

Arborist Report

308 Four Mile Creek Road

Niagara-on-the-Lake

Prepared For:

Sleek Developments Inc.

Prepared By:

Beacon Environmental Limited

Date:

2025-10-15

Project

224022



BEACON
ENVIRONMENTAL

GUIDING SOLUTIONS IN THE NATURAL ENVIRONMENT

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Issued

| Version | Date | Revisions |
|---------|----------------|-------------------|
| 1. | September 2025 | Issued for Review |

1. Introduction

Beacon Environmental Limited (Beacon) was retained by Sleek Developments Inc. to complete an Arborist Report and Tree Inventory and Preservation Plan (TIPP) in support of the proposed development of a property located at 308 Four Mile Creek Road the Town of Niagara-the-Lake, Niagara Region, hereafter referred to as the subject property.

The subject property is approximately 1.42 hectares and will be developed in two phases. Phase 1, in the north portion of the subject property, consists of nine (9) townhouse units. Phase 2, in the southern portion, consists of six (6) townhouse units.

An arborist report and TIPP were previously prepared Beacon for the Phase 1 lands (Beacon 2023).

The purpose of this report is to provide an inventory and description of trees located within and adjacent to the Phase 2 lands, along with recommendations for tree preservation or removal based on tree health, condition, and the potential for integration within the proposed development, taking into account the development design as well as grading and servicing requirements.

The Town of Niagara-on-the-Lake has a private tree by-law (No. 5139-19) under which the destruction of trees on private property are regulated; however, the by-law does not apply to activities described in subsection 135(12) of the Municipal Act, which includes:

The injuring or destruction of trees imposed after December 31, 2002 as a condition to the approval of a site plan, a plan of subdivision or a consent under section 41, 51 or 53, respectively, of the Planning Act or as a requirement of a site plan agreement or subdivision agreement entered into under those sections.

It is understood that this exemption applies once a planning application has been fully approved and the associated site plan or subdivision agreement has been registered. Until that point, the Private Tree By-law remains in effect and governs any tree removal or replanting activities. Once the planning approvals are finalized and the agreements are in place, tree-related matters are administered through the terms and conditions of the registered site plan or subdivision agreement rather than the private tree-by-law.

This report and the TIPP presented herein have been prepared to meet the requirements of the Private Tree By-law (should it apply) and in accordance with accepted arboricultural guidelines, standards, and practices outlined in *Managing Trees During Construction, Third Edition* (Methany et al., 2023) and the *ANSI A300 Tree Care Standards* (American National Standards Institute, 2023).

2. Methodology

Per the Town's Private Tree By-law, individual trees measuring at least 12.5 cm diameter at breast height (DBH, measured 1.4 m above grade) located within and adjacent to the subject property were inventoried and assessed on December 12, 2024, by a Beacon arborist certified by the International Society of Arboriculture (ISA).

Information collected from individual trees included: species, DBH, crown radius, and condition. The diameters of multi-stemmed trees were determined by taking the square root of the sum of squares of each stem's DBH ("aggregate DBH"). The condition of each tree was assessed for overall health and structural integrity based on indicators such as live buds and leaves, dead wood, decay, structural defects, and presence of disease. Trees on the subject property were marked with numbered metal forestry tags; trees located on adjacent private properties were not tagged. Each tree was assigned a condition rating of good, fair, poor, or dead, based on the following criteria:

- **Poor** – Severe dieback, significant lean, missing leader, major defects, significant decay and/or disease presence. Including hazardous trees and trees in terminal decline;
- **Fair** – Moderate dieback and/or lean, limb defects, multiple stems, moderate foliage damage from stress;
- **Good** – Healthy vigorous growth, minor visible defects or damage; or
- **Dead** – No live crown (epicormic growth may be present).

Tree condition was assessed in terms of overall health and structural integrity based on indicators such as live buds and leaves, dead wood, decay, wounds, structural defects, and presence of disease.

Limitation of the assessment are provided in **Appendix A**.

3. Results

A total of 10 trees were inventoried and assessed within and adjacent to the subject property. Of the 10 trees, six (6) are located within the subject property and four (4) are located on an adjacent private property to the south. Trees range in size from 23 cm to 96 cm DBH. The dominant species among the inventoried trees is Silver Maple (*Acer saccharinum*). Detailed information on individually tagged trees is provided in the tree inventory table (**Appendix B**), and all trees are illustrated in the TIPP (**Appendix C**).

3.1 Subject Property Trees

Of the 10 inventoried trees, six (6) are located within the subject property. These trees include:

- Two (2) Eastern White Pine (*Pinus strobus*) measuring 33 cm and 42 cm DBH, both in good condition;
- One (1) Norway Spruce (*Picea abies*) measuring 38 cm DBH, in fair-good condition;
- One (1) Silver Maple measuring 80 cm DBH, in poor-fair condition;
- One (1) White Spruce (*Picea glauca*) measuring 23 cm DBH, in good condition; and
- One (1) Black Walnut (*Juglans nigra*) measuring 27 cm DBH, in good condition.

Legend

- Subject Property
- Watercourse (MNR 2025)



| | |
|---|-----------------------------------|
| Site Location | Figure 1 |
| 308 Four Mile Creek Road | |
| Project: 222403 Last Revised: August 2025 | |
| Client: Sleek Developments Inc. | Prepared by: BD Checked by: HB |
| | 1:2,400 Inset Map: 1:26,000 |
| Contains information licensed under the Open Government License—Ontario Orthoimagery Baselayer: FBS Niagara Region (2023) | |

3.2 Adjacent Private Property Trees

The four (4) trees located on the private property adjacent to the south end of the subject property include:

- Four (4) Silver Maple ranging from 64 cm to 96 cm DBH, predominantly in good condition.

4. Impact Assessment and Recommendations

The proposed development for the subject property consists of a six-unit townhouse complex with a private roadway, as illustrated in **Appendix C**.

Based on a review of the development plans, all 10 inventoried trees will require removal. Of these, six (6) are located within the subject property and four (4) are located on the adjacent private property to the south.

The subject property trees proposed for removal include:

- Two (2) Eastern White Pine, Tree Nos. 1876 and 1877;
- One (1) Norway Spruce, Tree No. 1879;
- One (1) Silver Maple, Tree No. 1874;
- One (1) White Spruce, Tree No. 1875; and
- One (1) Black Walnut, Tree No. 1878.

The off-site property trees proposed for removal include:

- Four (4) Silver Maple, Tree Nos. 1870-1873.

Permission from adjacent landowners must be obtained prior to removing trees from adjacent lands.

The federal *Migratory Bird Convention Act* (1994) and the provincial *Fish and Wildlife Conservation Act* (1997) protect the nests, eggs and young of most bird species from harm or destruction. Environment Canada considers the 'general nesting period' of breeding birds in southern Ontario to be between late March and the end of August. To avoid impacts on nesting birds, tree removal should generally be avoided between April 1 to August 31. If unavoidable, in the 'shoulder' seasons of April 1 to May 15, and July 16 to August 31, vegetation clearing could potentially occur, but only after an ecologist with appropriate avian knowledge has surveyed the area to confirm an absence of nesting activity. If nesting is found, then vegetation clearing (in an area around the nest) must wait until nesting has concluded. From September 1 through to March 31, of any year, vegetation clearing can occur without nest surveys, but the law for nest protection applies at any time (i.e., if an active nest is known it should be protected).

5. Tree Compensation and Replacement

Requirements for tree replacement or compensation should be determined in consultation with Town.

If tree replacement is required, opportunities exist for supplemental tree planting along Four Mile Creek adjacent to the proposed development. A list of suggested replacement tree species selected from the Town of Niagara-on-the-Lake's Private Tree Protection By-law is shown in **Table 1** below. To avoid a monoculture, a variety of trees should be used with no more than 20% of the same species.

Table 1. Suggested Replacement Tree Species

| Common Name | Scientific Name |
|--------------------|------------------------------|
| American Beech | <i>Fagus grandifolia</i> |
| Basswood | <i>Tilia americana</i> |
| Bitternut Hickory | <i>Carya cordiformis</i> |
| Black Cherry | <i>Prunus serotina</i> |
| Black Walnut | <i>Juglans nigra</i> |
| Chokecherry | <i>Prunus virginiana</i> |
| Ironwood | <i>Ostrya virginiana</i> |
| Northern Hackberry | <i>Celtis occidentalis</i> |
| Shagbark Hickory | <i>Carya ovata</i> |
| Silver Maple | <i>Acer saccharinum</i> |
| Yellow Birch | <i>Betula alleghaniensis</i> |

6. Summary

Beacon was retained by Sleek Developments Inc. to undertake an Arborist Report and TIPP in support of a proposed townhouse development at 308 Four Mile Creek Road in Niagara-on-the-Lake.

A total of 10 trees were individually inventoried and assessed on and immediately adjacent to the subject property. All inventoried trees are proposed for removal based on the impacts of the proposed development.

Should you have any comments regarding the above, or require clarification or modification, please do not hesitate to contact the undersigned at dwestershof@beaconenviro.com.

Prepared by:
Beacon Environmental Ltd.



Holly Barsoum
ISA Certified Arborist (ON-2506A)

Reviewed by:
Beacon Environmental Ltd.



Dan Westerhof, B.Sc., M.E.S.
Senior Terrestrial Ecologist,
ISA Certified Arborist (ON-1536A)

7. References

American National Standards Institute. 2023.
ANSI A300 Tree Care Standards. 2023.

Government of Canada. 1994.
Migratory Birds Convention Act, 1994 (S.C. 1994, c.22).

Government of Ontario. 1997.
Fish and Wildlife Conservation Act, 1997 (S.O. 1997, c.41).

Methany et al. 2023.
Best Management Practices - Managing Trees During Construction, Third Edition. 2023.

Town of Niagara-on-the-Lake. 2019.
A By-law to Regulate the Destruction or Injuring of Trees on Private Property in the Urban Areas of the Municipality. By-law number 5139-19.

Appendix A



Limitations of Tree Assessment

Appendix A

Limitations of Tree Assessment

It is the policy of Beacon Environmental Limited to attach the following clause regarding limitations of the tree assessment. The intent is to ensure that the client is aware of what is technically and professionally realistic in assessing and/or retaining trees.

The assessment of the trees presented in this report has been made using accepted arboricultural techniques. These techniques 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 insect attack, crown dieback, discoloured foliage, the condition of any visible root structures, the degree and direction of lean (if any), the general condition of the tree(s) and the surrounding site, and the proximity of property and people. Except where specifically noted in the report, none of the trees examined were dissected, cored, probed, or climbed, and detailed root crown examinations involving excavation were not undertaken.

Notwithstanding the recommendations and conclusions made in this report, it must be recognized that trees are living organisms, and their health and vigour constantly change over time. They are not immune to changes in site conditions, pests, or variations in the weather conditions including severe storms with high-speed winds. Furthermore, some symptoms may only be visible seasonally; the extent of observations that can be made may be limited by the time of year in which the inspection took place.

While reasonable efforts have been made to ensure that the trees recommended for retention are healthy unless stated otherwise within the report, no warranty or guarantees are offered, or implied, that these trees, or any parts of them, will have continued health or structure as noted in the report. 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 if provided with the necessary combinations of stresses and elements. This risk can only be eliminated if the tree is removed.

Although every effort has been made to ensure that this assessment is reasonably accurate, it is recommended that trees be re-assessed periodically to identify changes in condition. Design or site plan changes may also necessitate re-assessment and/or revisions to this report. **The assessment presented in this report is valid at the time of the inspection and is intended for sole use of the client.** Any use of this report by a third party, and any decision based on this report, is the singular responsibility of the third party.

Appendix B



Appendix B

Tree Inventory Table

| Tree Tag No. | Scientific Name | Common Name | DBH (cm) | Crown Diameter (m) | Condition ¹ | Comments | Ownership | TPZ Radius ² (m) | Preservation Recommendation |
|--------------|-------------------------|--------------------|----------|--------------------|------------------------|---|------------------|-----------------------------|-----------------------------|
| 1870 | <i>Acer saccharinum</i> | Silver Maple | 96 | 14 | Good | Good form and vigour; Full healthy crown; Stems fork above great height; Included bark. | Off-site | N/A | Remove Due to Development |
| 1871 | <i>Acer saccharinum</i> | Silver Maple | 80 | 12 | Good | Good form and vigour; Full healthy crown; Stems fork above breast height; Good stem union. Two metres northwest of gravel driveway. | Off-site | N/A | Remove Due to Development |
| 1872 | <i>Acer saccharinum</i> | Silver Maple | 64 | 8 | Fair-Good | Narrow crown; Good vigour; Calloused wounds along stem; Stems fork above breast height; Good stem unions. | Off-site | N/A | Remove Due to Development |
| 1873 | <i>Acer saccharinum</i> | Silver Maple | 87 | 12 | Good | Good form and vigour; Full healthy crown; Stems fork above breast height; Included bark. | Off-site | N/A | Remove Due to Development |
| 1874 | <i>Acer saccharinum</i> | Silver Maple | 80 | 10 | Poor-Fair | Moderate dieback and thinning; Approximately 35 percent of canopy dead. | Subject Property | N/A | Remove Due to Development |
| 1875 | <i>Picea glauca</i> | White Spruce | 23 | 6 | Good | Good form and vigour; Crown raised; Vines growing along stem. | Subject Property | N/A | Remove Due to Development |
| 1876 | <i>Pinus strobus</i> | Eastern White Pine | 33 | 7 | Good | Good form and vigour; Crown raised; Vines growing along stem. | Subject Property | N/A | Remove Due to Development |
| 1877 | <i>Pinus strobus</i> | Eastern White Pine | 42 | 8 | Good | Good form and vigour; Crown raised; Vines growing along stem. | Subject Property | N/A | Remove Due to Development |
| 1878 | <i>Juglans nigra</i> | Black Walnut | 27 | 8 | Good | Good form and vigour; Full healthy crown. | Subject Property | N/A | Remove Due to Development |
| 1879 | <i>Picea abies</i> | Norway Spruce | 38 | 8 | Fair-Good | Minor dieback and thinning; Vines growing along stem. | Subject Property | N/A | Remove Due to Development |

1. The tree health condition rating was based on factors that could include one or a combination of:


Good Condition – Healthy vigorous growth, no or minor visible defects or damage

Fair Condition – Moderate dieback and/or lean, limb defects, multiple stems, moderate foliage damage from stress

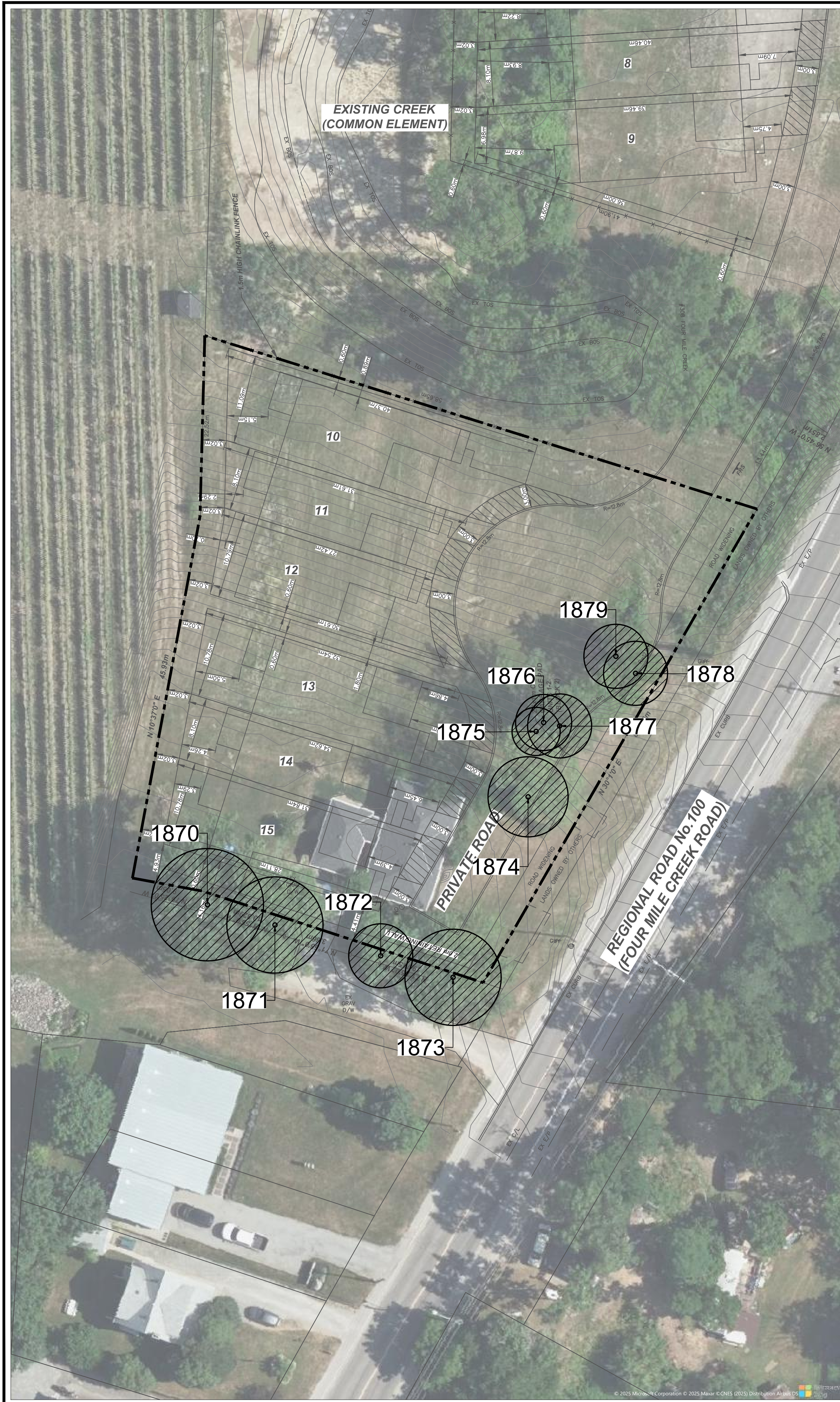
Poor Condition – Severe dieback, significant lean, decayed, missing leader, significant disease presence

2. The minimum TPZ distance as per arboricultural best practices.

Appendix C



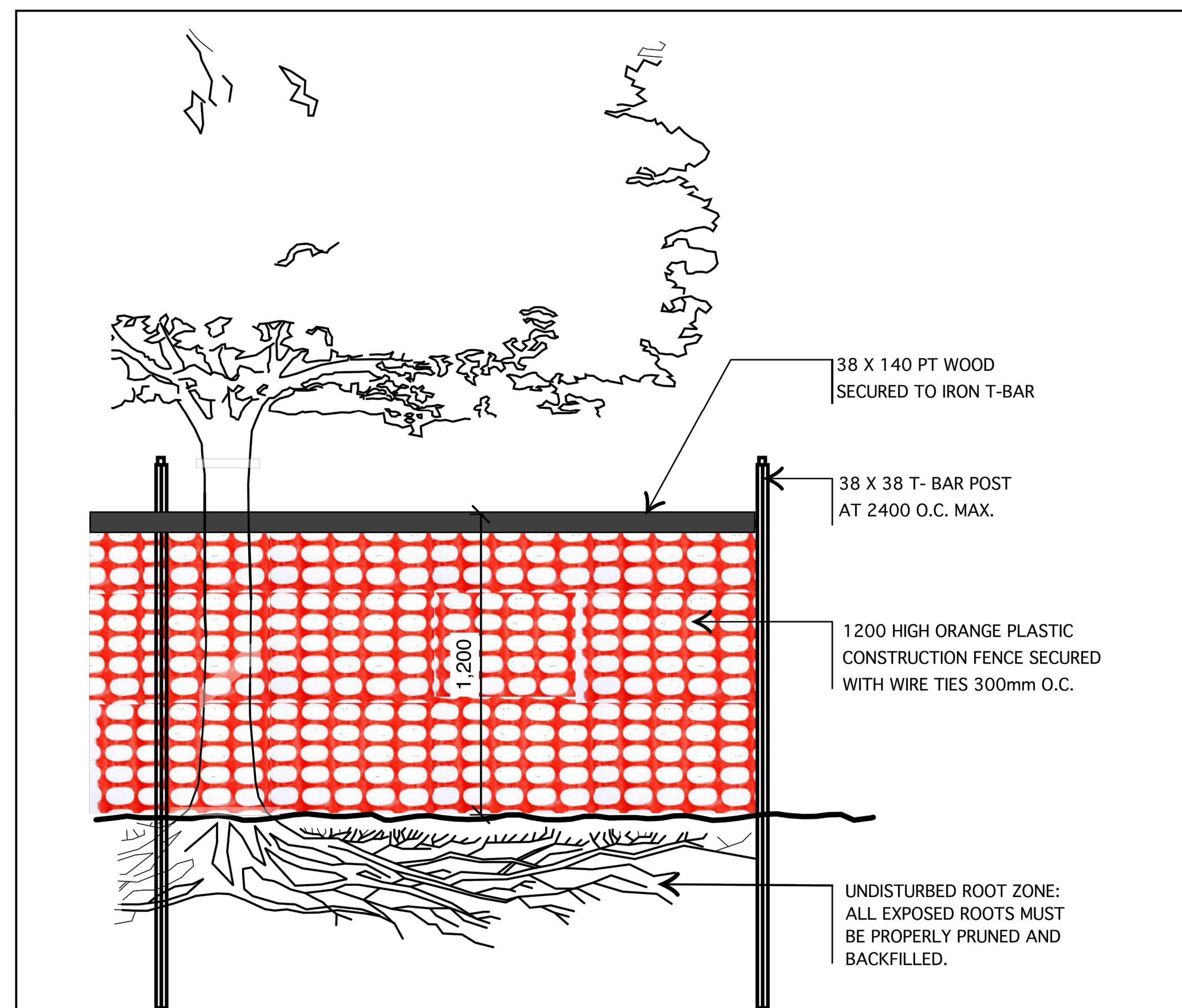
Tree Inventory and Preservation Plan



TREE INVENTORY TABLE

| Tag/Tree No. | Scientific Name | Common Name | DBH (cm) | Crown Diameter (m) | Condition1 | Comments | Ownership | TPZ Radius2 (m) | Tree Preservation Recommendation |
|--------------|-------------------------|--------------------|----------|--------------------|------------|---|------------------|-----------------|----------------------------------|
| 1870 | <i>Acer saccharinum</i> | Silver Maple | 96 | 14 | Good | Good form and vigour; Full healthy crown; Stems fork above great height; Included bark. | Subject Property | N/A | Remove Due to Development |
| 1871 | <i>Acer saccharinum</i> | Silver Maple | 80 | 12 | Good | Good form and vigour; Full healthy crown; Stems fork above breast height; Good stem union; Located two metres northwest of gravel driveway. | Subject Property | N/A | Remove Due to Development |
| 1872 | <i>Acer saccharinum</i> | Silver Maple | 64 | 8 | Fair-Good | Narrow crown; Good vigour; Calloused wounds along stem; Stems fork above breast height; Good stem unions. | Subject Property | N/A | Remove Due to Development |
| 1873 | <i>Acer saccharinum</i> | Silver Maple | 87 | 12 | Good | Good form and vigour; Full healthy crown; Stems fork above breast height; Included bar. | Subject Property | N/A | Remove Due to Development |
| 1874 | <i>Acer saccharinum</i> | Silver Maple | 80 | 10 | Poor-Fair | Moderate dieback and thinning; Approximately 35 percent of canopy dead. | Subject Property | N/A | Remove Due to Development |
| 1875 | <i>Picea glauca</i> | White Spruce | 23 | 6 | Good | Good form and vigour; Crown raised; Vines growing along stem. | Subject Property | N/A | Remove Due to Development |
| 1876 | <i>Pinus strobus</i> | Eastern White Pine | 33 | 7 | Good | Good form and vigour; Crown raised; Vines growing along stem. | Subject Property | N/A | Remove Due to Development |
| 1877 | <i>Pinus strobus</i> | Eastern White Pine | 42 | 8 | Good | Good form and vigour; Crown raised; Vines growing along stem. | Subject Property | N/A | Remove Due to Development |
| 1878 | <i>Juglans nigra</i> | Black Walnut | 27 | 8 | Good | Good form and vigour; Full healthy crown. | Subject Property | N/A | Remove Due to Development |
| 1879 | <i>Picea abies</i> | Norway Spruce | 38 | 8 | Fair-Good | Minor dieback and thinning; Vines growing along stem. | Subject Property | N/A | Remove Due to Development |

- The tree health condition rating was based on factors that could include one or a combination of:
 - Poor Condition – Severe dieback, significant lean, decayed, missing leader, significant disease presence
 - Fair Condition – Moderate dieback and/or lean, limb defects, multiple stems, moderate foliage damage from stress
 - Good Condition – Healthy vigorous growth, no or minor visible defects or damage
- The TPZ is the minimum distance required for tree preservation determined in accordance with standard ISA guidelines.



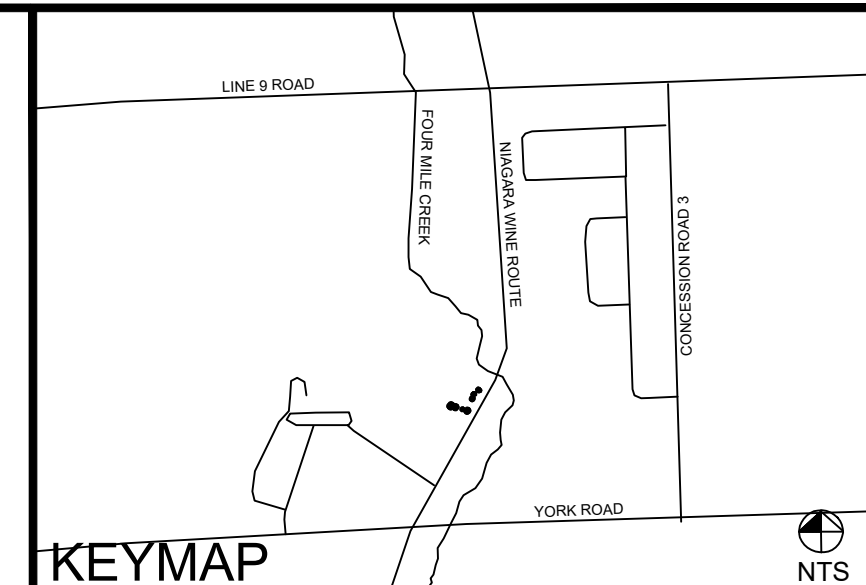
TREE PROTECTION BARRIER NOTES:

- HOARDING TYPE SHOULD BE DETERMINED IN CONSULTATION WITH THE CITY.
- ALL TREE PROTECTION HOARDING SHALL BE IN PLACE AND MUST BE INSPECTED AND APPROVED BY THE CITY PRIOR TO ANY CONSTRUCTION ACTIVITIES.
- ALL ARBORICULTURE WORK SUCH AS PRUNING OF BRANCHES AND ROOTS SHALL BE CONDUCTED BY A CERTIFIED ARBORIST.
- CONSTRUCTION ACTIVITIES, GRADE CHANGES, AND STORAGE OF EQUIPMENT AND MATERIALS ARE NOT ALLOWED WITHIN THE TREE PROTECTION ZONE.
- THIS DRAWING TO BE USED IN CONJUNCTION WITH 'CITY OF GUELPH TREE TECHNICAL MANUAL'.

| Tree Protection Zones | | |
|--|---|--|
| Diameter of Trunk Centimetres at 1.4 m above grade (DBH) | Minimum Tree Protection Zone (TPZ) Distance from trunk, measured in metres. | Potential Rooting Area (PRA) for all trees and TPZ for trees in NHS, parks, open spaces and other significant natural heritage areas. ^{1,2} |
| <10 | 1.2 | 2.4 |
| 10-29 | 1.8 | 3.6 |
| 30-40 | 2.4 | 4.8 |
| 41-50 | 3.0 | 6.0 |
| 51-60 | 3.6 | 7.2 |
| 61-70 | 4.2 | 8.4 |
| 71-80 | 4.8 | 9.6 |
| 81-90 | 5.4 | 10.8 |
| 91-100 | 6.0 | 12.0 |
| >100 | 6 cm per 1 cm DBH | 12 cm per 1 cm DBH |

BEACON ENVIRONMENTAL TREE PROTECTION - ORANGE PLASTIC FENCE DETAIL 1

AUGUST 2014 NTS



LEGEND

- Property Boundary
- 1678 Tree Tag
- Tree Crown
- Minimum Tree Protection Zone
- Tree Location
- Tree to be Removed due to Development

Scale: 1:300

0 5 10 20m

CERTIFIED ARBORIST ISA HOLLY BARSCUM #ON-2506A

BEACON ENVIRONMENTAL

MARKHAM OFFICE 80 MAIN ST NORTH MARKHAM, ON L3P 1X5

T) 905-201-7622 F) 905-201-0639 www.beaconenviro.com

CLIENT: SLEEK DEVELOPMENTS INC.

PROJECT: 308 FOUR MILE CREEK PHASE 2

SHEET TITLE: TREE INVENTORY AND PRESERVATION PLAN

DESIGN BY: ... PROJECT NO: 222403

DRAWN BY: JA FIGURE NO: TP-1

CHECKED BY: HB

DATE: 10 August 2025