

July 18, 2022 [*Revised March 22, 2023*]

ARBORIST REPORT
19 Mill Street East, Elora, Ontario

BACKGROUND

MHBC was retained to conduct an inventory of the existing trees within the boundaries of the property known as 19 Mill Street East, as they pertain to the Town of Elora Tree By-laws. This investigation examined 23 trees and 1 tree grouping within and around the subject property. Field work was completed July 1, 2022, and 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.

SUMMARY OF TREES INVENTORIED

Tree #	Common Name	Botanical Name	DBH (CM)	Canopy (m)	Condition	Structure	Comments	Recommendation
250	Norway Maple	Acer platanoides	58	13	F/G	F/G	Minor deadwood in canopy	Retain
251	Sugar Maple	Acer saccharum	40	8	F	F	Moderate deadwood in canopy	Retain
252	Norway Maple	Acer platanoides	56	14	F	P	Past major structural failure evident, moderate deadwood in canopy	Remove due to construction
253	Norway Maple	Acer platanoides	32	10	F/G	F/G	Damage at trunk is healing over	Remove due to construction
254	Black Walnut	Juglans nigra	39	11	F/G	P	Significant phototropic lean and bow in trunk	Retain
255	Manitoba Maple	Acer negundo	~55	16	F	P	2 stems, one stem has single off shoot and shows past significant failures	Retain
256	Manitoba Maple	Acer negundo	~40	16	F/G	F/P	Contorted form, volunteer tree	Retain
257	Manitoba Maple	Acer negundo	39	12	F/P	F	Canopy within overhead wires, sparse upper canopy	Remove due to construction
258	Manitoba Maple	Acer negundo	34	14	F/G	F	Co-dominant at 0.9 metres	Remove due to construction
O1	Black Locust	Robinia pseudoacacia	~24	8	F/G	F	High canopy	Retain
O2	Black Locust	Robinia pseudoacacia	~28	9	F/G	F	High canopy	Retain
O3	Black Locust	Robinia pseudoacacia	~32	9	F	F	Co-dominant at approximately 1.2 metres	Retain

O4	Black Locust	Robinia pseudoacacia	~34	11	F	F	Co-dominant at approximately 1.5 metres	Retain
O5	Norway Spruce	Picea abies	~55	~14	F/G	G		Retain
O6	Black Walnut	Juglans nigra	34	15	G	F/G		Retain
O7	Maidenhair Tree	Gingko bilboa	~26	9	G	F/G		Retain
O8	Tamarack	Larix laricina	~20	N/A	D	P	Tree is 100% dead	Retain
O9	Tamarack	Larix laricina	~28	9	F	F		Retain
O10	Black Walnut	Juglans nigra	40	14	F/G	F	Moderate deadwood in canopy	Retain
O11	White Spruce	Picea glauca	~32	13	F	F	Moderate deadwood in canopy, multiple leaders	Retain
O12	Manitoba Maple	Acer negundo	~23	8	F/P	F/P	Significant deadwood in canopy	Retain
O13	Manitoba Maple	Acer negundo	~35	12	F	F	Co-dominant at 1.5 metres, minor deadwood in canopy	Retain
O14	Weeping Willow	Salix babylonica	~200	~24	F/P	P	Multiple stems, suspected internal rot, multiple past significant failures	Retain
A	Tree Grouping	-	-	-	-	-	2 Manitoba Maple at 1-10cm DBH, 4 Manitoba Maple and 1 Black Walnut at 11-20cm DBH, 2 Manitoba Maple and 2 Black Walnut at 21-30cm DBH	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 Town of Elora 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 250 - 251



Tree 252



Tree 253



Trees 254 - 255



Trees 256, O1 – O5



Trees O6 – O10



Trees O11 – O13



Tree O14



Trees A



Trees A

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 Town of Elora 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 scribes
- 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 seven (7) trees will need to be removed to accommodate the proposed development. No tree shall be harmed or removed prior to applying for and receiving the requisite permits from the Town of Elora.

Trees #254 and 255 will sustain an injury to the root zone due to the proposed driveway. Given that these trees are located wholly on the neighbouring property, acknowledgement and permission from the neighbor shall be obtained prior to any work being completed. All work within the respective TPZs of these trees shall be completed by hand. Further, the driveway design shall consider the trees and should consider design that minimizes the need for compaction, and maximizes both air penetration and water percolation to the root zones.

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.

It is our opinion that the trees slated for retention can be successfully retained by following the recommendations set out in this report.

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

Respectfully submitted,
MHBC Planning, Urban Design & Landscape Architecture

A handwritten signature in blue ink, appearing to read "N. Miele".

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