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November 13, 2023

ARBORIST REPORT
1026 Cooke Boulevard, Burlington, Ontario

BACKGROUND

MHBC was retained to conduct an inventory of the existing trees within the boundaries of the property known as 1026 Cooke Boulevard, as they pertain to the City of Burlington Tree By-laws. This investigation examined 32 trees within and around the subject property. Field work was completed November 10, 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.

SUMMARY OF TREES INVENTORIED

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SUMMARY OF TREES INVENTORIED

Tree #	Owner	Common Name	Botanical Name	DBH (CM)	Canopy (M)	Critical Root Zone (M)	Condition	Structure	Condition %	Structure %	Min. TPZ Affected	Critical Root Zone Affected	Comments	Recommendation
244	1038 Cooke Boulevard	Crimson King Maple	Acer platanoides	27	7	4	F	F	75	75	100%	100%	Boundary tree	Remove due to construction (requires neighbours permission)
245	Private	Crimson King Maple	Acer platanoides	35	8	4	F	F	75	75	100%	100%		Remove due to construction
246	Private	Crimson King Maple	Acer platanoides	28	8	4	F	F	75	75	100%	100%		Remove due to construction
247	Private	Crimson King Maple	Acer platanoides	26	6	4	F	F	75	75	100%	100%		Remove due to construction
248	Private	Crimson King Maple	Acer platanoides	28	7	4	F	F	75	75	100%	100%		Remove due to construction
249	35 Plains Road East	Siberian Elm	Ulmus pumila	20	6	4	F	F	75	75	18%	30%		Retain (injure)
250	35 Plains Road East	Siberian Elm	Ulmus pumila	24	7	4	F	F	75	75	10%	22%	Co-dominant at 0.7 metres, vines growing at base	Retain (injure)
251	35 Plains Road East	Siberian Elm	Ulmus pumila	20	5.5	4	F	F	75	75	9%	24%		Retain (injure)
252	15 Plains Road East	Scots Pine	Pinus sylvestris	41	8	5	F	F	75	70	19%	31%	Mild lean, minor to moderate deadwood in canopy	Retain (injure)
253	15 Plains Road East	Manitoba Maple	Acer negundo	38	12	4	F	F/P	70	63	6%	21%	Co-dominant at 0.7 and 1.1 metres, bows in multiple limbs, one limb with significant lean	Retain (injure)
254	1021 Waterdown Road	Siberian Elm	Ulmus pumila	63	15	7	F	F	75	75	0%	2%	Co-dominant at 1.6 metres, minor deadwood in canopy	Retain (injure)

255	1021 Waterdown Road	Red Mulberry	Morus rubra	28	7	4	F	F	75	75	0%	0%	Mild lean	Retain
256	1021 Waterdown Road	Manitoba Maple	Acer negundo	43	13	5	F	F	75	75	26%	36%	Co-dominant at 0.6 metres, minor deadwood in canopy, mild lean	Retain (injure)
257	Private	Siberian Elm	Ulmus pumila	78	12	8	F	F	75	75	100%	100%		Remove due to construction
258	Private	Siberian Elm	Ulmus pumila	69	11	7	F	F	75	75	100%	100%		Remove due to construction
259	Private	Siberian Elm	Ulmus pumila	45	10	5	F	F/P	75	64	100%	100%	Moderate lean, minor deadwood in canopy	Remove due to construction
260	Private	Siberian Elm	Ulmus pumila	44	13	5	F	F	75	75	100%	100%		Remove due to construction
261	Private	Siberian Elm	Ulmus pumila	28	6	4	F	F	75	5	100%	100%		Remove due to construction
262	Private	Siberian Elm	Ulmus pumila	21	6	4	D	P	0	0	100%	100%	Tree is 100% dead	Remove due to condition
263	Private	Siberian Elm	Ulmus pumila	78	19	8	F	F	75	75	100%	100%	Co-dominant at 2.1 metres	Remove due to construction
264	Private	Siberian Elm	Ulmus pumila	32	8	4	F	F	75	74	100%	100%	Co-dominant at 1.2 metres, mild lean	Remove due to construction
265	Private	Siberian Elm	Ulmus pumila	45	8	5	F	F	75	75	100%	100%		Remove due to construction
266	Private	Siberian Elm	Ulmus pumila	24	7	4	F	F	75	72	100%	100%	Mild lean	Remove due to construction
267	Private	Siberian Elm	Ulmus pumila	21	10	4	F	F/P	75	70	100%	100%	Moderate lean, bow in trunk	Remove due to construction
268	Private	Siberian Elm	Ulmus pumila	63	16	7	F	F	73	70	100%	100%	Minor deadwood in canopy, mild lean	Remove due to construction
269	Private	Siberian Elm	Ulmus pumila	24	7	4	F	F	75	75	100%	100%		Remove due to construction
270	Private	Siberian Elm	Ulmus pumila	35	14	4	F	F	75	65	100%	100%	90 degree bow in upper trunk	Remove due to construction

271	Private	Siberian Elm	Ulmus pumila	33	9	4	F	F/P	70	68	100%	100%	Main limb previously failed at top, mild lean	Remove due to construction
272	Private	Siberian Elm	Ulmus pumila	21	3	4	P	P	45	30	100%	100%	Co-dominant at 0.6 metres, both limbs previously cut at 2.2 metres	Remove due to construction
273	Private	Siberian Elm	Ulmus pumila	55	19	6	F/P	F	65	70	100%	100%	Minor deadwood in canopy, cavity at base	Remove due to construction
274	1038 Cooke Boulevard	Siberian Elm	Ulmus pumila	41	13	5	F	F	73	70	7%	15%	Mild lean, minor deadwood in canopy	Retain (injure)
275	1038 Cooke Boulevard	Siberian Elm	Ulmus pumila	23	4	4	P/D	F/P	30	50	0%	0%	Tree is 75% dead, new growth at base	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 Burlington standards as outlined on drawing 1-TI-2. 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



Tree 244



Trees 245, 246



Trees 247, 248



Tree 249



Trees 250, 251



Trees 252, 253



Trees 254 – 256



Trees 257 – 271



Trees 268 – 271



Trees 272 – 275

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 Burlington detail 1-TI-2.
- 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 twenty-two (22) trees will require removal to accommodate the proposed development or due to condition. 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 Burlington.

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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