private	Many dead branches and dieback possibly due to reduced quantity of sunlight.	TO BE REMOVED DUE TO PROPOSED PARKING LOT AND HARD SURFACES.								
36	<i>Tilia cordata</i>	Littleleaf Linden	26	Poor	Private	Many dead branches and dieback possibly due to reduced quantity of sunlight.	TO BE REMOVED DUE TO PROPOSED ROAD.								
37	<i>Gleitsia triacanthos</i>	Honeylocust	11	Good	Private		TO BE REMOVED DUE TO PROPOSED ROAD.								
38	<i>Tilia cordata</i>	Littleleaf Linden	27	Good	Private		TO BE REMOVED DUE TO PROPOSED ROAD.								
39	<i>Gleitsia triacanthos</i>	Honeylocust	15	Good	Private		TO BE REMOVED DUE TO PROPOSED ROAD.								
40	<i>Gleitsia triacanthos</i>	Honeylocust	15	Good	Private		TO BE REMOVED DUE TO PROPOSED ROAD.								
41	<i>Tilia cordata</i>	Littleleaf Linden	30	Good	Private		TO BE REMOVED DUE TO PROPOSED ROAD.								
42	<i>Tilia cordata</i>	Littleleaf Linden	15	Good	Private		TO REMAIN AND BE PROTECTED.								
43	<i>Tilia cordata</i>	Littleleaf Linden	30	Good	Private		TO REMAIN AND BE PROTECTED.								
44	<i>Tilia cordata</i>	Littleleaf Linden	32	Good	Private		TO REMAIN AND BE PROTECTED.								
45	<i>Tilia cordata</i>	Littleleaf Linden	32	Good	Private		TO REMAIN AND BE PROTECTED.								
46	<i>Pinus nigra</i>	Black Pine	39	Good	Private	Few dead branches and dieback possibly due to reduced quantity of sunlight.	TO REMAIN AND BE PROTECTED.								
47	<i>Pinus nigra</i>	Black Pine	31	Poor/Fair	Private	Some dead branches and dieback possibly due to reduced quantity of sunlight.	TO REMAIN AND BE PROTECTED.								
48	<i>Pinus nigra</i>	Black Pine	44	Good	Private	Few dead branches and dieback possibly due to reduced quantity of sunlight.	TO REMAIN AND BE PROTECTED.								
49	<i>Pinus nigra</i>	Black Pine	32	Fair	Private	Some dead branches and dieback possibly due to reduced quantity of sunlight.	TO REMAIN AND BE PROTECTED.								
50	<i>Picea pungens</i>	Colorado Spruce	36	Good	Private		TO REMAIN AND BE PROTECTED.								
51	<i>Picea glauca</i>	White Spruce	10	Good	Private		TO REMAIN AND BE PROTECTED.								
52	<i>Picea glauca</i>	White Spruce	10	Good	Private		TO REMAIN AND BE PROTECTED.								
53	<i>Tilia cordata</i>	Littleleaf Linden	30	Fair	Private	Leader have been cut.	TO REMAIN AND BE PROTECTED.								
54	<i>Tilia cordata</i>	Littleleaf Linden	16	Poor/Declining	Private	Crown is dead.	TO BE REMOVED DUE TO ITS POOR HEALTH CONDITION.								
55	<i>Tilia cordata</i>	Littleleaf Linden	23	Fair	Private	Leader have been cut.	TO REMAIN AND BE PROTECTED.								
56	<i>Tilia cordata</i>	Littleleaf Linden	16	Good	Private		TO REMAIN AND BE PROTECTED.								
57	<i>Tilia cordata</i>	Littleleaf Linden	14	Fair/Good	Private	Leader have been cut.	TO REMAIN AND BE PROTECTED.								
58	<i>Tilia cordata</i>	Littleleaf Linden	28	Poor	Private	Leader is cut.	TO REMAIN AND BE PROTECTED.								
59	<i>Tilia cordata</i>	Littleleaf Linden	14	Fair	Private	Leader have been cut.	TO REMAIN AND BE PROTECTED.								
60	<i>Tilia cordata</i>	Littleleaf Linden	15	Fair	Private	Leader have been cut and visible abrasion on trunk.	TO BE REMOVED DUE TO PROPOSED FIRE ROUTE.								
61	<i>Tilia cordata</i>	Littleleaf Linden	17	Poor	Private	Leader is cut and visible abrasion on trunk.	TO BE REMOVED DUE TO PROPOSED FIRE ROUTE.								
62	<i>Tilia cordata</i>	Littleleaf Linden	16	Good	Private		TO REMAIN AND BE PROTECTED.								
63	<i>Tilia cordata</i>	Littleleaf Linden	14	Good	Private		TO REMAIN AND BE PROTECTED.								
64	<i>Tilia cordata</i>	Littleleaf Linden	40	Good	Private		TO REMAIN AND BE PROTECTED.								
65	<i>Tilia cordata</i>	Littleleaf Linden	15	Good	Private		TO REMAIN AND BE PROTECTED.								
66	<i>Tilia cordata</i>	Littleleaf Linden	15	Good	Private		TO REMAIN AND BE PROTECTED.								
67	<i>Tilia cordata</i>	Littleleaf Linden	14	Good	Private		TO REMAIN AND BE PROTECTED.								
68	<i>Tilia cordata</i>	Littleleaf Linden	14	Poor	Private	Many dead branches and dieback possibly due to reduced quantity of sunlight.	TO REMAIN AND BE PROTECTED.								
69	<i>Tilia cordata</i>	Littleleaf Linden	14	Fair	Private	Leader is dead and visible abrasion on trunk.	TO REMAIN AND BE PROTECTED.								
70	<i>Tilia cordata</i>	Littleleaf Linden	24	Fair	Private	Leader is dead.	TO REMAIN AND BE PROTECTED.								
71	<i>Tilia cordata</i>	Littleleaf Linden	28	Fair	Private	Leader is dead.	TO REMAIN AND BE PROTECTED.								
72	<i>Tilia cordata</i>	Littleleaf Linden	26; 11; 22	Good	Private	Multistem (3 stems).	TO REMAIN AND BE PROTECTED.								
73	<i>Quercus macrocarpa</i>	Bur Oak	25	Good	Private		TO REMAIN AND BE PROTECTED.								
74	<i>Betula papyrifera</i>	White Birch	38	Poor	Private	Visible abrasion on trunk and small canopy.	TO REMAIN AND BE PROTECTED.								
75	<i>Picea pungens</i>	Colorado Spruce	11	Good	Private		TO REMAIN AND BE PROTECTED.								
76	<i>Picea pungens</i>	Colorado Spruce	10	Good	Private		TO REMAIN AND BE PROTECTED.								
77	<i>Picea pungens</i>	Colorado Spruce	27	Fair	Private	Some dead branches and dieback possibly due to reduced quantity of sunlight.	TO REMAIN AND BE PROTECTED.								
78	<i>Picea pungens</i>	Colorado Spruce	10	Good	Private		TO REMAIN AND BE PROTECTED.								
79	<i>Picea pungens</i>	Colorado Spruce	26	Poor	Private	Many dead branches and dieback possibly due to reduced quantity of sunlight.	TO REMAIN AND BE PROTECTED.								
80	<i>Picea pungens</i>	Colorado Spruce	28	Poor	Private	Many dead branches and dieback possibly due to reduced quantity of sunlight.	TO REMAIN AND BE PROTECTED.								
81	<i>Picea pungens</i>	Colorado Spruce	24	Fair	Private	Some dead branches and dieback possibly due to reduced quantity of sunlight.	TO REMAIN AND BE PROTECTED.								
82	<i>Picea pungens</i>	Colorado Spruce	23	Fair	Private	Some dead branches and dieback possibly due to reduced quantity of sunlight.	TO REMAIN AND BE PROTECTED.								
83	<i>Picea pungens</i>	Colorado Spruce	22	Fair	Private	Some dead branches and dieback possibly due to reduced quantity of sunlight.	TO REMAIN AND BE PROTECTED.								
84	<i>Picea pungens</i>	Colorado Spruce	30	Fair	Private	Some dead branches and dieback possibly due to reduced quantity of sunlight.	TO REMAIN AND BE PROTECTED.								
85	<i>Picea pungens</i>	Colorado Spruce	21	Fair	Private	Some dead branches and dieback possibly due to reduced quantity of sunlight.	TO REMAIN AND BE PROTECTED.								
86	<i>Picea pungens</i>	Colorado Spruce	21	Fair	Private	Some dead branches and dieback possibly due to reduced quantity of sunlight.	TO REMAIN AND BE PROTECTED.								
87	<i>Picea pungens</i>	Colorado Spruce	27	Fair	Private	Some dead branches and dieback possibly due to reduced quantity of sunlight.	TO REMAIN AND BE PROTECTED.								
88	<i>Picea pungens</i>	Colorado Spruce	32	Fair	Private	Some dead branches and dieback possibly due to reduced quantity of sunlight.	TO REMAIN AND BE PROTECTED.								
89	<i>Pinus nigra</i>	Black Pine	23	Good	Private		TO REMAIN AND BE PROTECTED.								
90	<i>Pinus nigra</i>	Black Pine													

TREE CONSERVATION REPORT

Appendix D SITE PLAN AND CIVIL DESIGN

Appendix D SITE PLAN AND CIVIL DESIGN





LEGEND:

	EXISTING PROPERTY LINE TO REMAIN
	PROPOSED CURB
	PROPOSED DEPRESSED CURB
	PROPOSED TERRACING (3:1 MIN.)
	PROPOSED SILT FENCE AS PER OPSD 219.110
	PROPOSED FENCE
	PROPOSED DOOR ENTRANCE/EXIT
	PROPOSED GRASS AREA (100mm TOP SOIL & SOD)
	PROPOSED CONCRETE FEATURES/SLAB
	PROPOSED HEAVY DUTY ASPHALT
	PROPOSED LIGHT DUTY ASPHALT
	PROPOSED RIP RAP
	PROPOSED ELEVATION
	PROPOSED HIGH POINT ELEVATION
	PROPOSED SWALE ELEVATION
	PROPOSED BOTTOM OF CURB / ASPHALT ELEVATION
	PROPOSED TOP OF CURB ELEVATION
	PROPOSED EXPOSED BOTTOM OF RETAINING WALL
	PROPOSED TOP OF RETAINING WALL
	MATCH INTO EXISTING ELEVATION
	EXISTING ELEVATION
	PROPOSED OVERLAND MAJOR FLOW ROUTE
	PROPOSED 100mmØ PERFORATED SUBDRAIN
	EXISTING MANHOLE
	EXISTING CATCHBASIN
	PROPOSED CATCHBASIN-MANHOLE/CATCHBASIN
	PROPOSED MANHOLE
	PROPOSED 100 YEAR HIGH WATER LEVEL

USE AND INTERPRETATION OF DRAWINGS

GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION ARE PART OF THE CONTRACT DOCUMENTS AND DESCRIBE USE AND INTENT OF THE DRAWING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITY. THESE DRAWINGS ARE COMPLEMENTARY AND WHAT IS REQUIRED BY ANY ONE SHALL BE BINDING AS REQUIRED BY ALL WORK NOT COMPLETELY DELINEATED HEREON SHALL BE CONSTRUCTED OF THE SAME MATERIALS AND DETAIL SIMILARLY AS WORK SHOWN MORE COMPLETELY ELSEWHERE IN THE CONTRACT DOCUMENTS.

BY USE OF THE DRAWINGS FOR CONSTRUCTION OF THE PROJECT, THE OWNER CONFIRMS THAT HE HAS REVIEWED AND APPROVED THE DRAWINGS. THE CONTRACTOR CONFIRMS THAT HE HAS VISITED THE SITE, FAMILIARIZED HIMSELF WITH THE LOCAL CONDITIONS, VERIFIED FIELD DIMENSIONS AND CORRELATED HIS OBSERVATIONS WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

AS INSTRUMENTS OF SERVICE, ALL DRAWINGS, SPECIFICATIONS, CADD FILES OR OTHER ELECTRONIC MEDIA AND COPIES THEREOF FURNISHED BY THE ENGINEER ARE HIS PROPERTY. THEY ARE TO BE USED ONLY FOR THIS PROJECT AND ARE NOT TO BE USED ON ANY OTHER PROJECT, INCLUDING REPEATS OF THE PROJECT. CHANGES TO THE DRAWINGS MAY ONLY BE MADE BY THE ENGINEER.

UNLESS THE REVISION TITLE IS "ISSUED FOR CONSTRUCTION", THESE DRAWINGS SHALL BE CONSIDERED PRELIMINARY AND SHALL NOT BE USED AS A CONSTRUCTION DOCUMENT.

THESE DRAWINGS ILLUSTRATE THE WORK TO BE DONE. THE ENGINEER IS NOT RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES USED TO DO THE WORK, OR THE SAFETY ASPECTS OF CONSTRUCTION, AND NOTHING ON THESE DRAWINGS EXPRESSED OR IMPLIED CHANGES THIS CONDITION. CONTRACTOR SHALL DETERMINE ALL CONDITIONS AT THE SITE AND SHALL BE RESPONSIBLE FOR KNOWING HOW THEY AFFECT THE WORK. SUBMITTAL OF A BID TO PERFORM THIS WORK IS A KNOWLEDGE OF THE RESPONSIBILITIES, AND THAT THEY HAVE BEEN FULLY CONSIDERED IN PLANNING OF THE WORK AND THE PRICE. NO CLAIMS FOR EXTRA CHARGES DUE TO THESE CONDITIONS WILL BE FORTHCOMING.

UNAUTHORIZED CHANGES:

IN THE EVENT THE CLIENT, THE CLIENT'S CONTRACTORS OR SUBCONTRACTORS, OR ANYONE FOR WHOM THE CLIENT IS LEGALLY LIABLE MAKES OR PERMITS TO BE MADE ANY CHANGES TO ANY REVISED PLANS, SPECIFICATIONS OR OTHER CONSTRUCTION DOCUMENTS PREPARED BY LRI ASSOCIATES LTD. (LRI) WITHOUT OBTAINING LRI'S PRIOR WRITTEN CONSENT, THE CLIENT SHALL ASSUME FULL RESPONSIBILITY FOR THE RESULTS OF SUCH CHANGES. THEREFORE THE CLIENT AGREES TO WAIVE ANY CLAIM AGAINST LRI AND TO RELEASE LRI FROM ANY LIABILITY ARISING DIRECTLY OR INDIRECTLY FROM SUCH UNAUTHORIZED CHANGES.

IN ADDITION, THE CLIENT AGREES TO THE FULLEST EXTENT PERMITTED BY LAW, TO INDEMNIFY AND HOLD HARMLESS LRI FROM ANY DAMAGES, LIABILITIES OR COST, INCLUDING REASONABLE ATTORNEY'S FEES AND COST OF DEFENSE, ARISING FROM SUCH CHANGES.

GENERAL NOTES:

EXISTING SERVICES AND UTILITIES SHOWN ON THESE DRAWINGS ARE TAKEN FROM THE BEST AVAILABLE RECORDS, BUT MAY NOT BE COMPLETE OR TO DATE. CONTRACTOR SHALL VERIFY IN FIELD FOR LOCATION AND ELEVATION OF PIPES AND CHECK WITH THE UTILITY COMPANIES BEFORE DIGGING OR PERFORMING WORK.

CONTRACTOR IS ADVISED TO COLLECT INFORMATION ON SOIL CONDITIONS BEFORE START OF CONSTRUCTION.

THE ENGINEER WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS WHICH ARISE FROM FAILURE TO FOLLOW THESE PLANS, SPECIFICATIONS AND THE DESIGN INTENT THEY CONVEY, OR FOR PROBLEMS WHICH ARISE FROM OTHERS' FAILURE TO OBTAIN AND/OR FOLLOW THE ENGINEER'S GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES AMBIGUITIES OR CONFLICTS WHICH ARE ALLEGED.

CONTRACTOR TO VERIFY ALL DIMENSIONS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES BEFORE WORK COMMENCES. DO NOT SCALE DRAWINGS.

SCALE: 1:300

SUBJECT TO APPROVAL

No.	REVISIONS	BY	DATE
01	ISSUED FOR CLIENT APPROVAL	X.X.	XX XXX 2020

NOT AUTHENTIC UNLESS SIGNED AND DATED

LRJ
ENGINEERING | INGENIERIE
5430 Canotek Road | Ottawa, ON, K1J 9G2
www.lri.ca | (613) 842-3434

CLIENT
1600 JAMES NAISMITH LP
1460 THE QUEENSWAY, SUITE M264,
TORONTO, ON, M8Z 1S4

DESIGNED BY: A.S. DRAWN BY: A.S. APPROVED BY: V.J.

PROJECT
PROPOSED 8 STOREY APARTMENT BUILDING
1600 JAMES NAISMITH DRIVE
OTTAWA, ON

DRAWING TITLE
GRADING AND DRAINAGE PLAN

PROJECT NO.
220142

DATE
MARCH 2022

C301

