

KITCHENER WOODBRIDGE LONDON KINGSTON BARRIE BURLINGTON

August 23, 2023

ARBORIST REPORT 5858 Dunn Street, Niagara Falls, Ontario

BACKGROUND

MHBC was retained to conduct an inventory of the existing trees within the boundaries of the property known as 5858 Dunn Street, as they pertain to the City of Niagara Falls Tree By-laws. This investigation examined 46 trees within and around the subject property. Field work was completed August 15, 2023, this report relates to the condition of the trees at that time.

PROCEDURE

The on-site inventory of existing trees was carried out using the current survey of the property and relies on the accuracy of this survey. The inventory includes all trees within the site boundary, all trees within 6.0 metres of the site boundary and all Town owned trees along the adjacent boulevards.

This inventory is summarized graphically in the Tree Inventory Plan TI-1, which shall always be read in conjunction with this report and shall form part of this report. For the purposes of this report, trees and groupings of trees are identified in terms of species, size, condition, and recommendations.

The following rating system was used in describing the general condition of the trees inventoried:

Good: Indicates a condition of vigor and no major concerns.

Fair: Indicates an adequate tree, which may have some minor issues.

Poor: Indicates declining health, bad form, or other more serious issues.

Dead: Indicates a dead tree that should be removed.

ASSUMPTIONS AND LIMITING CONDITIONS

- Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible and is assumed to be correct; however MHBC can neither guarantee nor be responsible for the accuracy of information provided by others.
- It is assumed that the properties are not in violation of any applicable codes, ordinances, statutes, or other governmental regulations.
- Unless otherwise required by law, possession of this report or a copy thereof does not imply
 right of publication or use for any purpose in whole or in part by any other than the person
 or company by whom it was commissioned.
- The use of excerpts from this report or alterations to this report, without the authorization of MHBC Planning will invalidate the entire report. This report may not be used for any purpose other than its intended purpose as outlined.

- Unless expressed otherwise: 1) information contained in this report covers only those items that were examined and reflect the condition of those items at the time of inspection; and 2) the inspection is limited to visual examination or accessible items without dissection, excavation, probing, or coring. There is no warranty or guarantee, expressed or implied, that problems or deficiencies in the plants inventoried may not arise in the future.
- The determination of ownership of any subject tree(s) is the responsibility of the owner and any civil or common-law issues, which may exist between property owners with respect to trees, must be resolved by the owner. The recommendation to remove or maintain any tree(s) does not grant authority to encroach in any manner onto adjacent private properties.

Tree #	Common Name	Botanical Name	DBH (CM)	Condition	Comments	Recommendation
353	White Cedar	Thuja occidentalis	35	F	Minor to moderate deadwood in canopy, 2 stem at 0.8 metres	Remove due to construction
354	White Cedar	Thuja occidentalis	27	F	Co-dominant at 1.5 metres, minor deadwood in canopy	Remove due to construction
355	White Spruce	Picea glauca	32	F	Elevated canopy, minor to moderate deadwood in canopy	Remove due to construction
356	Norway Spruce	Picea abies	30	F	Mild lean, elevated canopy, minor to moderate deadwood in canopy	Remove due to construction
357	Colorado Blue Spruce	Picea pungens var. glauca	43	F	Elevated canopy, minor deadwood in canopy	Remove due to construction
358	Norway Maple	Acer platanoides	20	F		Remove due to construction
359	Norway Maple	Acer platanoides	18	F	2 stem at base	Remove due to construction
360	Norway Maple	Acer platanoides	17	F		Remove due to construction
361	Silver Maple	Acer saccharinum	119	Р	Moderate deadwood in canopy	Remove due to construction
362	Yew Sp.	Taxus Sp.	23	F	Multi-stem at 0.2 metres	Remove due to construction
363	Norway Spruce	Picea abies	51	F	Elevated canopy, minor deadwood in canopy	Remove due to construction
364	Norway Spruce	Picea abies	35	Р	Elevated canopy, moderate to significant deadwood in canopy	Remove due to construction
365	American Elm	Ulmus americana	38	F	Significant lean, cavity in base of trunk	Remove due to construction
366	Black Walnut	Juglans nigra	22	F		Retain
367	Norway Spruce	Picea abies	37	F	Elevated canopy, minor deadwood in canopy	Remove due to construction

SUMMARY OF TREES INVENTORIED

368	Norway Spruce	Picea abies	43	F	Moderate deadwood in canopy	Remove due to construction
369	Norway Maple	Acer platanoides	57	F	Minor deadwood in canopy	Remove due to construction
370	Norway Spruce	Picea abies	45	F	Minor deadwood in canopy	Remove due to construction
371	Norway Spruce	Picea abies	58	F	Minor deadwood in canopy	Remove due to construction
372	Norway Spruce	Picea abies	47	F	Moderate deadwood in canopy	Remove due to construction
373	Norway Spruce	Picea abies	37	P/D	Significant deadwood in canopy, tree is 95% dead	Remove due to condition
374	Norway Spruce	Picea abies	33	F/P	Moderate to significant	Remove due to
275	Disci Mala I				deadwood in canopy	construction
375	Black Walnut Manitoba Maple	Juglans nigra Acer negundo	~65	F F/P	Minor deadwood in canopy Significant deadwood in canopy, growing through fence, main limb encroaches over property line about 9.0 metres	Retain Retain
377	Black Walnut	Juglans nigra	26	F		Retain
378	Dead deciduous		~28	D	Tree is 100% dead, vines growing throughout	Remove due to condition
379	Ash Sp.	Fraxinus Sp.	23	F	Minor deadwood in canopy	Remove due to construction
380	American Chestnut	Castanea dentata	21	F	Minor deadwood in canopy	Remove due to construction
381	American Chestnut	Castanea dentata	19	F		Remove due to construction
382	American Chestnut	Castanea dentata	26	F	Minor deadwood in canopy	Remove due to construction
383	Flowering Crabapple Tree	Malus Sp.	28	F	Minor deadwood in canopy	Remove due to construction
384	American Chestnut	Castanea dentata	30	F		Remove due to construction
385	Canadian Hemlock	Tsuga canadensis	63	F		Remove due to construction
386	White Cedar	Thuja occidentalis	29	F/P	2 stem at base, moderate deadwood in canopy	Remove due to construction
387	White Cedar	Thuja occidentalis	38	F/P	Multi-stem at base, moderate deadwood in canopy	Remove due to construction
388	American Chestnut	Castanea dentata	44	F	Minor deadwood in canopy	Remove due to construction
389	American Chestnut	Castanea dentata	27	F	Co-dominant at 0.7 metres	Remove due to construction

390	American Chestnut	Castanea dentata	48	F	Minor deadwood in canopy	Remove due to construction
391	Black Walnut	Juglans nigra	71	F	Minor deadwood in canopy	Remove due to construction
392	Black Walnut	Juglans nigra	60	F	Minor deadwood in canopy	Remove due to construction
393	Burr Oak	Quercus macrocarpa	~110	F		Retain
394	Black Walnut	Juglans nigra	22	F		Retain
395	Flowering Crabapple Tree	Malus Sp.	19	F		Remove due to construction
01	Silver Maple	Acer saccharinum	~95	F		Retain
02	Flowering Crabapple Tree	Malus Sp.	~34	F		Retain
03	Common Hackberry	Celtis occidentalis	~21	F		Retain

The above table summarizes the on-site trees. The trees shown with a tone are recommended for removal. The remaining trees will be subject to tree protection per City of Niagara Falls standards as outlined on drawing 2-TI-1. It is noted that not all trees marked for retention require tree protection hoarding. Refer to TI-1 for size and layout of tree protection hoarding.

PHOTO RECORD



Trees 353 – 360





Trees 362 - 364





Tree 366





Trees 376 - 378





Trees 383, 384





Trees 388 - 390





Trees 394 – 395





Tree O2, O3

TREE PROTECTION RECOMMENDATIONS

The following standards shall apply to any trees that are identified to be retained. Where the municipality enforces its own standards, those of the governing municipality shall supersede the recommendations contained herein. In all other instances, the following recommendations shall be treated as minimum standards for tree protection and retention.

1.0 ESTABLISH A TREE PROTECTION ZONE

The purpose of the tree protection zone is to prevent root damage, soil compaction and soil contamination during construction activities. Workers and machinery shall not disturb the tree protection zone in any way. In order to prevent access, the following recommendations are offered.

- Install tree protection hoarding as per City of Niagara Falls detail 2-TI-1.
- Allow no fill, equipment, supplies, or waste within the tree protection zone.
- Maintain the tree protection hoarding in good condition for the duration of construction.
- Tree protection hoarding is not to be removed until all construction activities have been completed.

2.0 ROOT PRUNING

Where possible, hand dig areas closest to each tree to prevent any unnecessary tearing or pulling of roots. Removal of roots that are greater than 2.5 centimeters in diameter or roots that are injured or diseased should be performed as follows:

- Preserve the root bark ridge (similar in structure to the branch bark ridge). Directional Root Pruning (DRP) is the recommended technique and should be employed during hand excavation around tree roots. Roots are similar to branches in their response to pruning practices. With DRP, objectionable and severely injured roots are properly cut to a lateral root that is growing downward or in a favorable direction.
- All roots needing to be pruned or removed shall be cut cleanly with sharp hand tools, by a Certified Arborist.
- No wound dressings or pruning paint shall be used to cover the ends of each cut.
- All roots requiring pruning shall be cut using any of the following tools: Large or small loppers, Hand pruners, Small hand saws, Wound scribers
- Avoid prolonged exposure of tree roots during construction keep exposed roots moist and dampened with mulching materials, irrigation or wrap in burlap if exposed for longer than 4 hours.

3.0 FERTILIZATION AND IRRIGATION

The following measures are recommended:

- Aeration and deep root fertilize to ensure that all trees receive the appropriate nutrients for healthy growth.
- Fertilizer must be a low nitrogen formula such as *5-30-30* to promote root growth rather than shoot growth.
- If construction occurs during July and / or August, roots must be irrigated during conditions of drought.

4.0 ESTABLISH MAINTENANCE PROGRAM

Pre-Construction:

• Prune all trees to remove any deadwood and obstruction prune as required.

During Construction:

- Irrigate tree preservation zones during drought conditions (June through September), in an attempt to reduce the effects of drought stress.
- Inspect the site every month to ensure that all tree protection fence / hoarding is in place and in good condition, inspect the trees to monitor condition.

Post-Construction:

- Prune crowns to remove any newly developed deadwood only. Do not remove any live growth.
- Inspect the trees three times per year (May, July, and September) to monitor condition for a minimum period of 2 additional years.

5.0 LANDSCAPING

Any landscaping completed within the tree preservation zones, after construction is completed and tree protection fencing / hoarding has been removed, is to be carried out in such a way that it will not cause damage to any of the trees or their roots. The trees must be protected to the same standards listed earlier in this report, but without the use of tree protection fence or hoarding.

The following guidelines are recommended:

- No grade changes are permitted which include adding and/or removing soil.
- No excavation is permitted that can cause damage to the roots of the tree.
- No heavy equipment can be used to compact the soil within the tree preservation zone.
- Where possible, hard surface paving around trees to be protected should be constructed using permeable products such as interlocking stone. Areas to be paved must be hand dug when encroaching within the tree protection zone.

CONCLUSIONS

Based on our investigations, we are of the opinion that two (2) trees will require removal due to their poor state of health, and thirty-five (35) trees to accommodate the proposed development. All other trees can be successfully retained if the recommendations within this report are followed. No tree shall be harmed or removed prior to applying for and receiving the requisite permits from the City of Niagara Falls.

Trees which are to remain shall be protected according to the tree protection details and the required protection hoarding shall be installed, inspected and approved prior to the commencement of any construction activities.

Should you have any questions regarding this report, please contact the undersigned directly.

Respectfully submitted, MHBC Planning, Urban Design & Landscape Architecture

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