

Tree Preservation Report

Type of Document:

Tree Preservation Report

Project Name:

Chick-Fil-A 4270 Innes Rd, Orléans, Ottawa, ON K4A 5E6

Project Number:

BRM-23002042-H0

Date + time Submitted:

2024-10-04

Legal Notification

This Report was prepared by EXP Services Inc. for the account of the Chick-fil-A-Canada ULC.

Any use which a third party makes of this Report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. EXP Services Inc. accepts no responsibility for damages, if any, suffered by any third party due to decisions made or actions based on this report.



Table of Contents

Legal Notification	1
1. Introduction	3
2. General Overview	3
3. Method of Evaluation	2
4. Vegetation Summary	2
5. General Tree Preservation Measures	6
6. Assumption & Limitations	
Appendix A – Tree Inventory Chart	8
Appendix B – Compensation Planting Plan	9
Appendix C – Existing Conditions with Tree Cover Plan	10
Appendix D – Proposed Development with Tree Cover Plan	11
Appendix E – Existing Tree Photos	12

Drawing TPP

To be read in conjunction with this report



1. Introduction

This Report has been prepared for Chilk-Fil-A, 4270 Innes Rd, Orléans, Ottawa, ON K4A 5E6

This Report performs the following:

- Evaluate all trees that may be affected by the proposed construction in and close to the construction zone.
- Determine what trees are to be removed on the designated properties.
- Determine the necessary remediation permitting the preservation of trees suitable for retention.
- Evaluate and protect all trees within 6m away from the designated property limits of the proposed construction.
- Evaluate and protect the trees on adjacent properties that the proposed construction may impact.

2. General Overview





Figure 1: Site Aerial Photo: Chilk-Fil-A, 4270 Innes Road, Orleans, Ottawa, ON.

The site, which is approximately 4740 square meters in area, is located South of Innes Road and close to Lanthier Dr., Orleans, Ottawa, Ontario.

On the site, a tree inventory was conducted on August 23rd, 2024.



3. Method of Evaluation

The tree investigation and compensation in this report are in compliance with the City of Ottawa **Tree Preservation By-law 2020-340.**

The Tree Protection By-law requires that the measurement be taken at a height of 1.3 metres (51 inches) above ground level

Drawing TPP denotes each tree location and associated identification number for ease of reference. The trees were measured for DBH (Diameter at Breast Height) 1.3m above grade.

Any tree 10 centimeters in diameter or greater and City-owned trees of any diameter require a tree permit issued under the Tree Protection Bylaw.

Trees were assessed per the International Society of Arboriculture Methodology by visual inspection from ground locations only. They were not climbed or assessed using invasive techniques (trunk boring). The tree inventory and observations are summarized in Appendix A.

3.1 Assessment

Vegetation is assessed based on a visual inspection of the trunk and branch condition, structure, foliage condition, and evidence of abiotic (environmental, mechanical, and physical damage) and biotic (insects and disease) stressors.

3.2 Condition

Tree health and condition is evaluated as poor, fair, and good:

- Poor Considerable dieback, contorted growth, diseased or extensive physical damage, root damage, decay, cavities, and presence of secondary agents (harmful insects) that aid in tree decline. The plant may have reached its normal life expectancy.
- Fair—Some dieback and signs and symptoms of stress by non-living and living agents compromise aesthetic value; however, the tree continues to grow healthy.
- Good healthy, vigorous growth, strong branch attachment, and taper, no signs or symptoms of stress.

4. Vegetation Summary

The site inventory captured forty-seven (47) individual trees, as summarized in Appendix A—Tree Inventory Chart—a list of trees within 10 meters of the property's boundary, including location, species, condition, and size information.

The location and spread of the canopy of all trees noted herein are depicted on the Drawing TPP - Tree Protection Plan, which shall accompany this report.



Trees on Subject Site

In total, Thirty-five (35) were found within the subject site. All inventoried trees have been identified by their scientific and common names. Locations of all trees were identified on the Tree Preservation Plan. The trees are Honey Locust, Littleleaf Linden, and Blue Spruce.

4.1 Tree within Municipal Right of Way

There are no trees within the municipal right of way.

4.2 Study Criteria

The composition of individual trees and tree grouping were analyzed utilizing the following categories:

- Common and Botanical Classification
- General Health
- Size
- Species Potential for Preservation in an Urban Situation
- Site Potential to Support vegetation given proposed grading and drainage changes.

Considering all the above factors, tree preservation or removal recommendations were suggested.

4.3 Removal & Preservation Recommendations

Trees will not thrive if major disruptions occur in their microenvironment. Changes in grade, drainage, and wind patterns can all contribute to their decline and eventual death. Dead trees can result in costly removal fees once construction around the trees is completed. Therefore, extreme care must be taken with any trees scheduled for preservation. Removing trees before construction is cost-effective, but every effort should be made to preserve trees where possible. The decision to maintain trees must be coupled with sound arboriculture methods to ensure protected trees' long-term health and survival.

Trees Recommended for Removal

According to the proposed site construction and future easement, Trees # 8 to # 11, # 30 & # 35 and N7 are impacted and recommended for removal.

The total number of tree removal is eleven (11) trees.

Please refer to Appendix A – Tree Inventory Chart & TPP drawing for the detailed tree information.

Trees Recommended for Protection or Preservation

According to the proposed site construction and future easement, Trees # 1 to # 7 and # 12 to #35 will require protection; # N1 to N2 won't be impacted and will remain, #N3 to #N6 and N8 to N12 are close to the construction access which will be impacted and are recommended for protection.

Please refer to Appendix A – Tree Inventory Chart & TPP drawing for detailed tree information.



4.4 Tree Removal Compensation

According to the City's tree compensation policy, **Tree Protection (By-law No. 2020-340)**, removing eleven (11) trees, #8 to # 11 and #30 & #35, #N7 with DBH 10cm and more prominent, shall be counted for tree compensation. The following chart provides the compensation calculation according to the policy. A total of eleven (11) trees are required to be planted for compensation.

TREE REMOVAL COMPENSATION REQUIREMENTS

Existing Tree ID#	8	9	10	11	30	31	32	33	34	35	N7	Total Trees Required for Compensation
Existing Tree DBH (cm)	20	27	28	24	27	25	25	25	24	25	16	
Existing Tree Conditions	Good	Good	Good	Good to Fair	Good to Fair	Fair to Poor	Good	Good to Fair	Fair to Poor	Fair	Good	
Action	Remove	Remove	Remove	Remove	Remove	Remove	Remove	Remove	Remove	Remove	Remove	
Trees Required for Compensation	1	1	1	1	1	1	1	1	1	1	1	11

The landscape plan proposes thirteen (13) trees with 60mm caliper size; we believe the proposed trees have met the compensation requirements.

5. General Tree Preservation Measures

The following guidelines are to be observed where groups and individual trees are stated for preservation.

5.1 Construction Procedures

Construction procedures are very detrimental to the health of existing trees, and the below activities must be prevented:

- Burning of waste material in the vicinity of existing trees.
- Installation of rigging cables in the branches or around the trunks of existing trees.
- Flushing of cement or concrete mixing machines over the root systems.
- Storage of construction material and vehicles near existing trees.
- Tree Critical Root Zones (CRZ) and the City's Tree Protection Fencing must be in place before any construction works begin.

5.2 Preservation Prescriptions

Where necessary, tree preservation prescriptions shall be fulfilled to the following specifications:

Ground Injected Fertilizer

Fertilize with water-suspended Plant Products 5 -10 - 15, Soil Injected Fertilizer 10-12 inches below grade and throughout the entire preserved root zone.

Install Partially Composted Woodchips

Install a layer of partially composted 150mm wood chips mulch over the protected root zone, to improve soil structure, protect the minimum preserved root zone, and conserve soil moisture levels.

Tree Pruning

Maintenance Prune the canopy of specified trees to remove dead, diseased, and crossing branches 1-inch diameter and larger. Clearances prune the canopy to provide 1-1.5m feet of clearance to the construction site, and as necessary, elevate the canopy 2.4-3m feet above lawn areas.



6. Assumption & Limitations

This assessment and evaluation are limited to the assignment and purpose, as stated in the Introduction.

The assessment has been conducted using a visual examination of only the above-ground parts of trees. Unless specifically noted, trees were not cored, probed, sounded, or climbed. Parts of the trees below ground, unless specifically noted, were not inspected nor exposed by excavation for assessment.

Trees are living organisms that respond individually to outside influences such as climate, biotic changes, and abiotic changes. As such, this assessment is limited to the observations made during inspection.

On behalf of EXP Services Inc.

Lei Zhang, OALA (Assoc.), CSLA

Landscape Designer

hanglen'

Sally Wang, OALA, CSLA Senior Landscape Architect

Landscape Team Lead, Central Ontario



Appendix A – Tree Inventory Chart

Project: CFA Orleans

Date of Field Work: August 23, 2023

Tree ID#	Botanical name	Common name	Quantity	DBH (cm)	Crown (m)	CRZ=10xDim (m)	Ownership	Condition	Action	Reasons fo Removal	
1	Tilia cordata	Littleleaf Linden	1	30	6	3	Private onsite	Good	Protect		
2	Picea pungens	Blue Spruce	1	28	5	2.8	Private onsite	Good	Protect		
3	Picea pungens	Blue Spruce	1	31	6	3.1	Private onsite	Fair	Protect		
4	Picea pungens	Blue Spruce	1	29	5	2.9	Private onsite	Good	Protect		
5	Tilia cordata	Littleleaf Linden	1	30	6	3	Private onsite	Fair	Protect		
6	Picea pungens	Blue Spruce	1	31	4	3.1	Private onsite	Good	Protect		
7	Picea pungens	Blue Spruce	1	31	6	3.1	Private onsite	Good	Protect		
8	Gleditsia Triacanthos	Honey Locust	1	20	5	2	Private onsite	Good	Remove	Constructio	
9	Tilia cordata	Littleleaf Linden	1	27	8	2.7	Private onsite	Good	Remove	Constructio	
10	Gleditsia Triacanthos	Honey Locust	1	28	5	2.8	Private onsite	Good	Remove	Constructio	
11	Tilia cordata	Littleleaf Linden	1	24	7	2.4	Private onsite	Good to Fair	Remove	Constructio	
12	Picea pungens	Blue Spruce	1	28	4	2.8	Private onsite	Good	Protect		
13	Picea pungens	Blue Spruce	1	26	3	2.6	Private onsite	Fair	Protect		
14	Picea pungens	Blue Spruce	1	25	5	2.5	Private onsite	Fair	Protect		
15	Picea pungens	Blue Spruce	1	36	4	3.6	Private onsite	Good	Protect		
16		Honey Locust	1	20	5	2	Private onsite	Fair	Protect		
17		Honey Locust	1	20	5	2	Private onsite	Fair	Protect		
18		Honey Locust	1	14	3	1.4	Private onsite	Good	Protect		
19		Honey Locust	1	16	4	1.6	Private onsite	Good	Protect		
20		Honey Locust	1	16	5	1.6	Private onsite	Good	Protect		
21		Honey Locust	1	14	4	1.4	Private onsite	Good	Protect		
22		Honey Locust	1	13	4	1.3	Private onsite	Fair	Protect		
23		· · ·	1	16	4						
		Honey Locust		13	6	1.6	Private onsite	Good	Protect		
24 25		Honey Locust	1		6	1.3	Private onsite	Fair	Protect		
		Honey Locust	1	15		1.5	Private on Adjoining Site	Good	Protect		
26		Honey Locust	1	24	5	2.4	Private onsite	Good	Protect		
27		Honey Locust	1	24	5	2.4	Private onsite	Good	Protect		
28		Honey Locust	1	28	5	2.8	Private onsite	Good	Protect		
29		Honey Locust	1	25	5	2.5	Private onsite	Good	Protect		
30		Honey Locust	1	27	5	2.7	Private onsite	Good to Fair	Remove	Constructio	
31		Honey Locust	1	25	6	2.5	Private onsite	Fair to Poor	Remove	Constructio	
32		Honey Locust	1	25	5	2.5	Private onsite	Good	Remove	Constructio	
33		Honey Locust	1	25	5	2.5	Private onsite	Good to Fair	Remove	Constructio	
34		Honey Locust	1	24	5	2.4	Private onsite	Fair to Poor	Remove	Constructio	
35	Gleditsia Triacanthos	Honey Locust	1	25	4	2.5	Private onsite	Fair	Remove	Constructio	
NEIGHBO	OR TREES										
N1	Gleditsia Triacanthos	Honey Locust	1	13	3	1.3	Private on Adjoining Site	Good	Retain		
N2	Gleditsia Triacanthos	Honey Locust	1	16	6	1.6	Private on Adjoining Site	Fair	Retain		
N3	Gleditsia Triacanthos	Honey Locust	1	16	6	1.6	Private on Adjoining Site	Fair	Protect		
N4	Gleditsia Triacanthos	Honey Locust	1	18	5	1.8	Private on Adjoining Site	Fair	Protect		
N5	Gleditsia Triacanthos	Honey Locust	1	17	6	1.7	Private on Adjoining Site	Fair	Protect		
N6	Gleditsia Triacanthos	Honey Locust	1	15	4	1.5	Private on Adjoining Site	Good to Fair	Protect		
N7	Gleditsia Triacanthos	Honey Locust	1	16	6	1.6	Private on Adjoining Site	Good	Remove & Replace	Constructio	
N8	Gleditsia Triacanthos	Honey Locust	1	14	5	1.4	Private on Adjoining Site	Good to Fair	Protect		
N9		Honey Locust	1	11	3	1.1	Private on Adjoining Site	Good	Protect		
N10		Honey Locust	1	12	4	1.2	Private on Adjoining Site	Fair	Protect		
N11		Honey Locust	1	13	5	1.3	Private on Adjoining Site	Fair	Protect		
N12		Honey Locust	1	13	5	1.3	Private on Adjoining Site		Protect		



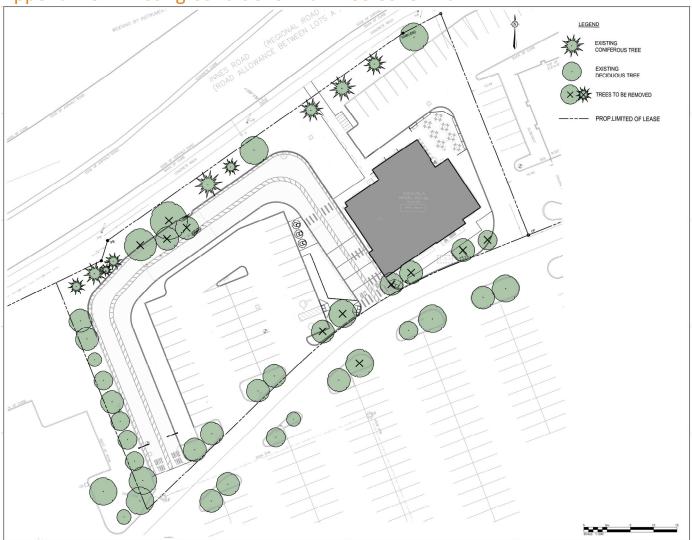
Appendix B – Compensation Planting Plan

TREE REMOVAL COMPENSATION REQUIREMENTS

Existing Tree ID#	8	9	10	11	30	31	32	33	34	35	N7	Total Trees Required for Compensation
Existing Tree DBH (cm)	20	27	28	24	27	25	25	25	24	25	16	
Existing Tree Conditions	Good	Good	Good	Good to Fair	Good to Fair	Fair to Poor	Good	Good to Fair	Fair to Poor	Fair	Good	
Action	Remove	Remove	Remove	Remove	Remove	Remove	Remove	Remove	Remove	Remove	Remove	
Trees Required for Compensation	1	1	1	1	1	1	1	1	1	1	1	11



Appendix C – Existing Conditions with Tree Cover Plan





Appendix D – Proposed Development with Tree Cover Plan





Appendix E – Existing Tree Photos

Photo 1 – Tree # 8 Honey Locust (*Gleditsia Triacanthos*) to be removed due to construction.

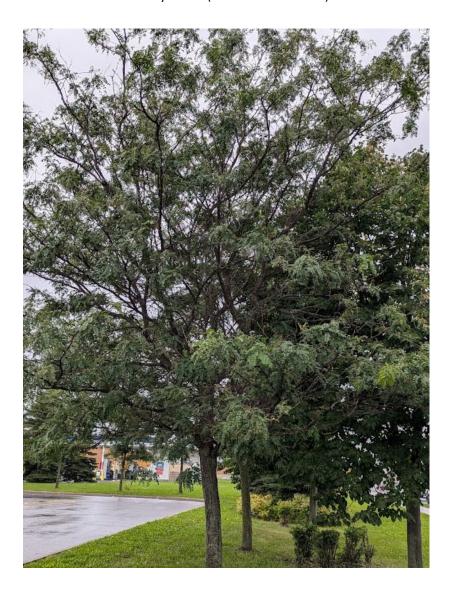




Photo 2 –Tree # 9 Littleleaf Linden (*Tilia cordata*) to be removed due to construction.





Photo 3 —Tree # 10 Honey Locust (*Gleditsia Triacanthos*) to be removed due to construction.

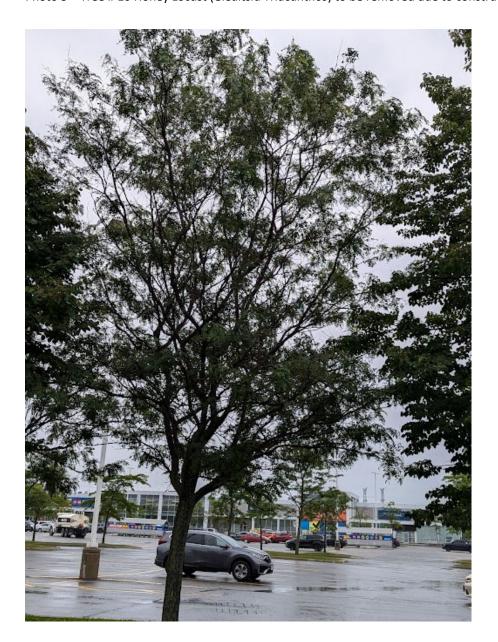




Photo 4 – Tree # 11 Littleleaf Linden (*Tilia cordata*) is to be removed due to construction.

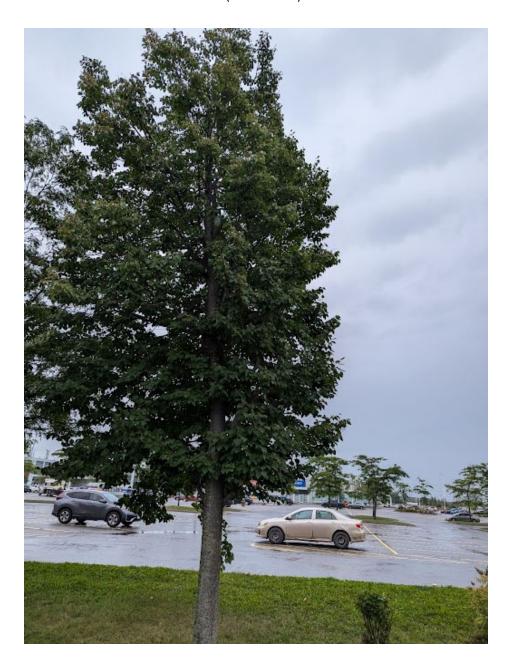




Photo 5 – Tree # 30 Honey Locust (Gleditsia Triacanthos) to be removed due to construction.





Photo 6 – Tree # 31 Honey Locust (Gleditsia Triacanthos) to be removed due to construction.





Photo 7 – Tree # 32 Honey Locust (Gleditsia Triacanthos) to be removed due to construction.

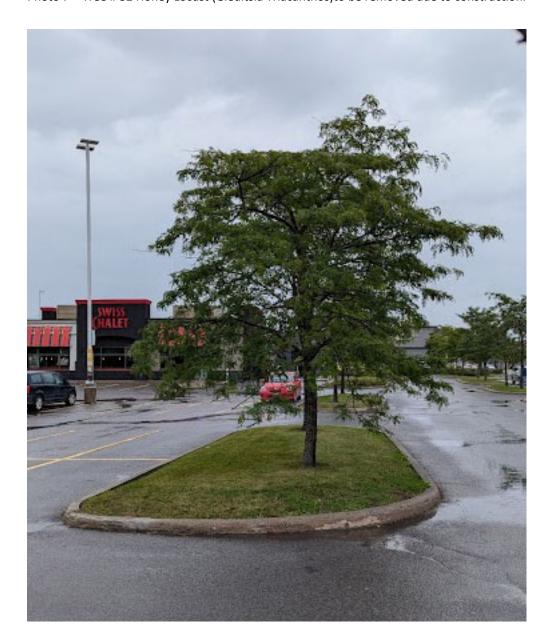




Photo 8 – Tree # 33 Honey Locust (Gleditsia Triacanthos) to be removed due to construction.





Photo 9 – Tree # 34 Honey Locust (Gleditsia Triacanthos) to be removed due to construction.

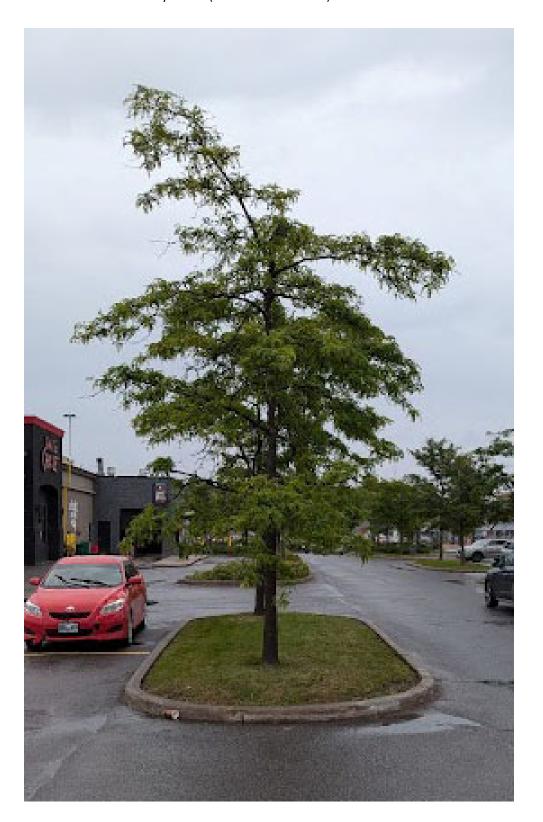




Photo 10 – Tree # 35 Honey Locust (Gleditsia Triacanthos) to be removed due to construction.



