



JACKSON ARBORICULTURE INC.

CONSULTING AND GIS ANALYSIS
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Tree Inventory and Preservation Plan Report

Subject Property:

4409 Erie Road
Fort Erie, ON

Prepared For:

Brock View Rentals
27 Chicora Avenue
Toronto, ON M5R 1T7

Prepared By:

Jackson Arboriculture Inc.
118 Pleasant Ridge Road
Brantford, ON N3R 0B8

30 September 2022

Jackson Arboriculture Inc. Project No. P313

1.0 Introduction

Jackson Arboriculture Inc. was retained by Brock View Rentals to complete a Tree Inventory and Preservation Plan report for a property situated at 4409 Erie Road in the Town of Fort Erie, Ontario, hereby referred to as the subject property. It is understood that a development application will be filed with the Town for the construction of a private subdivision.

2.0 Methodology

At the onset of the project the arborological scope of work was coordinated with the client and the consulting team. Prior to conducting a site visit, the topographic survey and current aerial photography were overlaid utilizing geographic information software for use on site during the completion of the tree inventory. The tree locations and the site plan were then overlaid and a tree preservation analysis was completed to determine the impacts to the trees included in the inventory.

2.1 Tree Inventory

A site visit was conducted on the 17th of June 2022 to complete the tree inventory. All trees 10 cm in diameter and larger situated on subject property, on neighbouring property within 6 m and within the road allowance were included in the tree inventory. A visual assessment was completed on each tree included in the inventory and the following information is provided in the tree inventory table (Table 1):

- **Tree #:** A number assigned to each tree corresponding to the tree inventory (Table 1) and the Tree Preservation Plan (Sheet 1).
- **Species:** Common and scientific (Latin) species names.
- **DBH:** The trunk diameter at breast height, measured in centimeters at 1.4 m from the ground.
- **Condition:** The health of the tree considering the trunk integrity, the crown structure and the crown vigour; each rated as good, fair or poor. The condition ratings are based on the signs, symptoms and defects exhibited by each tree, considering the surroundings in which it is growing.
- **Dripline:** The distance from the stem to the tips of the live branches.
- **Location:** The property where the tree is situated, based on the topographic survey.
- **Comments:** Any additional notes relevant to the tree's health or growing conditions.
- **Recommendation:** The recommended removal or preservation of each tree based on the results of the impact assessment.

The trees included in the inventory were identified with numbers 1-29 and were located using the topographic survey provided and a tablet computer with a GPS chip.

2.2 Impact Assessment

A tree preservation analysis was completed on each tree included in the inventory considering the impacts from the proposed development and many other factors including, but not limited to, tree condition, species, DBH and the existing site conditions. The impacts from the proposed development will occur where tree roots and branches conflict with machinery during pre-grading and construction.

During the tree preservation analysis the distance of dripline was utilized to assess the impacts to the trees included in the tree inventory. Where considerable encroachment is required within the dripline tree removal may be required.

3.0 Existing Conditions

The subject property is currently occupied by two single family dwelling, manicured lawn and amenity areas. The property is bound by residential development to the east and west, Erie Road to the north and Lake Erie to the south.

4.0 Tree Inventory Results

The results of the tree inventory indicate that a total of 29 trees reside on subject property and on neighbouring property within 6 m. There are no trees situated within the road allowance. The trees included in the inventory appear to be comprised of landscape plantings.

The trees included in the inventory are comprised of the following species:

- White Mulberry (*Morus alba*),
- White Pine (*Pinus strobus*),
- Basswood (*Tilia americana*),
- Yew species (*Taxus sp.*),
- Apple species (*Malus sp.*),
- Norway Maple (*Acer platanoides*),
- Blue Spruce (*Picea pungens*),
- Gingko (*Ginkgo biloba*),
- Japanese Maple (*Acer palmatum* 'Bloodgood'),
- Red Maple (*Acer rubrum*),
- Scots Pine (*Pinus sylvestris*),
- White Elm (*Ulmus americana*),
- Pear species (*Pyrus sp.*),
- Silver Maple (*Acer saccharinum*) and
- Freeman Maple (*Acer x freemanii*).

No rare, threatened or endangered tree species were documented in the tree inventory. Refer to Table 1 for the complete tree inventory and Sheet 1 for tree locations.

5.0 Proposed Development

The proposed development is comprised of a private residential development consisting of 8 single family dwellings. One of the existing dwellings on site is proposed to be demolished and the existing dwelling adjacent to Lake Erie is proposed to be retained within the site planning. Access to the subdivision is proposed in the form of a private road originating from Erie Road.

6.0 Discussion

The following sections discuss the tree removal requirements, tree preservation opportunities and tree preservation recommendations.

6.1 Tree Removal

The removal of Trees 3-5, 8-12, 18-21 and 24-29 will be required to accommodate the proposed development.

Tree 20 appears to reside on the property boundary. As per the Forestry Act, R.S.O. 1990, permission from the neighbouring property owner will be required prior to the removal of dual ownership trees.

Trees 24 and 28 are in decline and showing signs of elevated risk potential. Tree 24 is a 108 cm DBH Freeman Maple (*Acer x freemantii*) exhibiting heavy broken branches, dieback and extensive fruiting bodies on the lower trunk and roots. This tree appears to have an advanced root rot infection which has migrated into the trunk of the tree. Tree 28 is 64 cm diameter Red Maple (*Acer rubrum*) exhibiting upwards of 60% crown dieback with multiple stem wounds at the trunk flare and at 1.1 m with evidence of heart rot. Regardless of the status of this development application, Trees 24 and 28 should be removed as soon as possible to eliminate the elevated risk potential.

6.2 Tree Preservation

The preservation of Trees 1, 2, 6, 7, 13-17, 22 and 23 will be possible with the use of appropriate tree protection measures, pending the review of detailed grading plans. The tree protection measures must be implemented prior to the commencement of demolition to ensure that the trees identified for preservation are not impacted by the proposed development.

Encroachment within the dripline of Trees 6, 13, 14 and 15 will be required to accommodate the proposed private subdivision road. Considering that the tree protection fence is proposed at the limit of the existing driveway, it is anticipated that very few tree roots will reside below the existing driveway due to compaction. If any tree roots are exposed during construction they must be pruned by a Certified Arborist in accordance with good arboricultural practice to ensure that the root systems are not damaged by the proposed development.

Encroachment within the driplines of Trees 16 and 17 will be required to accommodate the demolition of the existing dwelling and excavation for a proposed bungalow. Considering that the area of encroachment is occupied by the existing dwelling on site, it is anticipated that there will be no tree roots within the area of encroachment. If any tree roots are exposed during construction, they must be pruned by a Certified Arborist in accordance with good arboricultural practice to ensure that the root systems are not damaged by the proposed development.

Encroachment within the dripline of Tree 22 will be required to accommodate the foundation for a proposed bungalow. Considering the proximity at which excavation will be required to the base of the tree, the area of encroachment must be excavated using air spade methods to gently expose any roots that conflict may with development. If any roots are exposed during air spade excavation they must be pruned by a Certified Arborist in accordance with good arboricultural practice to ensure that the root system is not damaged by the proposed development.

The patio proposed within the dripline of Tree 22 will must be constructed during the landscaping phase of development when the tree protection has been removed. The patio should be constructed with as little disturbance as possible to the existing root zone. If any roots are exposed during patio construction they must be pruned by a Certified Arborist in accordance with good arboricultural practice to ensure that the root system is not damaged by the proposed development.

Encroachment within the dripline of Tree 23 will be required to accommodate the foundation for a proposed bungalow. If any tree roots are exposed during construction, they must be pruned by a Certified Arborist in accordance with good arboricultural practice to ensure that the root systems are not damaged by the proposed development.

Tree protection fence must be installed at the driplines of trees identified for preservation, unless noted otherwise in this report and on Sheet 1. Refer to Sheet 1 for the prescribed tree protection fence locations, the tree protection fencing detail and additional tree protection notes.

6.3 Tree Preservation Recommendations

The following recommendations are made in attempts to reduce the impacts to trees identified for preservation:

- Tree protection fence must be installed at the driplines as outlined on Sheet 1 prior to the commencement of demolition unless noted otherwise in this report and on Sheet 1.
- Once tree protection fence has been installed it must not be moved, relocated or altered in any way (unless repairing fallen fence etc.) for the duration of the construction period.
- No intrusion into an area identified on Sheet 1 as a tree preservation zone (TPZ) is allowed at anytime during construction unless noted otherwise in this report and on Sheet 1.
- No storage of machinery, construction debris, materials, waste or any other items is allowed within a TPZ.
- Any tree branches and roots that conflict with the proposed development must be pruned by a Certified Arborist in accordance with good arboricultural practice.
- Tree protection fencing should be inspected by a Certified Arborist prior to and during construction to ensure that the fencing remains intact and in good repair throughout the stages of development.

7.0 Summary

Jackson Arboriculture Inc. was retained by Brock View Rentals to complete a Tree Inventory and Preservation Plan report for a property situated at 4409 Erie Road in the Town of Fort Erie, Ontario. A tree inventory was conducted and an impact assessment was completed in the context of the proposed development plan.

The tree inventory documented a total of 29 trees situated on subject property and on neighbouring property within 6 m. The results of the impact assessment indicate that the removal of 18 trees will be required to accommodate the proposed development.

Respectfully submitted,
Jackson Arboriculture Inc.

Jeremy Jackson

Jeremy Jackson, H.B.Sc.,
ISA Certified Arborist #ON-1089A
GIS Analyst

Limitations of Assessment

It is our policy to attach the following limitations of assessment to ensure that the client, municipalities and agencies are fully aware of what is technically and professionally realistic when visually assessing and retaining trees.

The assessment of the trees presented in this report has been made using accepted arboricultural techniques. These include a visual examination of the above ground parts of each tree for structural defects, scars, external indications of decay such as fungal fruiting bodies, evidence of attack by insects, discoloured foliage, the condition of any visible root structures, the degree and direction of any lean, the general condition of the trees and the surrounding site, and the proximity of property and people.

Notwithstanding the recommendations and conclusions made in this report, it must be realized that trees are living organisms and their health and vigour constantly change. They are not immune to changes in site conditions, or seasonal variations in the weather conditions, including severe storms with high-speed winds.

While reasonable efforts have been made to ensure that the trees recommended for retention are healthy no guarantees are offered, or implied, that these trees, or any parts of them, will remain standing. It is both professionally and practically impossible to predict with absolute certainty the behaviour of any single tree or group of trees or their component parts in all circumstances. Inevitably a standing tree will always pose some risk. Most trees have the potential for failure under adverse weather conditions, and the risk can only be eliminated if the tree is removed.

Although every effort has been made to ensure that this assessment is reasonably accurate, trees should be re-assessed periodically. The assessment presented in this report is valid as the time of the inspection.

Table 1. Tree Inventory

Location: 4409 Erie Rd, Fort Erie

Date: 17 July 2022 Surveyors: JJJ

Tree #	Common Name	Scientific Name	DBH	TI	CS	CV	DL	Location	Comments	Recom.
1	White Mulberry	<i>Morus alba</i>	52	F	FG	G	9	Subject Property	Union at 2 m with bacterial wetwood	Preserve
2	White Pine	<i>Pinus strobus</i>	44	G	G	G	5	Subject Property		Preserve
3	Basswood	<i>Tilia americana</i>	34, 9, 6, 6, 5	G	G	G	6	Subject Property	Smaller stems are coppice growth	Remove
4	Yew species	<i>Taxus sp.</i>	22, 26	F	G	G	5	Subject Property	Union at 1 m	Remove
5	Apple species	<i>Malus sp.</i>	14	G	G	G	3	Subject Property		Remove
6	Norway Maple	<i>Acer platanoides</i>	~30	G	G	G	5	Neighbouring		Preserve
7	Blue Spruce	<i>Picea pungens</i>	~35	G	FG	FG	3	Neighbouring	10% crown dieback	Preserve
8	Ginkgo	<i>Ginkgo biloba</i>	72	G	FG	FG	8	Subject Property	10% crown dieback	Remove
9	Japanese Maple	<i>Acer palmatum 'Bloodgood'</i>	15, 13, 18	FG	G	G	4	Subject Property	Union at ground	Remove
10	Japanese Maple	<i>Acer palmatum 'Bloodgood'</i>	16, 10, 18	FG	G	G	5	Subject Property	Union at ground	Remove
11	Red Maple	<i>Acer rubrum</i>	46	G	FG	FG	7	Subject Property	10% crown dieback	Remove
12	Red Maple	<i>Acer rubrum</i>	102	F	FG	G	10	Subject Property	Union at 2 m, girdling root	Remove
13	Scots Pine	<i>Pinus sylvestris</i>	37	G	G	G	4	Boundary	3 m from driveway	Preserve
14	Scots Pine	<i>Pinus sylvestris</i>	50	FG	FG	G	4	Boundary	Union at base of crown, 3 m from driveway	Preserve
15	Scots Pine	<i>Pinus sylvestris</i>	57	FG	FG	G	4	Boundary	Union at base of crown, 2.75 m from driveway	Preserve
16	White Elm	<i>Ulmus americana</i>	79	G	G	G	10	Boundary		Preserve
17	Pear species	<i>Pyrus sp.</i>	20	FG	G	G	3	Boundary	Union at 2.5 m	Preserve
18	White Pine	<i>Pinus strobus</i>	56	G	G	G	6	Subject Property	Virginia creeper competition, light lean	Remove
19	Silver Maple	<i>Acer saccharinum</i>	51, 37, 49, 55, 39, 42	F	FG	G	12	Subject Property	Unions at 0.3 and 1 m	Remove
20	White Pine	<i>Pinus strobus</i>	50	G	F	F	6	Boundary	Sparse crown	Remove
21	White Pine	<i>Pinus strobus</i>	41	F	F	F	5	Subject Property	Seam, sparse crown	Remove
22	White Pine	<i>Pinus strobus</i>	57	G	G	G	5	Boundary		Preserve
23	Silver Maple	<i>Acer saccharinum</i>	95	G	G	G	9	Boundary		Preserve
24	Freeman Maple	<i>Acer x freemanii</i>	108	G	FG	FG	14	Subject Property	Light stem wound, hazard limb hanging over driveway, 10% crown dieback	Remove
25	Freeman Maple	<i>Acer x freemanii</i>	107	P	F	F	10	Subject Property	Main stem dead in crown, root rot infection has spread into base of tree hazard	Remove
26	Red Maple	<i>Acer rubrum</i>	101	FG	FG	FG	9	Subject Property	Union at base of crown, light stem wound, 10% crown dieback, lightly chlorotic	Remove
27	Freeman Maple	<i>Acer x freemanii</i>	95	G	FG	FG	9	Subject Property	10% crown dieback	Remove
28	Red Maple	<i>Acer rubrum</i>	64	F	P	P	7	Subject Property	Stem wounds with heart rot, 60% crown dieback	Remove

Tree #	Common Name	Scientific Name	DBH	TI	CS	CV	DL	Location	Comments	Recom.
29	Silver Maple	<i>Acer saccharinum</i>	95	G	FG	FG	9	Subject Property	Union at 3 and 4 m, lightly chlorotic, 10% crown dieback	Remove

Table Legend

- DBH Diameter at Breast Height (cm)
- TI Trunk Integrity (G, F, P)
- CS Crown Structure (G, F, P)
- CV Crown Vigor (G, F, P)
- DL Dripline (m)
- Recom. Recommendation (preserve/remove)
- G Good
- F Fair
- P Poor
- ~ Estimate