



# **Guelph Innovation District (Blocks 1 and 2), Guelph**

## **Tree Inventory and Preservation Plan**

Prepared for:

Fusion Homes  
500 Hanlon Creek Blvd.  
Guelph, ON  
N1C 0A1

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**NATURAL RESOURCE SOLUTIONS INC.**

Aquatic, Terrestrial and Wetland Biologists

**Guelph Innovation District (Blocks 1 and 2), Guelph**  
**Tree Inventory and Preservation Plan**

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## Table of Contents

<b>1.0</b>	<b>Introduction .....</b>	<b>1</b>
<b>2.0</b>	<b>Tree Inventory and Methodology .....</b>	<b>3</b>
<b>3.0</b>	<b>Summary of Tree Inventory Findings.....</b>	<b>5</b>
<b>4.0</b>	<b>Preliminary Tree Retention Analysis .....</b>	<b>6</b>
<b>5.0</b>	<b>Tree Compensation Plan.....</b>	<b>8</b>
<b>6.0</b>	<b>Protection Measures and Recommended Mitigation .....</b>	<b>11</b>
<b>6.1</b>	<b>Prior to Construction .....</b>	<b>11</b>
6.1.1	Timing Windows .....	12
<b>6.2</b>	<b>During Construction.....</b>	<b>13</b>
<b>6.3</b>	<b>Post-Construction .....</b>	<b>13</b>
<b>7.0</b>	<b>Summary.....</b>	<b>14</b>
<b>8.0</b>	<b>References.....</b>	<b>16</b>

## List of Tables

Table 1: Preliminary Retention and Removal Analysis .....	7
Table 2: Recommended Compensation Plan .....	9

## List of Appendices

Appendix I Tree Inventory Data

Appendix II Tree Health and Potential for Structural Failure Assessment Criteria

Appendix III Conditions of Tree Assessment

Appendix IV Tree Data and Summary Tables

## Maps

Map 1. Subject Property and Natural Features

Map 2a-2e. Tree Inventory and Preservation Plan

## 1.0 Introduction

Natural Resource Solutions Inc. (NRSI) was retained by Fusion Homes (“the Client”) to complete a Tree Inventory and Preservation Plan (TIPP) in support of a Block Plan/Draft Plan of Subdivision for a proposed residential development within the Guelph Innovation District (GID) Blocks 1 and 2 in Guelph, Ontario. The GID Blocks 1 and 2 (hereafter referred to as the ‘subject property’) are bound by the Eramosa River in the north and east, Stone Road to the south, and Victoria Road to the west (Map 1).

The subject property is comprised of a diverse mix of natural and cultural communities. It was previously owned by the University of Guelph which had planted thousands of trees (mostly hybrid poplars, willows, and conifers) as part of their study program. These trees have since been removed by the University, which has created a number of open country habitats and mown lawn surrounding the former agriscience buildings. Ongoing maintenance has been required to prevent the cut poplar trees and willows from re-establishing on this site.

As per the City of Guelph Official Plan (2022), Section 4.2 indicates that a TIPP may be required in conjunction with an Environmental Impact Study (EIS) and/or Environmental Implementation Report (EIR) where development or site alteration is proposed within or adjacent to the Natural Heritage System. A Vegetation Compensation Plan, in accordance with the policies of Section 4.1.6.4, shall be required for the replacement of all healthy, non-invasive trees measuring over 10cm Diameter at Breast Height (DBH) that are proposed to be removed as part of development or site alteration.

This TIPP has been prepared in accordance with the Tree Technical Manual (City of Guelph 2019), the City of Guelph By-law (2010)-19058 (City of Guelph 2010), and the City of Guelph Official Plan (City of Guelph 2024). The Tree Technical Manual (2019) was developed by the City to support and supplement existing policies by promoting best practices for tree management, presenting standards for tree-related plans and reports, and promoting the maintenance and enhancement of Guelph’s tree canopy. The Tree By-law states that if an owner wishes to destroy or injure a regulated tree and if none of the exemptions set out in the by-law are applicable, then the owner shall submit the information required in Part 5 of the by-law, including a Landscaping, Replanting and Replacement Plan. Within the By-law, a regulated tree is defined as:

*“a specimen of any species of deciduous or coniferous growing woody perennial plant, supported by a single root system, which has reached, or could have reached a height at least 4.5m from the ground at physiological maturity, is located on a lot that is greater than 0.2 hectares (0.5 acres) in size and has a DBH [diameter at breast height] of at least 10cm”.*

This report provides the findings of the tree inventory, analysis of the proposed development plans against existing health and structural integrity of trees, protection measures for trees to be retained, and recommended compensation and mitigation measures. The tree data and mapping (Map 2a-2e) has been compared to the grading plans prepared by MTE (January 2025). These maps show the tree inventory data against the proposed development plans to determine whether existing trees may be impacted. Avoidance, mitigation, and protection measures for trees were examined to determine which trees would be impacted and which could be retained. The tree removal analysis presented in the following report is based on an estimated area of development and will require updates during the Detailed Design phase.

## 2.0 Tree Inventory and Methodology

An inventory and assessment of all trees  $\geq 10\text{cm}$  in DBH within the property, as well as those along the subject property boundary with the potential to be impacted by construction, was completed by NRSI Certified Arborists and Registered Professional Foresters (RPF) on November 13 and 14 2023, December 6 2023, January 3 2024, and December 6 2024. Individual trees that were  $\geq 10\text{cm}$  in DBH were tagged with a pre-numbered aluminum forestry tag and the locations of trees inventoried were surveyed using a mapping-grade U-Blox Duel Band GNSS Receiver GPS unit as shown on Map 1 and Maps 2a-2d. For off-property and inaccessible trees, the DBH was estimated and the trees were assigned a unique alphanumeric identifier. A complete list of the trees that were assessed and their overall health and potential for structural failure is included in Appendix I.

The following information was recorded for inventoried trees:

- Location;
- Tag number/alphanumeric identifier;
- Species (common and scientific name);
- DBH (cm) of the three largest trunks;
- Number of stems;
- Crown radius (metres);
- General health (excellent, good, fair, poor, very poor, snag);
- Potential for structural failure (improbable, possible, probable, imminent);
- General comments (i.e., disease, aesthetic quality, development constraints, prune to reduce structural failure, sensitivity to development, wildlife use (e.g. woodpecker nests), etc.).

The overall health of each tree and potential for structural failure was assessed based on the criteria outlined in Appendix II (Dunster 2009, Dunster *et al.* 2013). In carrying out these assessments, NRSI has exercised a reasonable standard of care, skill and diligence as would be customarily and normally provided in carrying out these assessments. The assessments have been made using accepted arboricultural techniques. These include a visual examination of each tree for structural defects, scars, external indications of decay such as fungal fruiting bodies, evidence of insect attack, 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 current or planned proximity of property and people. None of the trees examined were

dissected, cored, probed or climbed and detailed root examinations involving excavation were not undertaken. The conditions for this assessment, including restrictions, professional responsibility and third-party liability can be found in Appendix III.

### **3.0 Summary of Tree Inventory Findings**

In total, 844 trees were inventoried, comprising 41 species. Of the trees inventoried and assessed, 514 (61%) are native and 330 (39%) are non-native. A complete list of trees inventoried is provided in Appendix I, and tree locations within the subject property are shown on Maps 1 and 2a-2d.

Appendix IV provides a list of tree species inventoried within the subject property, whether they are native or non-native, their overall health, as well as their potential for structural failure. A majority of the trees inventoried were in fair or good health with a potential for structural failure rating of improbable.

## 4.0 Preliminary Tree Retention Analysis

This preliminary analysis of tree removal and retention is based on the detailed grading plans and anticipated limits of impact (MTE 2025). Updates to the TIPP will be required at the Detailed Design stage of the project. The preliminary tree removal and retention assessment was based on the following considerations;

1. Trees identified as having imminent or probable potential for structural failure and/or are in poor to very poor health and/or are dead within the project limits may be identified for removal where they may pose a safety risk to the adjacent development.
2. Trees that require removal based on the proposed preliminary development plan. This was determined by comparing the trees and their potential root systems to the location of components of the draft plan of development as shown on plans prepared by MHBC (2024) (Maps 2a-2d).

Of the 844 inventoried trees, 765 are recommended for removal. Many of these trees are in direct conflict with the proposed development, or are situated in close proximity to the grading limit and would incur severe root damage as a result of grading.

Table 1 provides a breakdown of the recommended actions. Appendix I includes a list of trees inventoried, their overall health and potential for structural failure, recommended action (retain, remove, etc.) and rationale for removal. Retention and removals are shown on Map 2a-2e, along with their crown radius and tree protection zone (TPZ) distance.

The following categories were included in the analysis:

- **Retain;**
- **Retain – Impact** - these trees have been recommended for retention despite the expectation that a portion of the root system could be affected by the proposed construction activities. This recommendation has been made with the intent of retaining as many existing trees as possible, and anticipating that the affected trees will tolerate the proposed impacts;
- **Remove;**
- **Remove - Retain Stump** – these trees are recommended for removal; however, are either located within a natural feature buffer, outside the development area but may be a hazard to the proposed pedestrian trail, or adjacent to a tree to be

retained. Retention of the stumps will ensure that the root systems and trunks of the adjacent vegetation are not impacted and soil disturbance is minimized.

**Table 1: Preliminary Retention and Removal Analysis**

<b>Proposed Action</b>	<b>Total</b>
Remove	751
Remove – Retain Stump	14
<b>Total Number of Trees to be Removed</b>	<b>765</b>
Retain	74
Retain - Impact	5
<b>Total Number of Trees to be Retained</b>	<b>79</b>
<b>Total Number of Trees Inventoried</b>	<b>844</b>

If any part of the trunk of a tree is located on multiple properties, all owners of those properties must be consulted prior to any impacts to those trees. Thirty trees proposed for removal are located along the property boundary or off-site (i.e. located partly or entirely on the railway or City road right-of-ways). Written permission from the landowners to remove these trees will be required by the City of Guelph to approve this plan. NRSI is not aware of receipt of approval for these removals at this time, and our recommendation for removal should not be inferred to reflect any approval from any parties. Informed consent should also be acquired from the property owner prior to any root pruning or major canopy pruning.

## 5.0 Tree Compensation Plan

Section 5 (h) in the City's tree by-law (2010)-19058 states that *"where three or more trees are proposed for Destruction or Injuring, and where the Inspector so requires, a Landscaping, Replanting and Replacement Plan"* is required. Overall compensation for tree loss is a requirement of the City's By-law (2010)-19058 which notes that *"each tree Destroyed or Injured be replaced with one or more replacements trees to be planted and maintained to the satisfaction of the Inspector in accordance with the Landscaping, Replanting and Replacement Plans approved by the Inspector"* [Section 7 (b)].

For individual trees, the City of Guelph Tree Technical Manual (2019) uses the *Aggregate Caliper Formula* to achieve compensation, whereby the summed caliper of replacement trees must equal the summed diameters of trees to be removed. Where a tree had multiple stems, the measurement of the largest stem was used to determine the number of replacement plantings required.

According to City of Guelph Tree By-law Number (2010)-19058, trees exempt from compensation must have the following site-specific criteria:

- *"A tree having no living tissue, having 70% or more of its crown dead, or being infected by a lethal pathogen, fungus or insect (including the Emerald Ash Borer or the Asian Longhorned Beetle), and where required, a certificate issued by an Arborist, confirming this justification for Destruction or Injuring, has been submitted to an Inspector"* [Part 4, section (a)],
- *"A tree which is Hazardous, and where required, a certificate issued by an Arborist, confirming this justification for Destruction or Injuring, has been submitted to an Inspector"* [Part 4, section (b)]
- *"A specimen of Rhamnus cathartica (common buckthorn), Rhamnus frangula (European or glossy buckthorn), Alnus glutinosa (black alder), Elaeagnus umbellata (autumn olive), or Morus alba (white mulberry)"* [Part 4, section (g)],
- *"A fruit tree that is capable of producing fruit for human consumption"* [Part 4, section (h)].

Trees proposed for removal that have a probable or imminent potential for structural failure and/or have <30% live crown are exempt pursuant to Section 4 of the City's tree By-law and do not require compensation. Table 2 provides a summary of the proposed compensation plan. A

complete list of inventoried trees, including a determination of whether trees require compensation, is provided in Appendix I.

Compensation may be provided in a combination of differently sized replacement trees provided their combined caliper totals no less than 16,343cm. The standard size of replacement trees is 60mm caliper for deciduous trees and 250cm tall for coniferous trees, which can be planted in combination with a mass planting approach of smaller stock and shrubs. Compensation through a shrub replacement ratio of 5:1 should also be discussed with the City in order to achieve the naturalized woodland restoration and enhancement approach on the subject property. Compensation plantings are recommended to be planted firstly within buffer areas to the woodlands to enhance the quality of buffers and the natural areas. Other open areas within the subject property should also be considered where suitable conditions exist. Where space for tree planting within the subject property is insufficient, the City may accept compensation via cash in lieu estimated at \$500 per replacement tree.

**Table 2: Recommended Compensation Plan**

<b>Tree Compensation</b>	<b>Total</b>
Trees with <30% live crown and/or a probable or imminent potential for structural failure and/or fruit trees to be removed (exempt from compensation)	235
Trees with >30% live crown to be removed (excluding exempt trees)	530
<b>Summed DBH (cm) for non-exempt trees (native and non-native)</b>	<b>16,343</b>
<b>Number of 60mm caliper compensation trees required</b>	<b>2,723</b>

Species used for compensation plantings, with the exception of street trees, should be native to the local geographic region and not include any species that are listed as introduced or invasive. The use of non-native species that are sometimes more tolerant of urban conditions (i.e. salt and drought tolerant) may be suitable as long as they do not include invasive species such as Norway Maple (*Acer platanoides*), Tree of Heaven (*Ailanthus altissima*) or Sweet Cherry (*Prunus avium*).

The following will be considered during development of the compensation planting design:

- Plantings limited to native, non-invasive tree and shrub species indigenous to the local geographic area that complement the surrounding natural features;
- Tree and shrub species to be situated in close proximity to roads, driveways and sidewalks should be salt and drought tolerant. Recommended street trees can be found in Schedule D of the Tree Technical Manual (2019);

- Include a diversity of trees from several genus to increase disease and pest tolerance and discourage monocultures (no more than 30% from a single genus, 10% from a single species);
- A variety of species should be identified on the landscape plans so as to avoid a monoculture;
- Avoid ash (*Fraxinus* spp.) species due to the risk of the Emerald Ash Borer (*Agrilus planipennis*);
- All plant material is to conform to the latest edition of the Canadian Nursery Trades Association Specifications and Standards;
- Plantings installed as per specifications outlined in planting plans to be prepared by an OALA, Certified Arborist, RPF or similarly qualified professional;
- Spacing of plant material should account for the ultimate size and form of the selected species and also the purpose of the planting, whether it be for screening, shade, naturalizing, rehabilitation, etc.;
- Special attention to location and height of trees in proximity to utilities and buildings, and;
- Ensure that there is sufficient soil volume for all plantings.

## **6.0 Protection Measures and Recommended Mitigation**

During the construction process, efforts will be made to protect the health and root systems of trees that have been assessed for retention in the plan that is based on the Detailed Design and detailed grading plans. The Client, or their designate (e.g. construction inspector or site manager), must ensure that all employees and contractors are informed of the meaning and importance of tree protection measures and the ways in which trees to be retained are identified.

### **6.1 Prior to Construction**

Temporary Tree Protection Fencing (TPF) should be situated where trees are adjacent to the limit of disturbance/grading. A combined heavy-duty Erosion and Sediment Control (ESC) fence (i.e. silt fence) and TPF is recommended where trees are situated adjacent to the limit of disturbance. TPF may take the form of 1200mm high paige-wire fencing secured to iron T-bar posts at 2400mm on-centre, in accordance with the Tree Technical Manual (Section 4.3 and Tree Protection Zone Fence Detail UF1.1). Signage, as per the City of Guelph Tree Protection Zone Information Signage (UF 1.2), indicating the purpose of protection fencing will be attached to the paige-wire fencing every 20m. Recommended fencing locations as well as fencing and signage detail are shown on Map 2a-2e. The TPF should be installed and maintained by the Developer or its designate.

A phased approach to tree removals and fence installation is recommended for the subject property. Trees proposed for removal along the limit of the natural features should be marked by a Certified Arborist or RPF, as per this report. These removals should be completed under the supervision of a qualified tree professional to ensure no adjacent trees and/or their roots are injured. TPF should then be installed along the limit of development immediately after these tree removals are complete and be inspected by a Certified Arborist, RPF or qualified other to ensure installed appropriately.

TPF should be erected, secure, and complete with signage posted (as identified on Map 2a-2e) prior to the removal of any trees outside of the natural areas or their limits, or any demolition, construction, or other works. Written verification is to be submitted to the City that all of the recommended tree protection measures have been inspected and approved by a Certified Arborist, RPF or qualified other, and installed in accordance with the TIPP.

### **6.1.1 Timing Windows**

#### **Migratory Birds Convention Act**

The removal of trees has the potential to disrupt nesting birds. The *Migratory Birds Convention Act* (MBCA) directs that all tree removals occur outside of the core nesting period for migratory birds as established by the Canadian Wildlife Service (CWS) (Government of Canada 1994, Government of Canada 2022b). This period extends from April 1 – August 31. All developers/consultants/contractors, etc. are legally obligated to carry out due diligence to protect migratory birds from harm during all construction projects. Despite this, certain circumstances may require tree and vegetation removals occur within the nesting period, such as those in which tree removals and construction is associated with the provision of public safety.

#### **Bat Roosting Habitat**

The destruction of Species at Risk (SAR) bats and their habitat is prohibited under the ESA, 2007. Since tree removal has the potential to directly impact candidate bat roosting habitat, it is recommended that this activity occur outside of the active roosting season (April 1 – September 30), to avoid direct impacts to individuals of the species and associated contravention of the Act. Candidate bat roosting trees are shown on Map 1 and Map 2a-2e. Further details regarding the presence of SAR bats and associated habitats can be found in NRSI's EIS (NRSI 2024).

## **6.2 During Construction**

The recommended TPF is to be maintained by the Client or its agents during the entire construction period to ensure that trees being retained (including their root systems) are protected. TPF is to be inspected by a Certified Arborist, RPF or qualified other to ensure it is functioning as intended and that tree and vegetation removal is in accordance with the approved TIPP. A Certified Arborist or RPF is to be on-site during any excavation and vegetation removal activities adjacent to trees to be retained or adjacent to natural features, to ensure that trees identified for retention are not removed or damaged.

Where construction occurs within tree driplines outside of TPF, minor damage (e.g., to limbs or roots) must be pruned using proper arboricultural techniques. Where necessary, the Certified Arborist or RPF on site will prescribe additional tree protection measures or arboricultural practices to support the preservation of trees to be retained. This may include root or limb pruning, measures to reduce soil compaction within the root zone of trees, hand grading, or other arboricultural methods. Should any of the trees intended to be retained be seriously damaged or die as a result of construction activities, the Client staff should be consulted to determine a plan of action, such as treatment or compensation.

Areas protected by TPF shall remain undisturbed and shall not be used for temporary storage, placement or excavation of fill or top soil, the storage of construction materials or equipment, or the storage of debris. Recognizing the root system of a tree often extends well beyond its dripline (i.e., outside the protected area), construction contaminants such as fuels, oils, etc. should be kept clear of areas protected by the TPF.

## **6.3 Post-Construction**

It is recommended that the TPF be removed upon completion of construction and soils are stabilized. Removal of TPF and revegetation will permit increased root development for the remaining trees. Following the completion of on-site works adjacent to the natural areas and retained trees, a Certified Arborist or RPF must inspect all retained trees and their rooting area, and recommend remediation work if conditions require it. A post-construction remediation plan may be required if damage to retained trees is noted. Following remediation activities, if needed, a final assessment should be done to ensure all protocols were met.

## 7.0 Summary

NRSI was retained by Fusion Homes to complete a TIPP for the GID Blocks 1 and 2, located in Guelph, Ontario.

NRSI Certified Arborists and Registered Professional Foresters conducted an inventory and assessment of trees with the potential to be impacted by the proposed development. Of the 844 trees inventoried, 764 trees will require removal based on the current draft plan concept (MHBC 2024). The tree removal analysis presented in this report is based on the current area of development and an updated TIPP will be required at the Detailed Design phase, along with an updated compensation plan.

It is recommended that all proposed tree removals occur in consideration of general timing windows for migratory birds (April 1 through August 31) and the bat active season (April 1 – September 30) (i.e., no removals between April 1 and September 30). As such, it is recommended that tree removals are completed before March 31 or after October 1 to avoid potential contraventions of the ESA.

It is required that written permission from impacted adjacent landowners be sought out and granted in advance of any boundary tree injuries or removals. TPF, combined with ESC fencing, is to be installed prior to any on-site work, in order to provide adequate protection for retained trees and their root systems (as per Map 2a-2e). Prior to the installation of the TPF, trees proposed for removal within and along the limit the natural features should be marked by a Certified Arborist or RPF and removed under the supervision of a qualified tree professional to ensure no adjacent trees and/or their roots are injured. TPF should be installed along the limit of development immediately after these tree removals are complete and be inspected by a Certified Arborist, RPF or qualified other to ensure installed appropriately.

TPF is to be installed prior to any construction work in order to provide adequate protection for retained trees and their root systems, and is to be monitored and maintained by the Developer or their agent throughout the construction phase of the project. All TPF is to conform to the specifications of the Tree Technical Manual (Section 4.3 and Tree Protection Zone Fence Detail UF1.1). Fencing is to be removed once construction is complete and exposed soils are stabilized.

As per the compensation requirements set by the City of Guelph's Tree Technical Manual (2019), compensation may be provided in a combination of differently sized replacement trees

provided their combined caliper totals no less than 16,343cm. Compensation through a shrub replacement ratio of 5:1 should also be discussed with the City in order to achieve the naturalized woodland restoration and enhancement approach on the subject property. Compensation plantings are recommended to be planted firstly within buffer areas to the woodlands to enhance the quality of buffers and the natural areas. Other open areas within the subject property should also be considered where suitable conditions exist. Where space for tree planting within the subject property is insufficient, the City may accept compensation via cash in lieu estimated at \$500 per replacement tree.

## 8.0 References

- City of Guelph. 2010a. The Official Plan of The City of Guelph By-law Number (2010)-19058.
- City of Guelph. 2019, December. City of Guelph Tree Technical Manual.
- City of Guelph. 2024. City of Guelph Official Plan. February 2024 Consolidation.  
<https://guelph.ca/wp-content/uploads/Official-Plan-February-2024-Consolidation.pdf>.
- Dunster, J.A. 2009. Tree Risk Assessment in Urban Areas and the Urban/Rural Interface: Course Manual. Silverton, Oregon: Pacific Northwest Chapter, International Society of Arboriculture.
- Dunster, J.A., E.T. Smiley, N. Matheny, and S. Lily. 2013. Tree Risk Assessment Manual. Champaign, Illinois: International Society of Arboriculture.
- Natural Resource Solutions Inc. 2024. Guelph Innovation District Lands, Blocks 1&2, Guelph Environmental Impact Study. December 2024.
- Ontario Ministry of Environment, Conservation, and Parks (MECP). 2024. Species at Risk in Ontario. Published: 2018-07-12. Updated: 2024-04-19. Available:  
<https://www.ontario.ca/page/species-risk-ontario>
- Ontario Ministry of Natural Resources (OMNR). 2000. Significant Wildlife Habitat Technical Guide. October 2000.
- Ontario Ministry of Natural Resources (OMNR). 2011. Bats and Bat Habitats: Guidelines for Wind Power Projects. First edition. July, 2011.
- Ontario Ministry of Natural Resources and Forestry (MNRF). 2015. Significant Wildlife Habitat Ecoregion 7E Criterion Schedule: Addendum to Significant Wildlife Habitat Technical Guide. Toronto, ON: Ontario Ministry of Natural Resources and Forestry.
- Watt, R.W. and M.C. Caceres. 1999. Managing for Snags in the Boreal Forests of Northeastern Ontario. OMNR. Northeast Science and Technology. Technical Note-016. 20p.

**Appendix I**  
Tree Inventory Data

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Guelph Innovation District (Blocks 1 & 2) Tree Inventory and Preservation Plan  
Tree Inventory Data

Tree Number	Common Name	Scientific Name	Native/Non-native	Stem Count	Summed DBH (cm)	DBH 1 (cm)	DBH 2 (cm)	DBH 3 (cm)	DBH 4 (cm)	DBH 5 (cm)	Crown Radius (m)	Tree Protection Zone (m)	Potential for Structural Failure Rating	Overall Condition	Location	Proposed Action	Rationale for Removal	Compensation Required	Comments
1	White Ash	<i>Fraxinus americana</i>	Native	1	47	47					5.0	3.6	Possible	Poor	Subject Property	Remove	Development	No	Canopy is dead, suckering from trunk.
2	White Ash	<i>Fraxinus americana</i>	Native	1	50	50					3.0	3.6	Improbable	Fair	Subject Property	Remove	Development	Yes	Some epicormic shoots, few dead branches.
3	White Ash	<i>Fraxinus americana</i>	Native	1	57	57					3.0	3.6	Improbable	Fair	Subject Property	Remove	Development	Yes	Epicormic shoots, some dead branches.
4	White Ash	<i>Fraxinus americana</i>	Native	1	43.5	43.5					5.0	3.0	Possible	Poor	Subject Property	Remove	Development	No	Dead upper canopy, suckering from upper branches; pruned to accommodate power line.
5	White Ash	<i>Fraxinus americana</i>	Native	1	42	42					5.0	0	Possible	Dead	Subject Property	Remove	Development	No	Peeling bark, no live buds, evidence of EAB.
6	White Ash	<i>Fraxinus americana</i>	Native	1	34	34					5.0	3	Possible	Very Poor	Subject Property	Remove	Development	No	Dead canopy, bark peel, epicormic branching at base.
7	White Ash	<i>Fraxinus americana</i>	Native	1	49.5	49.5					4.0	3.6	Improbable	Fair	Subject Property	Remove	Development	Yes	Epicormic shoots, few dead branches.
8	White Ash	<i>Fraxinus americana</i>	Native	1	49	49					5.0	3	Possible	Fair	Subject Property	Remove	Development	Yes	Upper canopy has live buds but poor yearly growth; suckering from branches.
9	White Ash	<i>Fraxinus americana</i>	Native	1	39.5	39.5					3.0	3	Possible	Very Poor	Subject Property	Remove	Development	No	Some live buds, trunk bark peeling off completely; EAB evidence; epicormic and basal shoots.
10	Norway Maple	<i>Acer platanoides</i>	Non-native	1	37	37					6.0	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Moderate lean south, corrected for in canopy.
11	Norway Maple	<i>Acer platanoides</i>	Non-native	1	16.5	16.5					5.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Asymmetrical crown due to crowding; few dead branches; tar spots on leaves.
12	Norway Maple	<i>Acer platanoides</i>	Non-native	1	30.5	30.5					5.5	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Healed branch tear off, canopy competition.
13	Norway Maple	<i>Acer platanoides</i>	Non-native	1	18	18					5.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Asymmetrical crown due to crowding; few dead branches; tar spots on leaves.
14	Norway Maple	<i>Acer platanoides</i>	Non-native	1	16	16					6.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Asymmetrical crown due to crowding; few dead branches; tar spots on leaves.
15	Norway Maple	<i>Acer platanoides</i>	Non-native	1	26	26					4.5	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Canopy competition.
16	Norway Maple	<i>Acer platanoides</i>	Non-native	1	17	17					3.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Suppressed canopy.
17	Norway Maple	<i>Acer platanoides</i>	Non-native	1	24	24					6.0	1.8	Probable	Poor	Subject Property	Remove	Development	No	Healed wound towards base of trunk; large wound/burl at mid trunk showing dead wood; minimal leaves on branches.
18	Norway Maple	<i>Acer platanoides</i>	Non-native	1	17.5	17.5					5.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Canopy lean south; asymmetrical canopy; tension bark on trunk.
19	Norway Maple	<i>Acer platanoides</i>	Non-native	1	16.5	16.5					3.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Twisted trunk; epicormic shoots; crowded crown.
20	Norway Maple	<i>Acer platanoides</i>	Non-native	1	25	25					4.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Slight lean south; suppressed canopy.
21	Norway Maple	<i>Acer platanoides</i>	Non-native	1	12	12					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Suppressed crown, twisted trunk.
22	Norway Maple	<i>Acer platanoides</i>	Non-native	1	16.5	16.5					4.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Slight lean south; tension wood present.
23	Norway Maple	<i>Acer platanoides</i>	Non-native	1	43	43					11.0	3.0	Improbable	Fair	Subject Property	Remove	Development	Yes	Asymmetrical crown due to suppression; few dead branches; tar spots on leaves.
24	Norway Maple	<i>Acer platanoides</i>	Non-native	1	23.5	23.5					5.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Corrected lean, compression wood present.
25	Norway Maple	<i>Acer platanoides</i>	Non-native	1	11	11					3.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Canopy competition.
26	Norway Maple	<i>Acer platanoides</i>	Non-native	1	16	16					2.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Slight lean south; suppressed canopy; tension wood present.
27	Norway Maple	<i>Acer platanoides</i>	Non-native	1	25.5	25.5					6.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Healed wound up trunk; few larger dead branches; epicormic shoots; tar spots on leaves.
28	Norway Maple	<i>Acer platanoides</i>	Non-native	1	14	14					2.5	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Slight lean south; tension wood present.
29	Norway Maple	<i>Acer platanoides</i>	Non-native	1	16	16					4.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Curved trunk leaning due to suppression; tar spots on leaves.
30	Norway Maple	<i>Acer platanoides</i>	Non-native	1	26.5	26.5					4.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Good form.
31	Norway Maple	<i>Acer platanoides</i>	Non-native	1	11.5	11.5					5.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Epicormic shoots; small burls.
32	Norway Maple	<i>Acer platanoides</i>	Non-native	1	20.5	20.5					5.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Moderate lean south; asymmetrical crown.
33	Norway Maple	<i>Acer platanoides</i>	Non-native	1	27	27					3.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Small crown due to suppression; slight asymmetrical crown; few epicormic shoots.
34	Norway Maple	<i>Acer platanoides</i>	Non-native	1	27	27					3.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Canopy competition.
35	Norway Maple	<i>Acer platanoides</i>	Non-native	1	17	17					2.5	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Epicormic shoots along trunk; suppressed canopy.
36	Norway Maple	<i>Acer platanoides</i>	Non-native	1	14	14					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Small canopy, very twisted trunk; burls up trunk.
37	Norway Maple	<i>Acer platanoides</i>	Non-native	1	40	40					5.0	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Overextended branches on north side.
38	Norway Maple	<i>Acer platanoides</i>	Non-native	1	43	43					10.0	3.0	Improbable	Fair	Subject Property	Remove	Development	Yes	Leaning toward laneway; crown completely asymmetrical; tar spots on leaves; few dead branches; epicormic shoots.
39	Norway Maple	<i>Acer platanoides</i>	Non-native	1	30.5	30.5					4.5	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Curved trunk growth; asymmetrical canopy.
40	Norway Maple	<i>Acer platanoides</i>	Non-native	1	22	22					4.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Main limbs intertwined with other tree branches; asymmetrical crown; tar spots on leaves.
41	Norway Maple	<i>Acer platanoides</i>	Non-native	1	13	13					4.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Healed open crack on lower trunk; over extended branches on north side.
42	Norway Maple	<i>Acer platanoides</i>	Non-native	1	32	32					6.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Lower branch dieback and tear off; asymmetrical canopy.
43	Norway Maple	<i>Acer platanoides</i>	Non-native	1	43	43					10.0	3.0	Improbable	Fair	Subject Property	Remove	Development	Yes	Asymmetrical crown leaning towards laneway; branches overlapping with other tree branches.
44	Norway Maple	<i>Acer platanoides</i>	Non-native	1	47	47					6.0	3.0	Improbable	Good	Subject Property	Remove	Development	Yes	Moderate interior branch dieback.
45	Norway Maple	<i>Acer platanoides</i>	Non-native	2	47.5	37.5	10				6.0	3.0	Improbable	Poor	Subject Property	Remove	Development	No	Healed trunk crack 2m up, 1m in length; broken top.
46	Norway Maple	<i>Acer platanoides</i>	Non-native	1	22.5	22.5					6.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Twisted trunk; asymmetrical crown.
47	Norway Maple	<i>Acer platanoides</i>	Non-native	1	27	27					6.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Twisted trunk; asymmetrical crown; leaning.
48	Norway Maple	<i>Acer platanoides</i>	Non-native	1	32	32					4.5	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Curved upper trunk; compression and tension bark.
49	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	5	60	24	22	15	13	16	3.5	3.6	Improbable	Good	Subject Property	Remove	Development	Yes	Slight asymmetrical canopy; multi-stem.
50	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	3	49	20	16	13			4.0	3.0	Improbable	Fair	Subject Property	Remove	Development	Yes	Few larger branches dead and fallen; poor attachment.
51	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	1	16	16					3.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Crowded by other trees; self pruning.
52	Norway Maple	<i>Acer platanoides</i>	Non-native	2	34.5	18.5	16				2.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Evidence of large leader failure; branches growing from failures doing well.
53	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	1	26	26					3.5	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Sweep trunk; healthy canopy.
54	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	2	26	16	10				3.0	1.8	Improbable	Poor	Subject Property	Remove	Development	No	Poor canopy structure; suppressed crown.
55	White Ash	<i>Fraxinus americana</i>	Native	1	48.5	48.5					4.0	3.0	Possible	Very Poor	Subject Property	Remove	Development	No	Still has live buds; large branch failures; peeling bark; EAB evidence.
56	Norway Maple	<i>Acer platanoides</i>	Non-native	1	35	35					4.5	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Corrected trunk lean.
57	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	5	59.5	23.5	18	18	14	14	3.0	3.6	Improbable	Fair	Subject Property	Remove	Development	Yes	Some poor attachment of main stems on tru k; self pruning.
58	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	2	37	21.5	16				2.5	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Tight canopy.
59	Norway Maple	<i>Acer platanoides</i>	Non-native	1	10.2	10.2					5.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Leaning trunk; asymmetrical crown; few tar spots on leaves.
60	Norway Maple	<i>Acer platanoides</i>	Non-native	1	16	16					6.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Leaning trunk; asymmetrical crown; few tar spots on leaves.
61	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	1	21	21					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Leaning trunk; asymmetrical crown due to competition; some self pruning.
62	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	3	35	13	12	11			4.0	2.4	Improbable	Poor	Subject Property	Remove	Development	No	Poor attachment of stems; numerous dead branches; only one branch with live needles; heavy lean.
63	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	2	44	23	21				2.0	3.0	Improbable	Poor	Subject Property	Remove	Development	No	Poor canopy health.
64	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	2	44.5	23.5	21				2.0	3.0	Improbable	Poor	Subject Property	Remove	Development	No	Poor canopy health.
65	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	1	18	18					2.0	1.8	Improbable	Poor	Subject Property	Remove	Development	No	Heavy lean south; poor canopy health.
66	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	4	39	14.5	14	11	10		1.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Very suppressed crown.
67	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	4	48	21	14	13	13		3.0	3.0	Improbable	Fair	Subject Property	Remove	Development	Yes	Correct canopy trunk sweeps, canopy suppressed.
68	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	2	26.5	16.5	10				5.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Self pruning.
69	Manitoba Maple	<i>Acer negundo</i>	Native	4	102	36	36	30	26		10.0	6.12	Possible	Fair	Subject Property	Remove	Development	Yes	Poor attachment of main stems; all leaning aggressively toward laneway almost living down; few dead branches.
70	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	4	61	23.5	19	19			3.0	4.2	Improbable	Good	Subject Property	Remove	Development	Yes	Included bark.
71	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	3	52.5	19.5	18	15			2.0	3.6	Improbable	Good	Subject Property	Remove	Development	Yes	Slight lean east.
72	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	2	30	16	14				2.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Dead lower branches; self pruning.
73	Manitoba Maple	<i>Acer negundo</i>	Native	4	75	31.5	28	16	15		4.5	4.8	Improbable	Good	Subject Property	Remove	Development	Yes	Hard lean west.
74	Manitoba Maple	<i>Acer negundo</i>	Native	1	35	35					6.0	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Lean east.
75	Norway Maple	<i>Acer platanoides</i>	Non-native	1	16	16					3.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Fair crown structure.
76	Black Pine	<i>Pinus nigra</i>	Non-native	1	42	42					3.5	3.0	Improbable	Good	Subject Property	Remove	Development	Yes	Normal lower branch dieback.
77	Norway Maple	<i>Acer platanoides</i>	Non-native	1	14.5	14.5					3.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Some poor branch attachment.
78	Norway Maple	<i>Acer platanoides</i>	Non-native	1	16.5	16.5					3.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Slight lean east; asymmetrical canopy.
79	Norway Maple	<i>Acer platanoides</i>	Non-native	1	21	21					6.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Leaning trunk; asymmetrical due to crowding.
80	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	2	32.5	21	12				3.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Some poor branch attachment.

Gulph Innovation District (Blocks 1 & 2) Tree Inventory and Preservation Plan  
Tree Inventory Data

Tree Number	Common Name	Scientific Name	Native/Non-native	Stem Count	Summed DBH (cm)	DBH 1 (cm)	DBH 2 (cm)	DBH 3 (cm)	DBH 4 (cm)	DBH 5 (cm)	Crown Radius (m)	Tree Protection Zone (m)	Potential for Structural Failure Rating	Overall Condition	Location	Proposed Action	Rationale for Removal	Compensation Required	Comments
81	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	5	52	21	18	13	13	11	2.0	3.6	Improbable	Good	Subject Property	Remove	Development	Yes	Slight lean west
82	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	1	11	11					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Large trunk leaning on lower stem
83	White Ash	<i>Fraxinus americana</i>	Native	1	45	45					4.5	3.0	Possible	Poor	Subject Property	Remove	Development	No	Poor, nearly crown/loose bark
85	White Ash	<i>Fraxinus americana</i>	Native	1	33.5	33.5					4.0	2.4	Probable	Very Poor	Subject Property	Remove	Development	No	Peeling bark, evidence of EAB, dead branches
86	White Ash	<i>Fraxinus americana</i>	Native	1	46.5	46.5					4.0	2.0	Possible	Fair	Subject Property	Remove	Development	Yes	Still living, poor overall crown
87	White Ash	<i>Fraxinus americana</i>	Native	1	27	27					2.0	1.8	Probable	Very Poor	Subject Property	Remove	Development	No	Peeling bark, evidence of EAB, dead branches
88	White Ash	<i>Fraxinus americana</i>	Native	1	29.5	29.5					4.0	0	Possible	Dead	Subject Property	Remove	Development	No	Minimal bark left
89	White Ash	<i>Fraxinus americana</i>	Native	1	26	26					4.0	1.8	Probable	Very Poor	Subject Property	Remove	Development	No	Peeling bark, evidence of EAB, dead branches, live basal shoots
90	Northern Catalpa	<i>Catalpa speciosa</i>	Non-native	3	34.5	13.5	11	11			3.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Fair form
91	Black Pine	<i>Pinus nigra</i>	Non-native	1	32	32					4.5	2.4	Improbable	Good	Subject Property, Road ROW	Remove	Development	Yes	Landscape tree
92	Norway Spruce	<i>Picea abies</i>	Non-native	1	48	48					5.5	3.0	Improbable	Good	Subject Property, Road ROW	Remove	Development	Yes	
93	Scots Pine	<i>Pinus sylvestris</i>	Non-native	1	24	24					3.0	1.8	Improbable	Fair	Subject Property, Road ROW	Remove	Development	Yes	Some self pruning, Fair crown structure
94	Black Pine	<i>Pinus nigra</i>	Non-native	2	38	22	16				3.0	2.4	Improbable	Fair	Subject Property, Road ROW	Remove	Development	Yes	Some self pruning, slightly suppressed by other conifers
95	Scots Pine	<i>Pinus sylvestris</i>	Non-native	1	26.5	26.5					2.5	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Good form
96	Scots Pine	<i>Pinus sylvestris</i>	Non-native	1	24.5	24.5					3.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Good form, healthy
97	Scots Pine	<i>Pinus sylvestris</i>	Non-native	1	25	25					4.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Double leader, Fair form
98	Little-leaf Linden	<i>Tilia cordata</i>	Non-native	1	30.5	30.5					4.5	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Multi-stem above DBH
99	American Basswood	<i>Tilia americana</i>	Native	1	30	30					4.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Good form, numerous overlapping stems
100	Balsam Fir	<i>Abies balsamea</i>	Native	1	26.5	26.5					3.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Good form
101	Amur Corktree	<i>Phellodendron amurense</i>	Non-native	1	27	27					3.5	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	
102	Balsam Fir	<i>Abies balsamea</i>	Native	1	25.5	25.5					2.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Good form
103	Amur Corktree	<i>Phellodendron amurense</i>	Non-native	2	31.5	18	14				3.0	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Multi-stem at DBH
104	Balsam Fir	<i>Abies balsamea</i>	Native	1	23.5	23.5					3.0	1.8	Improbable	Excellent	Subject Property	Remove	Development	Yes	Good form, healthy canopy
105	American Basswood	<i>Tilia americana</i>	Native	2	26.5	14.5	12				3.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Larger dead, peeling, poor branch attachment
106	White Ash	<i>Fraxinus americana</i>	Native	1	19	19					2.5	1.8	Possible	Poor	Subject Property	Remove	Development	No	Poor, nearly crown/loose bark
107	White Ash	<i>Fraxinus americana</i>	Native	4	50.5	24	17	10	13		3.0	3.6	Improbable	Fair	Subject Property	Remove	Development	Yes	Few dead branches, good form
108	Eastern White Pine	<i>Pinus strobus</i>	Native	1	17	17					1.7	1.0	Excellent	Fair	Subject Property	Remove	Development	Yes	Good form, healthy vigor
109	White Ash	<i>Fraxinus americana</i>	Native	2	24.5	13	12				2.5	1.8	Improbable	Poor	Subject Property	Remove	Development	No	
110	White Ash	<i>Fraxinus americana</i>	Native	1	16	16					2.5	0	Possible	Dead	Subject Property	Remove	Development	No	EAB
111	Scots Pine	<i>Pinus sylvestris</i>	Non-native	1	20	20					3.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Self pruning, good form
112	American Basswood	<i>Tilia americana</i>	Native	1	19	19					3.5	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Good form, some lower branch tear offs
113	Blue Spruce	<i>Picea pungens</i>	Non-native	1	22	22					2.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Good form
114	Blue Spruce	<i>Picea pungens</i>	Non-native	1	36	36					3.0	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Good form, minor thinning
115	Norway Spruce	<i>Picea abies</i>	Non-native	1	27.5	27.5					3.5	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Moderate lower branch dieback
116	Scots Pine	<i>Pinus sylvestris</i>	Non-native	1	31.5	31.5					4.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Some thinning, self pruning, buckhorn growing under canopy
117	Scots Pine	<i>Pinus sylvestris</i>	Non-native	1	21.5	21.5					3.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Solanum dulcamara vine in lower canopy
118	Scots Pine	<i>Pinus sylvestris</i>	Non-native	1	19	19					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Self pruning, Fair form
119	Eastern White Pine	<i>Pinus strobus</i>	Native	1	28.5	28.5					4.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	One over extended branch growing directly upwards
120	Norway Spruce	<i>Picea abies</i>	Non-native	1	34.5	34.5					4.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Thinner lower crown, overall Fair form
121	Norway Spruce	<i>Picea abies</i>	Non-native	1	42	42					5.5	3.0	Improbable	Fair	Subject Property	Remove	Development	Yes	
122	Norway Maple	<i>Acer platanoides</i>	Non-native	1	17	17					3.5	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Suppressed canopy, hard lean west; broken branches from other trees in canopy
123	Blue Spruce	<i>Picea pungens</i>	Non-native	1	29	29					3.5	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	
124	Norway Maple	<i>Acer platanoides</i>	Non-native	1	27	27					4.5	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Asymmetrical canopy, trunk space competition
125	Siberian Elm	<i>Ulmus pumila</i>	Non-native	1	25	25					0	0	Imminent	Poor	Subject Property	Remove	Development	No	Dead standing, no live crown, all dead branches
126	Norway Maple	<i>Acer platanoides</i>	Non-native	1	30	30					4.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Healing crack up entire trunk, poor branch attachment
127	Norway Maple	<i>Acer platanoides</i>	Non-native	1	17.5	17.5					4.5	1.8	Possible	Fair	Subject Property	Remove	Development	Yes	Canopy suppressed by larger elm
128	Black Pine	<i>Pinus nigra</i>	Non-native	1	16	16					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Poor branch attachment, numerous failed branches; dead lower canopy
129	Norway Maple	<i>Acer platanoides</i>	Non-native	1	11	11					2.0	1.8	Improbable	Poor	Subject Property	Remove	Development	No	Crack up entire trunk; peeling bark; very little live crown; epicormic shoots
130	Siberian Elm	<i>Ulmus pumila</i>	Non-native	2	59.5	39.5	20				3.0	0	Probable	Dead	Subject Property	Remove	Development	No	Tooded canopy, one piece hanging on
131	Siberian Elm	<i>Ulmus pumila</i>	Non-native	1	64	64					8.0	4.2	Probable	Fair	Subject Property	Remove	Development	No	Large branch failures - extremely poor branch attachment
132	Siberian Elm	<i>Ulmus pumila</i>	Non-native	1	22	22					2.5	1.8	Possible	Poor	Subject Property	Remove	Development	No	Large open trunk wound with insect holes
133	Siberian Elm	<i>Ulmus pumila</i>	Non-native	1	37	37					3.0	2.4	Possible	Poor	Subject Property	Remove	Development	No	Large branch failure; very small crown due to crowding and dead branches
134	Norway Maple	<i>Acer platanoides</i>	Non-native	2	31	16.5	15				4.5	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Suppressed canopy, included bark
135	Norway Maple	<i>Acer platanoides</i>	Non-native	1	21.5	21.5					3.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Asymmetrical canopy, suppressed crown
136	Siberian Elm	<i>Ulmus pumila</i>	Non-native	1	41	41					6.0	3.0	Possible	Fair	Subject Property	Remove	Development	Yes	Twisted trunk; leaning crown, large branch failures; numerous dead branches
137	Norway Maple	<i>Acer platanoides</i>	Non-native	1	28	28					4.5	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Asymmetrical canopy
138	Norway Maple	<i>Acer platanoides</i>	Non-native	1	28.5	28.5					5.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Fair spots on leaves; twisted trunk; epicormic shoots
139	Siberian Elm	<i>Ulmus pumila</i>	Non-native	2	42.5	21.5	21				3.0	3.0	Probable	Very Poor	Subject Property	Remove	Development	No	Condominium crack at union, one dead leader
140	Siberian Elm	<i>Ulmus pumila</i>	Non-native	1	33	33					3.5	2.4	Possible	Fair	Subject Property	Remove	Development	Yes	Brown rot on trunk, dead lower branches
141	Norway Maple	<i>Acer platanoides</i>	Non-native	1	14.5	14.5					4.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Twisted trunk; numerous dead branches
142	Norway Maple	<i>Acer platanoides</i>	Non-native	1	15.5	15.5					4.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Moderate lean south, asymmetrical canopy
143	Norway Maple	<i>Acer platanoides</i>	Non-native	1	25	25					6.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Leaning crown, suppressed
144	Siberian Elm	<i>Ulmus pumila</i>	Non-native	1	18	18					0.5	0	Imminent	Dead	Subject Property	Remove	Development	No	No crown, peeling bark, wounds at base
145	Siberian Elm	<i>Ulmus pumila</i>	Non-native	2	88	50	38				8.0	5.4	Probable	Poor	Subject Property	Remove	Development	No	Brown rot up trunk; evidence of major branch failures; small crowns
146	Norway Maple	<i>Acer platanoides</i>	Non-native	1	16	16					3.5	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Lean north; suppressed canopy
147	Siberian Elm	<i>Ulmus pumila</i>	Non-native	1	39	39					5.0	2.4	Possible	Fair	Subject Property	Remove	Development	Yes	Evidence of large branch failures; dead branches
148	Norway Maple	<i>Acer platanoides</i>	Non-native	1	11	11					3.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Suppressed canopy
149	Siberian Elm	<i>Ulmus pumila</i>	Non-native	2	49	29	21				5.0	3.0	Possible	Poor	Subject Property	Remove	Development	No	Large dead canopy branches
150	Siberian Elm	<i>Ulmus pumila</i>	Non-native	1	20.5	20.5					4.0	3.0	Improbable	Fair	Subject Property	Remove	Development	Yes	Evidence of large branch dieback; leaning crown
151	Norway Maple	<i>Acer platanoides</i>	Non-native	1	13.5	13.5					4.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Leaning trunk, poor attachment
152	Norway Maple	<i>Acer platanoides</i>	Non-native	1	15.5	15.5					4.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Suppressed canopy
153	Norway Maple	<i>Acer platanoides</i>	Non-native	1	10.5	10.5					4.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Suppressed canopy
154	Norway Maple	<i>Acer platanoides</i>	Non-native	1	15.5	15.5					4.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Numerous dead branches; leaning crown
155	Siberian Elm	<i>Ulmus pumila</i>	Non-native	3	91.5	32.5	32	27			4.0	6	Possible	Poor	Subject Property	Remove	Development	No	Large dead wood in canopy
156	Siberian Elm	<i>Ulmus pumila</i>	Non-native	1	27.5	27.5					0.5	0	Imminent	Dead	Subject Property	Remove	Development	No	No crown; peeling bark
157	Siberian Elm	<i>Ulmus pumila</i>	Non-native	3	85.5	30.5	31	25			4.0	5.4	Possible	Fair	Subject Property	Remove	Development	Yes	Trunk rub, included bark
158	Norway Maple	<i>Acer platanoides</i>	Non-native	1	20	20					6.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Twisted limbs; leaning crown
159	Norway Maple	<i>Acer platanoides</i>	Non-native	1	24	24					4.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Slight lean north, asymmetrical crown
160	Norway Maple	<i>Acer platanoides</i>	Non-native	1	24	24					6.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Poor branch attachment; growing directly side larger elm
161	Siberian Elm	<i>Ulmus pumila</i>	Non-native	1	49	49					7.0	3.0	Improbable	Good	Subject Property	Remove	Development	Yes	Minimal branch dieback
162	Norway Maple	<i>Acer platanoides</i>	Non-native	1	117.5	117.5					9.0	7.05	Improbable	Fair	Subject Property	Remove	Development	Yes	Some healing wounds on main leaders; evidence of large branch failure; evidence of pruning
163	Norway Maple	<i>Acer platanoides</i>	Non-native	1	10.5	10.5					3.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Planted tree, improper pruning
164	Norway Maple	<i>Acer platanoides</i>	Non-native	1	10	10					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Poorly pruned; numerous dead branches
165																			

Guelph Innovation District (Blocks 1 & 2) Tree Inventory and Preservation Plan  
Tree Inventory Data

Tree Number	Common Name	Scientific Name	Native/Non-native	Stem Count	Summed DBH (cm)	DBH 1 (cm)	DBH 2 (cm)	DBH 3 (cm)	DBH 4 (cm)	DBH 5 (cm)	Radius (cm)	Crown Radius (m)	Tree Protection Zone (m)	Potential for Structural Failure Rating	Overall Condition	Location	Proposed Action	Rationale for Removal	Compensation Required	Comments
172	European Larch	<i>Larix decidua</i>	Non-native	1	33.5	33.5						4.0	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Tons of cones, overall good form.
173	Common Hackberry	<i>Celtis occidentalis</i>	Native	1	19.5	19.5						3.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Good form, fruiting.
174	Eastern White Pine	<i>Pinus strobus</i>	Native	1	30.5	30.5						5.0	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Numerous stems, good form.
175	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	1	12.5	12.5						2.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Good form.
176	Little-leaf Linden	<i>Tilia cordata</i>	Non-native	1	32	32						4.0	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Multi-stem, above DBH.
177	Eastern White Pine	<i>Pinus strobus</i>	Native	1	38	38						4.0	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Over extended lower branches.
178	Siberian Elm	<i>Ulmus pumila</i>	Non-native	1	31	31						4.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Slight lean in trunk, few dead branches.
179	White Ash	<i>Fraxinus americana</i>	Native	1	33.5	33.5						4.0	2.4	Possible	Very Poor	Subject Property	Remove	Development	No	Poor, yearly growth, loose bark, epicormic branches at base.
180	Norway Spruce	<i>Picea abies</i>	Non-native	2	60	31		29				5.0	3.6	Improbable	Fair	Subject Property	Remove	Development	Yes	Some thinner parts of the canopy, overall good form.
181	European Larch	<i>Larix decidua</i>	Non-native	1	37	37						4.0	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Lots of cones.
182	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	5	41	15.5	14	12	13	10	2.0	3.0	Improbable	Good	Subject Property	Remove	Development	Yes	Good form.	
183	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	3	38	14					1.5	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Good form.	
184	Manitoba Maple	<i>Acer negundo</i>	Native	1	30.5	30.5						3.0	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Light lean north.
185	Manitoba Maple	<i>Acer negundo</i>	Native	3	168	70		52	46			8.0	10.08	Improbable	Fair	Subject Property	Remove	Development	Yes	Evidence of recent large branch failures, one stem broken at mid trunk, epicormic shoots, poor attachment.
186	Manitoba Maple	<i>Acer negundo</i>	Native	1	14	14						2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	One dead leader, poor canopy vigor.
187	Norway Maple	<i>Acer platanoides</i>	Non-native	1	38	38						7.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Leaning trunk, asymmetrical crown.
188	Manitoba Maple	<i>Acer negundo</i>	Native	1	53.5	53.5						2.0	3.6	Improbable	Fair	Subject Property	Remove	Development	Yes	Lean south, one dead leader, poor crown form.
189	Norway Maple	<i>Acer platanoides</i>	Non-native	1	23.5	23.5						5.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Growing into trunk of neighboring trees, tar spots on leaves; poor attachment.
190	White Spruce	<i>Picea glauca</i>	Native	1	22.5	22.5						2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Asymmetrical canopy, fair vigor.
191	Manitoba Maple	<i>Acer negundo</i>	Native	1	51	51						11.0	3.6	Improbable	Fair	Subject Property	Remove	Development	Yes	Leaning trunk, asymmetrical crown, epicormic shoots.
192	Manitoba Maple	<i>Acer negundo</i>	Native	1	49.5	49.5						4.0	3.0	Improbable	Fair	Subject Property	Remove	Development	Yes	Torsion in trunk, fungal fruiting bodies in canopy.
193	Manitoba Maple	<i>Acer negundo</i>	Native	2	67	38		29				12.0	4.2	Improbable	Fair	Subject Property	Remove	Development	Yes	Largest stem on ground, tree fallen but still growing; poor form; limbs all over the place but growing.
194	Manitoba Maple	<i>Acer negundo</i>	Native	1	50	50						4.0	3.0	Improbable	Very Poor	Subject Property	Remove	Development	No	Growing parallel to ground, uprooted trunk.
195	Red Maple	<i>Acer rubrum</i>	Native	3	35.5	13	12	11				6.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Numerous smaller stems, epicormic shoots.
196	Norway Spruce	<i>Picea abies</i>	Non-native	1	29.5	29.5						4.0	1.8	Improbable	Excellent	Subject Property	Remove	Development	Yes	Good form, healthy canopy, seedling.
197	White Spruce	<i>Picea glauca</i>	Native	1	22	22						3.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Good form, Manitoba Maple growing at its side causing asymmetrical crown.
198	Eastern White Pine	<i>Pinus strobus</i>	Native	1	46	46						4.0	3.0	Improbable	Fair	Subject Property	Remove	Development	Yes	Larger trunks suckering from lower stem; unusual form.
199	Hawthorn so.	<i>Crataegus so.</i>	Non-native	5	35.5	14			13	12		3.0	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Good form.
200	Black Pine	<i>Pinus nigra</i>	Non-native	3	73.5	26.5	24	23				4.0	4.8	Improbable	Good	Subject Property	Remove	Development	Yes	Loss of inferior branches.
201	Black Walnut	<i>Juglans nigra</i>	Native	1	32.5	32.5						4.0	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Good form.
202	Eastern White Pine	<i>Pinus strobus</i>	Native	1	36	36						4.0	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Form impacted by wind throw, exposed hedgerow tree.
203	European Larch	<i>Larix decidua</i>	Non-native	1	37	37						3.0	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Good form.
204	White Ash	<i>Fraxinus americana</i>	Native	1	33	33						4.0	2.4	Possible	Very Poor	Subject Property	Remove	Development	No	Dense canopy, epicormic shoots.
205	White Spruce	<i>Picea glauca</i>	Native	1	27.5	27.5						3.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Good form.
206	Sugar Maple	<i>Acer saccharum</i>	Native	1	27	27						3.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Dense canopy.
207	White Spruce	<i>Picea glauca</i>	Native	1	29	29						3.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Good form.
208	Norway Spruce	<i>Picea abies</i>	Non-native	6	49	19	16	15	13	10		4.0	3.6	Improbable	Good	Subject Property	Remove	Development	Yes	Good vigor, fair trunk structure.
209	White Ash	<i>Fraxinus americana</i>	Native	1	24.5	24.5						3.0	0	Possible	Dead	Subject Property	Remove	Development	No	No live buds, peeled bark, EAB evidence.
210	White Ash	<i>Fraxinus americana</i>	Native	1	27.5	27.5						4.0	0	Possible	Dead	Subject Property	Remove	Development	No	EAB.
211	White Ash	<i>Fraxinus americana</i>	Native	1	28	28						3.0	1.8	Possible	Very Poor	Subject Property	Remove	Development	No	Slight lean, aggressive live basal sheets; no live canopy; peeling bark, signs of EAB.
212	White Ash	<i>Fraxinus americana</i>	Native	1	18.5	18.5						3.0	0	Possible	Dead	Subject Property	Remove	Development	No	EAB.
213	Sugar Maple	<i>Acer saccharum</i>	Native	1	29.5	29.5						3.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Some poor branch attachment, overall good form.
214	Sugar Maple	<i>Acer saccharum</i>	Native	1	32	32						3.0	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Good form, healthy vigor.
215	White Ash	<i>Fraxinus americana</i>	Native	1	22.5	22.5						0	0	Possible	Dead	Subject Property	Remove	Development	No	No live crown, evidence of EAB, peeled bark.
216	White Ash	<i>Fraxinus americana</i>	Native	1	31.5	31.5						3.5	2.4	Possible	Very Poor	Subject Property	Retain	Development	No	Epicormic shoots at base.
217	White Ash	<i>Fraxinus americana</i>	Native	1	31.5	31.5						5.0	0	Possible	Dead	Subject Property	Remove	Hazard Mitigation	No	No live crown, evidence of EAB, peeling bark.
218	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	1	38.5	15		10				2.5	2.4	Improbable	Fair	Subject Property	Retain	Development	Yes	Growing adjacent to structure.
219	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	2	33.5	20	14					1.0	2.4	Improbable	Fair	Subject Property	Retain	Development	Yes	Wounds up entire side of stems; right against building; otherwise looks good.
220	Northern Red Oak	<i>Quercus rubra</i>	Native	1	42	42						5.0	3.0	Improbable	Good	Subject Property	Remove	Development	Yes	Good form.
221	Sugar Maple	<i>Acer saccharum</i>	Native	1	31.5	31.5						4.0	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Good form.
222	Northern Red Oak	<i>Quercus rubra</i>	Native	1	36.5	36.5						4.5	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Good form.
223	Northern Red Oak	<i>Quercus rubra</i>	Native	1	27.5	27.5						4.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Good form; few dead branches.
224	Sugar Maple	<i>Acer saccharum</i>	Native	1	32.5	32.5						6.0	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Good form.
225	Eastern White Pine	<i>Pinus strobus</i>	Native	1	26.5	26.5						4.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	One lower branch over extended.
226	Sugar Maple	<i>Acer saccharum</i>	Native	1	31	31						5.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Dead leaders; peeling bark; evidence of recent large branch failure.
227	Sugar Maple	<i>Acer saccharum</i>	Native	1	22	22						2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Some poor branch attachment; overall good form.
228	White Ash	<i>Fraxinus americana</i>	Native	1	38	38						4.5	0	Possible	Dead	Subject Property	Remove	Development	No	EAB.
229	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	2	26	14	12					1.5	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Growing against fence; full crown.
230	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	1	16.5	16.5						2.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Cedar hedgerow.
231	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	2	24.5	12.5	12					1.5	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Growing against fence; full crown.
232	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	2	21	11	10					2.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Cedar hedgerow.
233	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	2	27.9	16.5	11					2.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Cedar hedgerow.
234	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	2	22.5	12.5	10					1.5	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Growing against fence; full crown.
235	Amur Corktree	<i>Phellodendron amurense</i>	Non-native	1	35	35						4.0	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Multi-stem above DBH.
236	Amur Corktree	<i>Phellodendron amurense</i>	Non-native	1	19.5	19.5						4.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Good form.
237	Amur Corktree	<i>Phellodendron amurense</i>	Non-native	2	24	12.5	12					3.5	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Landscape tree.
238	Amur Corktree	<i>Phellodendron amurense</i>	Non-native	3	61.5	28	18	16				4.0	4.2	Improbable	Good	Subject Property	Remove	Development	Yes	Good form; few dead trees.
239	Ohio Buckeye	<i>Aesculus glabra</i>	Non-native	1	22.5	22.5						3.5	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Landscape tree.
240	Ohio Buckeye	<i>Aesculus glabra</i>	Non-native	1	22	22						3.5	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Epicormic shoots.
241	Ohio Buckeye	<i>Aesculus glabra</i>	Non-native	1	29.5	29.5						4.5	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Some peeling bark at base, few dead branches; overall good form.
242	Little-leaf Linden	<i>Tilia cordata</i>	Non-native	1	29.5	29.5						3.5	1.8	Improbable	Good	Subject Property	Retain	Development	Yes	Landscape tree.
243	American Basswood	<i>Tilia americana</i>	Native	10	50	20	15	15				2.0	3.0	Improbable	Fair	Subject Property	Retain	Development	Yes	Coppiced growth with numerous stems; full crown with high vigor; one dead stem.
244	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	4	52	18	17	17				3.0	3.6	Improbable	Good	Subject Property	Retain	Development	Yes	Good form.
245	White Spruce	<i>Picea glauca</i>	Native	1	29	29						4.0	1.8	Improbable	Good	Subject Property	Retain	Development	Yes	Good form, some minor thinning.
246	Sugar Maple	<i>Acer saccharum</i>	Native	1	31	31						6.0	2.4	Improbable	Good	Subject Property	Retain	Development	Yes	Good form; evidence of pruning, epicormic growth.
247	Sugar Maple	<i>Acer saccharum</i>	Native	1	32.5	32.5						3.5	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Large full crown, good form.
248	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	21	21						1.5	1.8	Probable	Very Poor	Subject Property	Remove	Development	No	Only basal shoots alive, EAB.
249	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	18.5	18.5						3.0	0	Probable	Dead	Subject Property	Remove	Development	No	Little to no bark left; large cracks up deadwood; branch failures.
250	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	16	16						2.5	1.8	Probable	Very Poor	Subject Property	Remove	Development	No	Only epicormic shoots alive.
251	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	12.5	12.5						3.0	1.8	Probable	Very Poor	Subject Property	Remove	Development	No	Main tree dead; peeling bark; evidence of EAB, failed branches; live basal shoots.
252	American Elm	<i>Ulmus americana</i>	Native	2	58	30	28													

Guelph Innovation District (Blocks 1 & 2) Tree Inventory and Preservation Plan  
Tree Inventory Data

Tree Number	Common Name	Scientific Name	Native/ Non-native	Stem Count	Summed DBH (cm)	DBH 1 (cm)	DBH 2 (cm)	DBH 3 (cm)	DBH 4 (cm)	DBH 5 (cm)	Crown Radius (m)	Tree Protection Zone (m)	Potential for Structural Failure Rating	Overall Condition	Location	Proposed Action	Rationale for Removal	Compensation Required	Comments
254	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	37	37					4.0	2.4	Probable	Very Poor	Subject Property	Remove	Development	No	EAB; advanced crown dieback; missing bark; epicormic shoots.
255	Thornless Honey Locust	<i>Gleditsia triacanthos var. inermis</i>	Non-native	1	28.5	28.5					4.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Good form.
256	Thornless Honey Locust	<i>Gleditsia triacanthos var. inermis</i>	Non-native	1	24	24					3.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Erect form; full crown.
257	Thornless Honey Locust	<i>Gleditsia triacanthos var. inermis</i>	Non-native	1	27	27					3.5	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Dense crown; good vigor.
258	Thornless Honey Locust	<i>Gleditsia triacanthos var. inermis</i>	Non-native	1	22.5	22.5					4.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Double leader; good form.
259	Thornless Honey Locust	<i>Gleditsia triacanthos var. inermis</i>	Non-native	1	25	25					4.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Dense crown; good vigor.
260	Thornless Honey Locust	<i>Gleditsia triacanthos var. inermis</i>	Non-native	1	19	19					4.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Good form.
261	Black Pine	<i>Pinus nigra</i>	Non-native	2	45	25					3.0	0	Possible	Dead	Subject Property	Remove	Development	No	Crown intact; recently dead.
262	Scots Pine	<i>Pinus sylvestris</i>	Non-native	1	30.5	30.5					4.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Some thinning; overall form.
263	Norway Spruce	<i>Picea abies</i>	Non-native	1	41	41					4.0	3.0	Improbable	Good	Subject Property	Remove	Development	Yes	Full vigorous crown; short and wide stature.
264	Eastern White Pine	<i>Pinus strobus</i>	Native	1	24	24					4.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Slightly thinner crown but overall good form.
265	Manitoba Maple	<i>Acer negundo</i>	Native	3	55.5	22.5	15	18			3.5	3.6	Improbable	Fair	Subject Property	Remove	Development	Yes	Dense large crown; high vigor.
266	Manitoba Maple	<i>Acer negundo</i>	Native	2	86	52	46				9.0	6	Probable	Fair	Subject Property	Remove	Development	No	Numerous large wounds on main branches; aggressive epicormic shoots; numerous dead branches.
267	Manitoba Maple	<i>Acer negundo</i>	Native	2	39	27.5	12				5.0	2.4	Possible	Fair	Subject Property	Remove	Development	Yes	Larger stem with 45 degree lean north; basal wounds; high crown vigor.
268	Eastern Cottonwood	<i>Populus deltoides</i>	Native	1	21.5	21.5					3.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Good form.
269	Manitoba Maple	<i>Acer negundo</i>	Native	1	13.5	13.5					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Epicormic shoots; high vigor.
270	Manitoba Maple	<i>Acer negundo</i>	Native	2	34	22					3.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Wounds up tree; possible wildlife feeding; surface roots.
271	Manitoba Maple	<i>Acer negundo</i>	Native	1	16	16					3.5	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	High vigor; slightly suppressed.
272	Eastern Cottonwood	<i>Populus deltoides</i>	Native	2	34	22.5	12				4.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Few dead branches; Fair form.
273	American Basswood	<i>Tilia americana</i>	Native	1	15	15					3.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Pistol butt over dirt mound; smaller stem at 70 degree angle.
274	American Basswood	<i>Tilia americana</i>	Native	3	36	14.5		10			5.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Growing on dirt mound; overall Fair form.
275	American Basswood	<i>Tilia americana</i>	Native	1	11	11					2.0	1.8	Improbable	Poor	Subject Property	Remove	Development	No	Heavily suppressed to north; crown asymmetrical; crown dieback.
276	Manitoba Maple	<i>Acer negundo</i>	Native	1	10.5	10.5					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Growing out of dirt mound; twisted trunk at base; numerous dead branches.
277	Manitoba Maple	<i>Acer negundo</i>	Native	1	17	17					2.5	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Epicormic shoots throughout trunk; on edge of steep small mound.
278	American Basswood	<i>Tilia americana</i>	Native	3	35.5	14	11	11			3.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Growing out of dirt mound; one stem has signs of pistol butt; otherwise good form.
279	American Basswood	<i>Tilia americana</i>	Native	4	34	13.5	11	10	10		4.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Generally suppressed crown; weak upright attachment between stems.
280	American Basswood	<i>Tilia americana</i>	Native	1	10.5	10.5					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Asymmetrical crown due to crowding; slight pistol butt; good crown form.
281	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	2	34.5	18	17				2.0	2.4	Possible	Poor	Subject Property	Remove	Development	No	Crown dieback; EAB; extensive epicormic shoots.
282	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	12.5	12.5					2.0	1.8	Possible	Very Poor	Subject Property	Remove	Development	No	Main stem dead; no live buds; live basal shoots; peeling bark.
283	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	11.5	11.5					2.0	1.8	Possible	Poor	Subject Property	Remove	Development	No	Crown dieback; EAB; epicormic shoots; trunk wounds.
284	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	12.5	12.5					3.0	1.8	Probable	Very Poor	Subject Property	Remove	Development	No	Main stem dead; peeling bark; evidence of EAB; live basal shoots.
285	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	15.5	15.5					2.0	1.8	Possible	Poor	Subject Property	Remove	Development	No	Crown dieback; EAB; epicormic shoots; trunk wounds.
286	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	14.5	14.5					3.0	1.8	Probable	Poor	Subject Property	Remove	Development	No	Wounds up trunk; cankers; majority of crown dead.
287	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	12	12					1.5	1.8	Possible	Poor	Subject Property	Remove	Development	No	Crown dieback; EAB; epicormic shoots; trunk wounds.
288	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	12	12					1.0	1.8	Probable	Poor	Subject Property	Remove	Development	No	Wounds up trunk; cankers; majority of crown dead; peeling bark; evidence of EAB.
289	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	10.5	10.5					1.5	1.8	Possible	Poor	Subject Property	Remove	Development	No	Crown dieback; EAB; epicormic shoots; trunk wounds.
290	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	13	13					2.0	1.8	Probable	Very Poor	Subject Property	Remove	Development	No	Main stem dead; peeling bark; evidence of EAB; live basal shoots.
291	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	15.5	15.5					1.5	1.8	Possible	Poor	Subject Property	Remove	Development	No	EAB; epicormic shoots; trunk wounds.
292	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	3	39	16	12	11			3.0	2.4	Probable	Very Poor	Subject Property	Remove	Development	No	Main stem dead; peeling bark; evidence of EAB; live basal shoots.
293	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	11	11					1.0	1.8	Possible	Poor	Subject Property	Remove	Development	No	EAB; epicormic shoots; trunk wounds.
294	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	11.5	11.5					1.0	1.8	Probable	Very Poor	Subject Property	Remove	Development	No	Main stem dead; peeling bark; evidence of EAB; live basal shoots; main stem lost top.
295	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	3	40	15	15	15			1.5	2.4	Possible	Poor	Subject Property	Remove	Development	No	EAB; epicormic shoots; trunk wounds.
296	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	2	29.5	15	15				2.0	1.8	Probable	Very Poor	Subject Property	Remove	Development	No	Main stem dead; peeling bark; evidence of EAB; live basal shoots; main stem lost top.
297	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	2	26	14	12				2.0	1.8	Possible	Poor	Subject Property	Remove	Development	No	EAB; epicormic shoots; trunk wounds.
298	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	2	24.5	13	12				1.5	1.8	Possible	Poor	Subject Property	Remove	Development	No	EAB; epicormic shoots; trunk wounds; one leader broken.
299	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	16	16					3.0	1.8	Probable	Poor	Subject Property	Remove	Development	No	Main stem dead; peeling bark; evidence of EAB; live basal shoots.
300	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	11.5	11.5					1.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Epicormic shoots; trunk wounds.
301	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	12	12					1.5	1.8	Possible	Poor	Subject Property	Remove	Development	No	EAB; epicormic shoots; trunk wounds.
302	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	11	11					3.0	1.8	Possible	Poor	Subject Property	Remove	Development	No	Main stem dead; peeling bark; evidence of EAB; live basal shoots.
303	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	15	15					1.5	1.8	Possible	Poor	Subject Property	Remove	Development	No	EAB; epicormic shoots; trunk wounds; leader broken at 2m.
304	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	15	15					1.5	1.8	Possible	Poor	Subject Property	Remove	Development	No	EAB; epicormic shoots; trunk wounds.
305	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	14.5	14.5					4.0	1.8	Possible	Poor	Subject Property	Remove	Development	No	Peeling bark; evidence of EAB; aggressive basal shoots; minimal buds.
306	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	14.5	14.5					2.0	1.8	Possible	Poor	Subject Property	Remove	Development	No	EAB; epicormic shoots; trunk wounds.
307	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	13	13					1.0	1.8	Possible	Very Poor	Subject Property	Remove	Development	No	EAB; epicormic shoots; trunk wounds.
308	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	11.5	11.5					2.0	1.8	Probable	Poor	Subject Property	Remove	Development	No	Peeling bark; evidence of EAB; aggressive basal shoots; minimal buds.
309	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	2	31.5	16.5	15				3.0	2.4	Possible	Very Poor	Subject Property	Remove	Development	No	EAB; epicormic shoots; trunk wounds; one leader broken.
310	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	2	30	17	13				2.0	2.4	Probable	Poor	Subject Property	Remove	Development	No	Peeling bark; evidence of EAB; aggressive basal shoots; minimal buds.
311	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	14	14					1.5	1.8	Possible	Poor	Subject Property	Remove	Development	No	EAB; epicormic shoots; trunk wounds.
312	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	3	48	20	16	12			2.0	3.0	Possible	Poor	Subject Property	Remove	Development	No	EAB; epicormic shoots; trunk wounds.
313	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	3	66	29.5	18	19			6.0	4.2	Probable	Poor	Subject Property	Remove	Development	No	Peeling bark; evidence of EAB; aggressive basal shoots; minimal buds; broken off leaders.
314	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	25	25					2.0	1.8	Possible	Poor	Subject Property	Remove	Development	No	EAB; epicormic shoots; trunk wounds.
315	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	2	36	21	15				5.0	2.4	Probable	Very Poor	Subject Property	Remove	Development	No	Peeling bark; evidence of EAB; aggressive basal shoots; minimal buds; broken off leaders.
316	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	2	21	11	10				3.0	1.8	Possible	Poor	Subject Property	Remove	Development	No	EAB; epicormic shoots; trunk wounds; trunk leaning.
317	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	2	25.5	14.5	11				4.0	1.8	Probable	Poor	Subject Property	Remove	Development	No	Peeling bark; evidence of EAB; aggressive basal shoots; minimal buds; numerous dead branches.
318	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	15	15					1.5	1.8	Possible	Poor	Subject Property	Remove	Development	No	EAB; epicormic shoots; trunk wounds.
319	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	2	27	14	13				2.0	1.8	Possible	Poor	Subject Property	Remove	Development	No	EAB; epicormic shoots; trunk wounds; one leader broken.
320	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	2	33.5	21	13				4.0	2.4	Probable	Poor	Subject Property	Remove	Development	No	Peeling bark; evidence of EAB; aggressive basal shoots; minimal buds; numerous dead branches; one leader topped.
321	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	2	47	27.5	20				3.5	3.0	Possible	Poor	Subject Property	Remove	Development	No	EAB; epicormic shoots; trunk wounds; large crown.
322	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	10	10					1.5	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Good form; some dead branches.

Guelph Innovation District (Blocks 1 & 2) Tree Inventory and Preservation Plan  
Tree Inventory Data

Tree Number	Common Name	Scientific Name	Native/ Non-native	Stem Count	Summed DBH (cm)	DBH 1 (cm)	DBH 2 (cm)	DBH 3 (cm)	DBH 4 (cm)	DBH 5 (cm)	Crown Radius (m)	Tree Protection Zone (m)	Potential for Structural Failure Rating	Overall Condition	Location	Proposed Action	Rationale for Removal	Compensation Required	Comments
323	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	14	14					1.5	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Full crown, cracks in trunk.
324	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	3	64	23	22	19			3.0	4.2	Improbable	Poor	Subject Property	Remove	Development	No	Peeling bark; majority of canopy dead; live basal shoots.
325	Eastern White Pine	<i>Pinus strobus</i>	Native	1	30	30					5.0	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Good form.
326	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	2	51	26.5	25				4.0	3.6	Improbable	Fair	Subject Property	Remove	Development	Yes	Large full crown, dense conflicting branches
327	Thornless Honey Locust	<i>Gleditsia triacanthos</i> var. <i>inermis</i>	Non-native	1	19.5	19.5					4.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Good form, few dead branches.
328	Sugar Maple	<i>Acer saccharum</i>	Native	1	23	23					3.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Good form.
329	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	14	14					1.5	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Good vigor, trunk wounds.
330	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	11	11					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Slight pestal built at base overall good form.
331	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	2	34	19	15				3.0	2.4	Possible	Poor	Subject Property	Remove	Development	No	Crown dieback, large trunk wound.
332	Norway Spruce	<i>Picea abies</i>	Non-native	1	43.5	43.5					6.0	3.0	Improbable	Fair	Subject Property	Remove	Development	Yes	Some self thinning; overall good form.
333	Scots Pine	<i>Pinus sylvestris</i>	Non-native	2	43	30	13				3.0	3.0	Improbable	Good	Subject Property	Remove	Development	Yes	Relatively short tree with wide crown, lower crown branches retained.
334	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	39	39					3.0	0	Probable	Dead	Subject Property	Remove	Development	No	No live crown; bark peeling completely off; all branches dead; evidence of EAB.
335	American Elm	<i>Ulmus americana</i>	Native	1	45.5	45.5					5.0	3.0	Improbable	Fair	Subject Property	Remove	Development	Yes	Shallow cavity at 1.5m, moderate response growth; crown asymmetrical, dying interior twigs.
336	Eastern White Pine	<i>Pinus strobus</i>	Native	1	32	32					4.0	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Needles slightly yellow, overall good form.
337	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	35.5	35.5					5.0	2.4	Improbable	Poor	Subject Property	Remove	Development	No	Minimal live crown; dead branches; evidence of EAB; peeling bark.
338	Sugar Maple	<i>Acer saccharum</i>	Native	1	30	30					2.5	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Healthy vigorous crown with ascending branches.
339	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	28.5	28.5					4.0	1.8	Possible	Very Poor	Subject Property	Remove	Development	No	Half of bark missing; most of crown intact; epicormic shoots; crown dieback.
340	Amur Corktree	<i>Phellodendron amurense</i>	Non-native	4	39.5	15	12	13	13		4.0	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Good form; multiple leaders.
341	Amur Corktree	<i>Phellodendron amurense</i>	Non-native	1	16	16					2.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Low branching tree, shrubby form; good vigor.
342	Amur Corktree	<i>Phellodendron amurense</i>	Non-native	4	41	14.5	15	12	12		4.0	3.0	Improbable	Good	Subject Property	Remove	Development	Yes	Few dead branches; overall good form.
343	Amur Corktree	<i>Phellodendron amurense</i>	Non-native	2	26	14	12				2.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Low spreading branches; shrubby form; good vigor.
344	Amur Corktree	<i>Phellodendron amurense</i>	Non-native	1	12.5	12.5					3.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Few dead branches; good form.
345	Amur Corktree	<i>Phellodendron amurense</i>	Non-native	3	40.5	14.5	13	14			2.0	3.0	Improbable	Good	Subject Property	Remove	Development	Yes	Competition with buckthorn; low spreading crown; good vigor.
346	Amur Corktree	<i>Phellodendron amurense</i>	Non-native	1	21	21					3.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Good form.
347	Amur Corktree	<i>Phellodendron amurense</i>	Non-native	3	37	14	12	11			2.0	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Competing with buckthorn; shrubby form; good vigor.
348	Amur Corktree	<i>Phellodendron amurense</i>	Non-native	3	46	18	14	15			4.0	3.0	Improbable	Good	Subject Property	Remove	Development	Yes	Few dead branches; overall good form.
349	Manitoba Maple	<i>Acer negundo</i>	Native	8	82	29	34	19	16		6.0	5.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Coppiced growth, large spreading crown; stems weakly attached at base, high vigor, growing through fence.
350	Manitoba Maple	<i>Acer negundo</i>	Native	3	32	11	11				2.5	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Coppiced growth, high vigor, 10+ multi-stems.
351	Willow sp.	<i>Salix</i> sp.	Native	4	41.5	14.5	16	12	10		5.0	3.0	Improbable	Good	Subject Property	Remove	Development	Yes	Good form.
352	Willow sp.	<i>Salix</i> sp.	Native	7	51.5	19.5	18	15	15		2.5	3.6	Improbable	Fair	Subject Property	Remove	Development	Yes	High vigor; coppiced growth; numerous multi-stems.
353	Willow sp.	<i>Salix</i> sp.	Native	8	51	18.5	18	15			4.0	3.6	Improbable	Good	Subject Property	Remove	Development	Yes	Numerous stems; good form.
354	Willow sp.	<i>Salix</i> sp.	Native	4	71	25.5	21	25			4.8	3.5	Improbable	Fair	Subject Property	Remove	Development	Yes	Multi stemmed at base, high vigor.
355	Eastern Cottonwood	<i>Populus deltoides</i>	Native	1	16.5	16.5					4.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Slight lean; poor branch attachment; asymmetrical crown.
356	Siberian Elm	<i>Ulmus pumila</i>	Non-native	1	19	19					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Leaning towards pond; willow branches up on it.
357	Eastern Cottonwood	<i>Populus deltoides</i>	Native	1	10	10					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Slight lean, fair form.
358	Willow sp.	<i>Salix</i> sp.	Native	4	62.5	25	17	21			3.0	4.2	Improbable	Fair	Subject Property	Remove	Development	Yes	Multi-stem trunks with weak attachment; high crown vigor; epicormic shoots.
359	Willow sp.	<i>Salix</i> sp.	Native	3	51.5	19.5	16	17			3.0	3.6	Improbable	Good	Subject Property	Remove	Development	Yes	Good form, some poor branch attachment.
360	Willow sp.	<i>Salix</i> sp.	Native	1	11	11					1.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Good form.
361	Willow sp.	<i>Salix</i> sp.	Native	1	11	11					1.5	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Dieback of lower crown, ascending multi-stems.
362	Willow sp.	<i>Salix</i> sp.	Native	3	50.5	19.5	17	15			2.5	3.6	Improbable	Fair	Subject Property	Remove	Development	Yes	High vigor, ascending codominant stems with included bark.
363	Eastern Cottonwood	<i>Populus deltoides</i>	Native	1	10.2	10.2					2.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Good form.
364	Willow sp.	<i>Salix</i> sp.	Native	2	48	30	18				2.5	3.0	Improbable	Good	Subject Property	Remove	Development	Yes	Great vigor, erect form.
365	Willow sp.	<i>Salix</i> sp.	Native	11	67	24.5	25	18			7.0	4.2	Improbable	Good	Subject Property	Remove	Development	Yes	Numerous smaller stems; good form.
366	Manitoba Maple	<i>Acer negundo</i>	Native	1	24.5	24.5					2.5	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Good crown vigor; full crown.
367	Willow sp.	<i>Salix</i> sp.	Native	2	33.5	17	17				2.5	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Good vigor.
368	Little-leaf Linden	<i>Tilia cordata</i>	Non-native	1	29.5	29.5					3.5	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Full round vigorous crown; epicormic shoots.
369	Little-leaf Linden	<i>Tilia cordata</i>	Non-native	1	28	28					4.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Evidence of pruning, good form.
370	Little-leaf Linden	<i>Tilia cordata</i>	Non-native	1	28	28					4.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Epicormic shoots; full vigorous crown.
371	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	21	21					4.0	1.8	Possible	Very Poor	Subject Property	Remove	Development	No	Main stem dead; bark almost completely peeled off; large live basal shoots.
372	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	1	12	12					1.5	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Vigorous crown, growing along fence line.
373	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	2	32.5	20	13				4.0	2.4	Possible	Poor	Subject Property	Remove	Development	No	Majority of pain stem dead; peeling bark; dead limbs; live large epicormic growth.
374	Common Apple	<i>Malus pumila</i>	Non-native	1	16	16					2.0	1.8	Improbable	Poor	Subject Property	Remove	Development	No	Lower trunk wounds; epicormic shoots; heavily curved trunk; growing through fence.
375	Common Apple	<i>Malus pumila</i>	Non-native	1	13	13					2.5	1.8	Improbable	Fair	Subject Property	Remove	Development	No	Growing along fence, tangled crown branches.
376	Common Apple	<i>Malus pumila</i>	Non-native	1	16	16					3.0	1.8	Improbable	Fair	Subject Property	Remove	Development	No	Growing within fence, lots of fruit on branches.
377	Common Apple	<i>Malus pumila</i>	Non-native	1	15.5	15.5					2.5	1.8	Improbable	Fair	Subject Property	Remove	Development	No	Contorted leaders girdling trunk; branches growing through fence.
378	Common Apple	<i>Malus pumila</i>	Non-native	1	10.5	10.5					4.0	1.8	Improbable	Fair	Subject Property	Remove	Development	No	Poor branch attachment; stem guard still on trunk; abundance of acicles; contorted limbs.
379	Common Apple	<i>Malus pumila</i>	Non-native	1	11	11					2.5	1.8	Improbable	Fair	Subject Property	Remove	Development	No	Lower trunk wound; growing through fence; dead lower branches.
380	Common Apple	<i>Malus pumila</i>	Non-native	1	18	18					3.0	1.8	Improbable	Fair	Subject Property	Remove	Development	No	Poor branch attachment; stem guard still on trunk; abundance of acicles; contorted limbs.
381	Common Apple	<i>Malus pumila</i>	Non-native	1	11	11					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	No	Poor branch attachment; growing through fence; abundance of acicles.
382	Common Apple	<i>Malus pumila</i>	Non-native	1	14	14					3.0	1.8	Improbable	Fair	Subject Property	Remove	Development	No	Good vigor, fecund with fruit; growing along fence line; tree guards grown into base.
383	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	18.5	18.5					2.0	1.8	Improbable	Poor	Subject Property	Remove	Development	No	EAB, wounds throughout trunk; epicormic shoots.
384	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	11	11					1.5	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Good vigor, erect form.
385	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	39	39					4.0	2.4	Possible	Poor	Subject Property	Remove	Development	No	Main stem dead; no live branches; live basal shoots; peeling bark.
386	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	2	50.5	29	22				4.0	3.6	Improbable	Poor	Subject Property	Remove	Development	No	Loose bark; crown intact; codominant trunks with included bark; epicormic shoots.
387	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	2	25.5	13.5	12				3.0	1.8	Possible	Poor	Subject Property	Remove	Development	No	Majority of canopy dead; peeling bark; live epicormic shoots.
388	Common Apple	<i>Malus pumila</i>	Non-native	7	43	15	15	13			3.5	3.0	Improbable	Fair	Subject Property	Remove	Development	No	Low branching multi-stem; several stems dead; low vigor; weak attachments.
389	Common Apple	<i>Malus pumila</i>	Non-native	2	33	14.5	19				3.0	2.4	Improbable	Fair	Subject Property	Remove	Development	No	Poor branch attachment; evidence of large branch failures.
390	Common Apple	<i>Malus pumila</i>	Non-native	2	42	27.5	15				2.5	3.0	Improbable	Fair	Subject Property	Remove	Development	No	Low vigor; small basal wound; conflicting crown branches; long trunk seam.

Guelph Innovation District (Blocks 1 & 2) Tree Inventory and Preservation Plan  
Tree Inventory Data

Tree Number	Common Name	Scientific Name	Native/ Non-native	Stem Count	Summed DBH (cm)	DBH 1 (cm)	DBH 2 (cm)	DBH 3 (cm)	DBH 4 (cm)	DBH 5 (cm)	Crown Radius (m)	Tree Protection Zone (m)	Potential for Structural Failure Rating	Overall Condition	Location	Proposed Action	Rationale for Removal	Compensation Required	Comments
391	Common Apple	<i>Malus pumila</i>	Non-native	5	44	17.5	15	12			6.0	3.0	Possible	Fair	Subject Property	Remove	Development	No	Recent failure of main leader, still producing fruit; fallen branches now growing upward to replace leaders; abundance of fruit.
392	Common Apple	<i>Malus pumila</i>	Non-native	3	65.5	29	23	14			2.5	4.2	Improbable	Fair	Subject Property	Remove	Development	No	Branch dieback; epicormic shoots; overly dense crown
393	Common Apple	<i>Malus pumila</i>	Non-native	4	73	27.5	18	28	12		4.0	4.8	Possible	Fair	Subject Property	Remove	Development	No	Large holes in trunk, wildlife habitat; dead branches; poor branch attachment.
394	Common Apple	<i>Malus pumila</i>	Non-native	2	36.5	19	18				2.0	2.4	Probable	Very Poor	Subject Property	Remove	Development	No	Nearly dead, one living branch; trunks decaying, one nearly rotted out.
395	Common Apple	<i>Malus pumila</i>	Non-native	4	61.5	28.5	17	16			4.0	4.2	Possible	Fair	Subject Property	Remove	Development	No	Numerous fallen stems; many growing from ground; poor branch attachment.
396	Common Apple	<i>Malus pumila</i>	Non-native	2	53	29	24				3.5	3.6	Possible	Poor	Subject Property	Remove	Development	No	Crown dieback; trunks with missing and loose bark; old broken leader.
397	Common Apple	<i>Malus pumila</i>	Non-native	1	59	59					5.0	3.6	Possible	Poor	Subject Property	Remove	Development	No	Large wounds on trunk; grape within canopy; evidence of large main branch failures; completely hollow trunk but producing fruit; wildlife tree.
398	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	2	21	11	10				1.5	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Codominant leaders with weak attachment; short twigs, healthy buds.
399	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	12	12					2.0	1.8	Possible	Very Poor	Subject Property	Remove	Development	No	Live epicormic shoots; peeling bark; evidence of EAB.
400	Common Apple	<i>Malus pumila</i>	Non-native	2	54.4	29.9	25				3.0	3.6	Possible	Fair	Subject Property	Remove	Development	No	Wildlife holes; numerous dead branches; fruiting, poor branch attachment.
401	Common Apple	<i>Malus pumila</i>	Non-native	3	42.5	21.5	11	10			3.0	3.0	Possible	Poor	Subject Property	Remove	Development	No	Advanced crown dieback; basal decay; cavity in leader; epicormic shoots.
402	Common Apple	<i>Malus pumila</i>	Non-native	3	80	30	20	30			4.0	4.8	Possible	Fair	Subject Property	Remove	Development	No	Numerous dead branches; poor attachment; evidence of branch failures.
403	Manitoba Maple	<i>Acer negundo</i>	Native	3	55.5	29.5	15	11			5.5	3.6	Improbable	Fair	Subject Property	Remove	Development	Yes	Prostrate stems; leaning trunks; partially suppressed crown.
404	Manitoba Maple	<i>Acer negundo</i>	Native	2	71	42	29				5.0	4.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Slight lean; numerous dead branches.
405	Common Apple	<i>Malus pumila</i>	Non-native	1	27.5	27.5					2.0	1.8	Possible	Poor	Subject Property	Remove	Development	No	Basal and trunk decay; main crown lost, one living branch remaining.
406	Common Apple	<i>Malus pumila</i>	Non-native	1	36	36					4.0	2.4	Possible	Poor	Subject Property	Remove	Development	No	Majority of canopy dead; large leader broken off leaving large rotted wound; numerous dead branches.
407	Common Apple	<i>Malus pumila</i>	Non-native	2	23.5	12.5	11				3.0	1.8	Possible	Poor	Subject Property	Remove	Development	No	Advanced crown dieback; largest trunk long dead.
408	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	13	13					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Wound towards base of trunk; nood form otherwise.
409	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	10	10					1.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Healed wound; double leader.
410	Common Apple	<i>Malus pumila</i>	Non-native	2	31	17.5	14				2.5	2.4	Possible	Poor	Subject Property	Remove	Development	No	Advanced crown dieback; trunk decay; epicormic shoots.
411	Common Apple	<i>Malus pumila</i>	Non-native	3	63	27.5	16	20			5.0	4.2	Possible	Fair	Subject Property	Remove	Development	No	Numerous dead branches; evidence of main large branch failure; wounds on main leaders.
412	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	11.5	11.5					1.5	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Healthy buds throughout crown; good form.
413	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	28	28					4.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Full canopy of buds; bark starting to pe, few dead branches.
414	Common Apple	<i>Malus pumila</i>	Non-native	3	90	33.5	24	33			3.0	5.4	Possible	Poor	Subject Property	Remove	Development	No	Advanced crown dieback; trunk cavities; tangled branches.
415	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	26.5	26.5					4.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Main stem bark starting to peel; aggressive epicormic shoots.
416	Common Apple	<i>Malus pumila</i>	Non-native	2	39	25	14				5.0	2.4	Probable	Poor	Subject Property	Remove	Development	No	Minimal live branches; still producing fruit; trunk completely hollow.
417	Common Apple	<i>Malus pumila</i>	Non-native	3	51.5	21	21	10			3.5	3.6	Possible	Poor	Subject Property	Remove	Development	No	Conflicting branches; advanced crown dieback; hanger caught against trunk; broken leader; trunk decay.
418	Common Apple	<i>Malus pumila</i>	Non-native	3	65	29	18	19			4.0	4.2	Probable	Fair	Subject Property	Remove	Development	No	Majority of branches have large wounds or evidence of rot; large rot wound on trunk; numerous dead branches.
419	Common Apple	<i>Malus pumila</i>	Non-native	3	61	24.5	23	14			3.0	4.2	Possible	Poor	Subject Property	Remove	Development	No	Trunk decay; broken leaders; advanced crown dieback.
420	Common Apple	<i>Malus pumila</i>	Non-native	2	65	36	29				3.0	4.2	Probable	Fair	Subject Property	Remove	Development	No	Large portion of tree failed and growing on ground; numerous dead branches.
421	Common Apple	<i>Malus pumila</i>	Non-native	1	17.5	17.5					2.0	1.8	Possible	Poor	Subject Property	Remove	Development	No	Twisted trunk with basal decay; crown asymmetrical; crown dieback.
422	Common Apple	<i>Malus pumila</i>	Non-native	3	89	32	26	31			5.0	5.4	Improbable	Very Poor	Subject Property	Remove	Development	No	Broken at base, stems prostrate on ground; advanced stage of basal decay; epicormic shoots.
423	Common Apple	<i>Malus pumila</i>	Non-native	4	44	23	10	11	14		5.0	3.0	Probable	Poor	Subject Property	Remove	Development	No	Majority of branches dead; peeled off bark; hollow areas of trunk.
424	Common Apple	<i>Malus pumila</i>	Non-native	3	64.5	25	19	21			2.5	4.2	Possible	Poor	Subject Property	Remove	Development	No	One main leader forking at 1m; stems with cavities; twig dieback; tangled crown branches.
425	Common Apple	<i>Malus pumila</i>	Non-native	3	73.5	25.5	24	24			5.0	4.8	Possible	Fair	Subject Property	Remove	Development	No	Numerous dead branches; evidence of branch failures; overall fair structure.
426	White Ash	<i>Fraxinus americana</i>	Native	1	33	33					4.0	2.4	Probable	Very Poor	Subject Property	Remove	Development	No	Peel off bark; most branches have no buds/ dead.
427	Paper Birch	<i>Betula papyrifera</i>	Native	1	20	20					2.5	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Broken top; weeping form; sweep in lower trunk.
428	Hawthorn sp.	<i>Crataegus sp.</i>	Non-native	3	41	18	12	11			2.5	3.0	Probable	Fair	Subject Property	Remove	Development	No	Evidence of pruning; few dead branches.
429	Hawthorn sp.	<i>Crataegus sp.</i>	Non-native	4	50.5	19	19	13	15		3.0	3.6	Improbable	Fair	Subject Property	Remove	Development	Yes	Full vigorous crown; minor interior deadwood.
430	Hawthorn sp.	<i>Crataegus sp.</i>	Non-native	3	54.5	18.5	19	17			3.0	3.6	Probable	Fair	Subject Property	Remove	Development	No	Fair form.
431	American Basswood	<i>Tilia americana</i>	Native	1	16	16					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Vigorous epicormic shoots; full crown.
432	Norway Spruce	<i>Picea abies</i>	Non-native	1	26	26					3.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Thin canopy; few dead branches.
433	Blue Spruce	<i>Picea pungens</i>	Non-native	1	42	42					3.0	3.0	Improbable	Good	Subject Property	Remove	Development	Yes	Relatively short wide crown; minor twig dieback.
434	Eastern White Pine	<i>Pinus strobus</i>	Native	2	33	21	12				3.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Loss of secondary leader causing numerous shoots.
435	American Basswood	<i>Tilia americana</i>	Native	1	45	45					3.0	3.0	Improbable	Good	Subject Property	Remove	Development	Yes	Full vigorous crown; erect form; epicormic shoots.
436	Manitoba Maple	<i>Acer negundo</i>	Native	1	14	14					3.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Fair form.
437	Norway Spruce	<i>Picea abies</i>	Non-native	1	50	50					3.5	3.0	Improbable	Good	Subject Property	Remove	Development	Yes	Full vigorous crown; good form.
438	Little-leaf Linden	<i>Tilia cordata</i>	Non-native	3	35.5	10.5	12	13			4.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Numerous smaller stems; few dead stems; fair form.
439	Norway Spruce	<i>Picea abies</i>	Non-native	1	55	55					4.5	3.6	Improbable	Good	Subject Property	Remove	Development	Yes	Good form.
440	White Spruce	<i>Picea glauca</i>	Native	1	30	30					3.0	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Full vigorous crown; good form.
441	Amur Corktree	<i>Phellodendron amurense</i>	Non-native	6	43.5	14	15	15	14	16	6.0	3.0	Improbable	Fair	Subject Property	Remove	Development	Yes	Basal shoots; peeling bark on stems; evidence of pruning; few leaning stems.
442	European Larch	<i>Larix decidua</i>	Non-native	1	41.5	41.5					3.0	3.0	Improbable	Fair	Subject Property	Remove	Development	Yes	Large full crown; EAB exit holes.
443	European Larch	<i>Larix decidua</i>	Non-native	1	45	45					4.0	3.0	Improbable	Good	Subject Property	Remove	Development	Yes	Full vigorous crown; good form.
444	Blue Spruce	<i>Picea pungens</i>	Non-native	1	32	32					4.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Growing on lean; thinner canopy.
445	Northern Red Oak	<i>Quercus rubra</i>	Native	1	25.5	25.5					2.5	0	Probable	Dead	Subject Property	Remove	Development	No	Most twigs lost.
446	Bur Oak	<i>Quercus macrocarpa</i>	Native	1	19	19					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Evidence of pruning; mechanical damage to base of trunk.
447	Northern Red Oak	<i>Quercus rubra</i>	Native	1	24	24					2.5	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Full vigorous upper crown; minor epicormic shoots and lower crown deadwood.
448	European Larch	<i>Larix decidua</i>	Non-native	1	31.5	31.5					5.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Evidence of pruning; good form.
449	Blue Spruce	<i>Picea pungens</i>	Non-native	1	45	45					3.0	3.0	Improbable	Good	Subject Property	Remove	Development	Yes	Full vigorous crown; excellent form.
450	European Larch	<i>Larix decidua</i>	Non-native	1	18	18					4.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Slight twist in trunk; fair crown form.
451	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	3	57.5	21	18	19			2.0	3.6	Improbable	Good	Subject Property	Remove	Development	Yes	Healthy crown.
452	American Elm	<i>Ulmus americana</i>	Native	1	68.5	68.5					5.0	4.2	Improbable	Fair	Subject Property	Remove	Development	Yes	Some poor attachment of multiple leaders; numerous epicormic shoots.
453	Maiden-hair Tree	<i>Ginkgo biloba</i>	Non-native	1	25	25					3.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Vigorous crown; erect form.
454	Black Pine	<i>Pinus strobus</i>	Native	1	23.5	23.5					3.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Mostly dead lower crown; thin crown.
455	Bur Oak	<i>Quercus macrocarpa</i>	Native	1	32	32					3.0	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Full vigorous crown; pruned lower lateral branches well-callused.
456	White Spruce	<i>Picea glauca</i>	Native	1	48	48					4.0	3.0	Improbable	Excellent	Subject Property	Remove	Development	Yes	Great form.
457	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	4	44	13.5	15	16	14		2.0	3.0	Improbable	Good	Subject Property	Remove	Development	Yes	Good form.
458	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	3	51.5	18	17	17			2.0	3.6	Improbable	Good	Subject Property	Remove	Development	Yes	Healthy crown.
459	Eastern White Cedar	<i>Thuja occidentalis</i>	Native	6	55	21.5	15	19	14	13	2.5	3.6	Improbable	Fair	Subject Property	Remove	Development	Yes	Fair form; numerous stems.
460	Eastern White Pine	<i>Pinus strobus</i>	Native	1	25	25					3.0	0	Probable	Dead	Subject Property	Remove	Development	No	Twice tilted.
461	Ohio Buckeye	<i>Aesculus glabra</i>	Non-native	4	37	15	12	10	12		3.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Numerous leaders; large healing wound at base.
462	Scots Pine	<i>Pinus sylvestris</i>	Non-native	1	22	22					2.5	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Upper crown full; healthy foliage.

Guelph Innovation District (Blocks 1 & 2) Tree Inventory and Preservation Plan  
Tree Inventory Data

Tree Number	Common Name	Scientific Name	Native/ Non-native	Stem Count	Summed DBH (cm)	DBH 1 (cm)	DBH 2 (cm)	DBH 3 (cm)	DBH 4 (cm)	DBH 5 (cm)	Crown Radius (m)	Tree Protection Zone (m)	Potential for Structural Failure Rating	Overall Condition	Location	Proposed Action	Rationale for Removal	Compensation Required	Comments
463	Norway Spruce	<i>Picea abies</i>	Non-native	1	24	24					3.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Thinner canopy in middle.
464	Norway Spruce	<i>Picea abies</i>	Non-native	1	15	15					2.5	1.8	Improbable	Excellent	Subject Property	Remove	Development	Yes	Excellent vigor and form.
465	Sweet Cherry	<i>Prunus avium</i>	Non-native	2	23	11.5	12				1.0	1.8	Improbable	Fair	Subject Property	Remove	Development	No	Morphed leaders below Bt; some healed damage at base; poor attachment.
466	Sweet Cherry	<i>Prunus avium</i>	Non-native	1	17	17					1.5	1.8	Improbable	Fair	Subject Property	Remove	Development	No	Conflicting, partially fused stems; good vigor.
467	Sweet Cherry	<i>Prunus avium</i>	Non-native	1	15	15					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	No	Poor attachment; numerous leaders.
468	Sweet Cherry	<i>Prunus avium</i>	Non-native	2	27	13	14				2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	No	Conflicting, partially fused stems; good vigor.
469	Sweet Cherry	<i>Prunus avium</i>	Non-native	2	29	14	11				2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	No	Poor attachment; numerous smaller stems; epicormic shoots.
470	Little-leaf Linden	<i>Tilia cordata</i>	Non-native	4	73.5	23.5		15		11	4.0	4.8	Improbable	Good	Subject Property	Remove	Development	Yes	Good form.
471	Little-leaf Linden	<i>Tilia cordata</i>	Non-native	1	49	49					4.0	3.0	Improbable	Good	Subject Property	Remove	Development	Yes	Large full vigorous crown; densely packed branches.
472	Little-leaf Linden	<i>Tilia cordata</i>	Non-native	2	51.5	41.5	10				5.0	3.6	Improbable	Fair	Subject Property	Remove	Development	Yes	Main stem good form; numerous smaller stems growing from base on angle.
473	Little-leaf Linden	<i>Tilia cordata</i>	Non-native	1	41	41					3.0	3.0	Improbable	Good	Subject Property	Remove	Development	Yes	Large full vigorous crown; densely packed branches; leaders with weak attachments. Dbh measured below branch unions.
474	Little-leaf Linden	<i>Tilia cordata</i>	Non-native	1	40.5	40.5					4.0	3.0	Improbable	Fair	Subject Property	Remove	Development	Yes	Good form.
475	Little-leaf Linden	<i>Tilia cordata</i>	Non-native	1	43	43					4.0	3.0	Improbable	Good	Subject Property	Remove	Development	Yes	Large full vigorous crown; densely packed branches; leaders with weak attachments. Dbh measured below branch unions.
476	Little-leaf Linden	<i>Tilia cordata</i>	Non-native	1	32.5	32.5					4.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Good form.
477	Little-leaf Linden	<i>Tilia cordata</i>	Non-native	1	43	43					5.0	3.0	Improbable	Good	Subject Property	Remove	Development	Yes	Large full vigorous crown; densely packed branches; leaders with weak attachments. Dbh measured below branch unions.
478	Little-leaf Linden	<i>Tilia cordata</i>	Non-native	1	31.8	31.8					5.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Good form.
479	Little-leaf Linden	<i>Tilia cordata</i>	Non-native	1	25	25					3.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Large full vigorous crown; densely packed branches; leaders with weak attachments. Dbh measured below branch unions.
480	Little-leaf Linden	<i>Tilia cordata</i>	Non-native	1	40	40					6.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Good form.
481	Black Walnut	<i>Juglans nigra</i>	Native	1	15	15					3.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Good vigor; crown slightly asymmetrical due to adjacent walnut.
482	Black Walnut	<i>Juglans nigra</i>	Native	1	17.5	17.5					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Poor attachment; cankered; large wound at base.
483	Little-leaf Linden	<i>Tilia cordata</i>	Non-native	1	49	49					4.5	3.0	Improbable	Good	Subject Property	Remove	Development	Yes	Large full vigorous crown; densely packed branches; leaders with weak attachments. Dbh measured below branch unions.
484	Little-leaf Linden	<i>Tilia cordata</i>	Non-native	1	42	42					5.0	3.0	Improbable	Fair	Subject Property	Remove	Development	Yes	Good form.
485	Little-leaf Linden	<i>Tilia cordata</i>	Non-native	3	66	42.5	12	12			4.5	4.2	Improbable	Fair	Subject Property	Remove	Development	Yes	Large full vigorous crown; densely packed branches; leaders with weak attachments; extensive basal shoots. Dbh measured below branch unions.
486	Little-leaf Linden	<i>Tilia cordata</i>	Non-native	1	42.5	42.5					6.0	3.0	Improbable	Fair	Subject Property	Remove	Development	Yes	Good form.
487	Little-leaf Linden	<i>Tilia cordata</i>	Non-native	1	43.5	43.5					4.5	3.0	Improbable	Good	Subject Property	Remove	Development	Yes	Large full vigorous crown; densely packed branches; leaders with weak attachments. Dbh measured below branch unions.
488	Little-leaf Linden	<i>Tilia cordata</i>	Non-native	1	44.5	44.5					5.0	3.0	Improbable	Fair	Subject Property	Remove	Development	Yes	Good form.
489	Little-leaf Linden	<i>Tilia cordata</i>	Non-native	1	37.5	37.5					4.0	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Large full vigorous crown; densely packed branches; leaders with weak attachments. Dbh measured below branch unions.
490	Little-leaf Linden	<i>Tilia cordata</i>	Non-native	1	38	38					6.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Good form.
491	Little-leaf Linden	<i>Tilia cordata</i>	Non-native	1	38.5	38.5					4.0	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Large full vigorous crown; densely packed branches; leaders with weak attachments. Dbh measured below branch unions.
492	Little-leaf Linden	<i>Tilia cordata</i>	Non-native	1	35	35					5.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Good form.
493	Little-leaf Linden	<i>Tilia cordata</i>	Non-native	1	41	41					4.0	3.0	Improbable	Good	Subject Property	Remove	Development	Yes	Large full vigorous crown; densely packed branches; leaders with weak attachments. Dbh measured below branch unions.
494	Little-leaf Linden	<i>Tilia cordata</i>	Non-native	1	35	35					5.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Good form.
495	White Ash	<i>Fraxinus americana</i>	Native	1	57	57					4.0	3.6	Probable	Very Poor	Subject Property	Remove	Development	No	EAB; one third of bark lost; crown dieback; trunk decay.
496	Common Apple	<i>Malus pumila</i>	Non-native	2	49.5	24.5	25				3.0	3.0	Probable	Poor	Subject Property	Remove	Development	No	Decaying leaders; epicormic shoots; broken branches; small hangers.
497	Common Apple	<i>Malus pumila</i>	Non-native	3	75	26.5	21	28			4.0	4.8	Probable	Poor	Subject Property	Remove	Development	No	Decaying branches; some peeling bark; poor attachment; few dead branches.
498	Common Apple	<i>Malus pumila</i>	Non-native	1	28.5	28.5					2.0	1.8	Possible	Poor	Subject Property	Remove	Development	No	Half of trunk decayed; old decaying leaders.
499	Common Apple	<i>Malus pumila</i>	Non-native	1	32	32					3.0	2.4	Probable	Poor	Subject Property	Remove	Development	No	Decaying branches; some peeling bark; poor attachment; large secondary stem failure.
500	Common Apple	<i>Malus pumila</i>	Non-native	2	48	30	18				3.0	3.0	Probable	Very Poor	Subject Property	Remove	Development	No	Main stems dead; into epicormic growth.
501	Common Apple	<i>Malus pumila</i>	Non-native	1	10.5	10.5					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	No	Decaying stump adjacent to base; crown dieback.
502	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	13	13					1.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Basal shoots; bark started to peel but minimal.
503	Common Apple	<i>Malus pumila</i>	Non-native	2	35	21.5	14				2.5	2.4	Improbable	Fair	Subject Property	Remove	Development	No	Stems fused and decaying at base; dead leader; crown dieback.
504	Common Apple	<i>Malus pumila</i>	Non-native	1	41.5	41.5					2.0	3.0	Probable	Very Poor	Subject Property	Remove	Development	No	Main stems dead and decaying; live epicormic shoots.
505	Common Apple	<i>Malus pumila</i>	Non-native	5	54.5	15.5	20	19	16		4.0	3.6	Improbable	Fair	Subject Property	Remove	Development	No	Cross branches rubbing; large spreading crown; one dead leader.
506	Common Apple	<i>Malus pumila</i>	Non-native	2	22	12	10				5.0	1.8	Probable	Very Poor	Subject Property	Remove	Development	No	Decaying limbs; numerous fallen branches; peeling bark.
507	Common Apple	<i>Malus pumila</i>	Non-native	2	58.5	39.5	19				3.5	3.6	Possible	Poor	Subject Property	Remove	Development	No	Main trunk hollow; main leaders dead and broken; epicormic shoots; basal stems alive.
508	Common Apple	<i>Malus pumila</i>	Non-native	3	46.5	20	14	13	10		3.0	3.0	Probable	Very Poor	Subject Property	Remove	Development	No	Decaying limbs; numerous large branch failures; peeling bark.
509	Common Apple	<i>Malus pumila</i>	Non-native	5	68	26	29	13	19	13	4.0	4.2	Possible	Poor	Subject Property	Remove	Development	No	Main trunk with deep indent; broken leader leaving large decay area. Dead leaders; 35% crown dieback; grapevine present.
510	Manitoba Maple	<i>Acer negundo</i>	Native	4	75.5	32	25	19	22		7.0	4.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Few dead branches; fair form.
511	Common Apple	<i>Malus pumila</i>	Non-native	2	73.5	47	27				4.0	4.8	Probable	Fair	Subject Property	Remove	Development	No	Trunk and leader decay throughout; epicormic shoots; 50% crown dieback.
512	Common Apple	<i>Malus pumila</i>	Non-native	1	27	27					2.0	1.8	Probable	Very Poor	Subject Property	Remove	Development	No	Hollow trunk; decaying limbs; large branch failure.
513	Common Apple	<i>Malus pumila</i>	Non-native	1	29.5	29.5					6.0	1.8	Probable	Very Poor	Subject Property	Remove	Development	No	Basal shoots; living off of dead fallen leader.
514	Common Apple	<i>Malus pumila</i>	Non-native	2	68	47.5	21				3.0	4.2	Probable	Poor	Subject Property	Remove	Development	No	Decay throughout leaders; 60% crown dieback; decaying stumps.
515	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	12	12					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Burl near base; overall good form.
516	Common Apple	<i>Malus pumila</i>	Non-native	1	20.5	20.5					6.0	1.8	Improbable	Very Poor	Subject Property	Remove	Development	No	Decayed stump with broken off stump; live epicormic shoots.
517	Common Apple	<i>Malus pumila</i>	Non-native	3	73.5	34	18	22			2.5	4.8	Probable	Poor	Subject Property	Remove	Development	No	75% crown dieback; broken and dead leaders; trunk decay.
518	Common Apple	<i>Malus pumila</i>	Non-native	2	54.5	31.5	23				4.0	3.6	Probable	Very Poor	Subject Property	Remove	Development	No	No bark; decaying trunk and main branches; live epicormic shoots.
519	Common Apple	<i>Malus pumila</i>	Non-native	1	22	22					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	No	Crown comprised of ascending shoots; lacking strong leader or lateral branches; dead leaders.
520	Common Apple	<i>Malus pumila</i>	Non-native	1	39.5	39.5					6.0	2.4	Probable	Poor	Subject Property	Remove	Development	No	Decaying and rotted limbs; hollow trunk.
521	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	12.5	12.5					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	No	Fair form.
522	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	14.5	14.5					1.5	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Good form; good vigor.
523	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	2	28.5	15.5	13				2.0	1.8	Improbable	Poor	Subject Property	Remove	Development	No	All leaders broken off; heavy grapevine burden; EAB; 90% crown dieback.
524	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	11	11					3.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Fair form.
525	Common Apple	<i>Malus pumila</i>	Non-native	7	50	17.5	17	16	15	12	3.0	3.0	Probable	Fair	Subject Property	Remove	Development	No	One trunk with extensive decay; crown partially suppressed; conflicting crown branches.
526	Black Walnut	<i>Juglans nigra</i>	Native	1	11	11					1.0	1.8	Possible	Poor	Road ROW	Remove	Road Access	No	Large necrotic canker; little remaining live tissue.
527	Black Locust	<i>Robinia pseudoacacia</i>	Non-native	1	10	10					1.5	1.8	Improbable	Fair	Road ROW	Remove	Road Access	Yes	Minor crown dieback; Riverbank Grape throughout lower scaffold; growing underneath power lines.
528	Black Locust	<i>Robinia pseudoacacia</i>	Non-native	1	12.5	12.5					2.0	1.8	Improbable	Fair	Road ROW	Retain		No	Asymmetrical crown due to competition with adjacent tree; minor dieback.
529	Black Locust	<i>Robinia pseudoacacia</i>	Non-native	1	11	11					1.5	1.8	Improbable	Good	Road ROW	Retain		No	Slight lean; under hydro.
530	Black Locust	<i>Robinia pseudoacacia</i>	Non-native	1	13.9	13.9					1.0	1.8	Possible	Poor	Road ROW	Retain		No	Previously failed and growing on 45 degree angle; decay along stem; crown dieback.
531	Siberian Elm	<i>Ulmus pumila</i>	Non-native	1	12.5	12.5					1.5	1.8	Improbable	Fair	Road ROW	Retain		No	Epicormic growth; twig dieback.
532	Black Locust	<i>Robinia pseudoacacia</i>	Non-native	1	10.5	10.5					1.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Poor crown structure; twig dieback.

Guelph Innovation District (Blocks 1 & 2) Tree Inventory and Preservation Plan  
Tree Inventory Data

Tree Number	Common Name	Scientific Name	Native/ Non-native	Stem Count	Summed DBH (cm)	DBH 1 (cm)	DBH 2 (cm)	DBH 3 (cm)	DBH 4 (cm)	DBH 5 (cm)	Crown Radius (m)	Tree Protection Zone (m)	Potential for Structural Failure Rating	Overall Condition	Location	Proposed Action	Rationale for Removal	Compensation Required	Comments
533	Black Locust	<i>Robinia pseudoacacia</i>	Non-native	1	10.5	10.5					1.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Poor crown structure; twig dieback.
534	Black Locust	<i>Robinia pseudoacacia</i>	Non-native	2	11.1	11.1					1.5	1.8	Improbable	Fair	Subject Property	Retain	Development	No	Well balanced crown; vigorous crown; growing close to power lines
536	Manitoba Maple	<i>Acer negundo</i>	Native	2	27.8	15.6	12				2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Relatively vigorous crown; some dieback in lower scaffold; epicormic growth.
537	Eastern Cottonwood	<i>Populus deltoides</i>	Native	2	41.5	21	21				2.5	3.0	Improbable	Good	Road ROW	Retain	Development	No	Twig dieback; growing under power lines.
538	Siberian Elm	<i>Ulmus pumila</i>	Non-native	2	29.2	15.6	14				2.5	1.8	Improbable	Good	Road ROW	Retain	Development	No	Relatively full, vigorous crown; lower scaffold dieback only.
539	Manitoba Maple	<i>Acer negundo</i>	Native	3	55.5	21.5	20	14			3.0	3.6	Improbable	Fair	Subject Property	Remove	Development	Yes	Decay at branch unions; twig dieback; poor crown structure.
540	Siberian Elm	<i>Ulmus pumila</i>	Non-native	2	33.7	17.7	16				3.0	2.4	Improbable	Good	Road ROW	Retain	Development	No	Full, vigorous crown; growing close to telephone lines
541	Manitoba Maple	<i>Acer negundo</i>	Native	4	58.5	24	18	17	14		3.0	3.6	Possible	Fair	Subject Property	Remove	Development	Yes	Multiple stems; poor crown structure; twig and branch dieback.
542	White Ash	<i>Fraxinus americana</i>	Native	2	25.4	13.2	12				2.0	1.8	Probable	Very Poor	Subject Property	Remove	Development	No	Almost dead; loose bark; galleries; epicormic growth; EAB ext holes.
543	White Ash	<i>Fraxinus americana</i>	Native	1	26	26					2.0	1.8	Possible	Very Poor	Subject Property	Remove	Development	No	EAB; twig and branch dieback; peeling bark.
544	White Ash	<i>Fraxinus americana</i>	Native	2	24.5	12.3	12				1.5	1.8	Possible	Poor	Subject Property	Remove	Development	No	Galleries; epicormic growth; loose bark.
545	White Ash	<i>Fraxinus americana</i>	Native	1	16	16					1.5	1.8	Possible	Very Poor	Subject Property	Remove	Development	No	EAB; epicormic growth; twig and branch dieback.
546	White Ash	<i>Fraxinus americana</i>	Native	2	23.4	11.8	12				1.0	1.8	Possible	Poor	Subject Property, Road ROW	Remove	Development	No	Crown dieback; epicormic growth; Riverbank grape throughout; galleries.
547	White Ash	<i>Fraxinus americana</i>	Native	1	11	11					1.0	1.8	Possible	Fair	Subject Property, Road ROW	Remove	Development	Yes	EAB; crown primarily alive; twig dieback.
548	Freeman's Maple	<i>Acer x freemanii</i>	Native	1	43	43					4.0	3.0	Improbable	Fair	Road ROW	Retain - Impact	Development	No	Forked above BH; poor crown structure but healthy; one failed branch.
549	White Ash	<i>Fraxinus americana</i>	Native	1	18.5	18.5					1.5	1.8	Possible	Poor	Subject Property, Road ROW	Remove	Development	No	Crown dieback; galleries; epicormic growth; asymmetrical crown due to competition with adjacent tree.
550	Freeman's Maple	<i>Acer x freemanii</i>	Native	1	29	29					3.0	1.8	Improbable	Fair	Road ROW	Retain	Development	No	Epicormic growth; twig and branch dieback.
551	White Ash	<i>Fraxinus americana</i>	Native	1	11.5	11.5					2.0	1.8	Possible	Poor	Subject Property, Road ROW	Remove	Development	No	Galleries; crown dieback; EAB ext holes.
552	White Ash	<i>Fraxinus americana</i>	Native	1	13.2	13.2					1.0	1.8	Possible	Poor	Subject Property, Road ROW	Remove	Development	No	Galleries; epicormic growth; crown dieback.
553	White Ash	<i>Fraxinus americana</i>	Native	1	11	11					1.0	1.8	Possible	Very Poor	Subject Property, Road ROW	Remove	Development	No	EAB; epicormic growth; primarily dead.
554	Freeman's Maple	<i>Acer x freemanii</i>	Native	1	17.8	17.8					3.0	1.8	Improbable	Fair	Road ROW	Retain	Development	No	Photographic growth in upper stem; unbalanced crown; minor bark cracks.
555	White Ash	<i>Fraxinus americana</i>	Native	1	12.5	12.5					1.0	1.8	Possible	Very Poor	Subject Property, Road ROW	Remove	Development	No	EAB; branch dieback; epicormic growth; primarily dead.
556	White Ash	<i>Fraxinus americana</i>	Native	1	12.5	12.5					1.0	1.8	Possible	Very Poor	Subject Property, Road ROW	Remove	Development	No	EAB; branch dieback; epicormic growth; primarily dead.
557	Freeman's Maple	<i>Acer x freemanii</i>	Native	1	19.5	19.5					3.0	1.8	Improbable	Fair	Road ROW	Retain	Development	No	Epicormic growth; unbalanced crown; bark cracks; crown still relatively healthy.
558	White Ash	<i>Fraxinus americana</i>	Native	3	43.5	15	15	14			2.0	3.0	Possible	Very Poor	Subject Property, Road ROW	Remove	Development	No	EAB; branch dieback; epicormic growth; primarily dead.
559	White Ash	<i>Fraxinus americana</i>	Native	1	10.5	10.5					1.0	1.8	Possible	Very Poor	Subject Property, Road ROW	Remove	Development	No	EAB; branch dieback; epicormic growth; primarily dead.
560	White Ash	<i>Fraxinus americana</i>	Native	1	10.1	10.1					1.0	1.8	Possible	Poor	Subject Property, Road ROW	Remove	Development	No	Galleries; epicormic growth; crown dieback; EAB ext holes.
561	White Ash	<i>Fraxinus americana</i>	Native	2	30	19.5		11			2.0	2.4	Possible	Very Poor	Subject Property, Road ROW	Remove	Development	No	EAB; branch dieback; epicormic growth; primarily dead.
562	Freeman's Maple	<i>Acer x freemanii</i>	Native	5	61.4	29.4	17	15	14	12	4.0	4.2	Improbable	Good	Subject Property, Road ROW	Remove	Development	Yes	Bark cracks on main stem; full, vigorous crown.
563	Freeman's Maple	<i>Acer x freemanii</i>	Native	2	50	32	18				3.0	3.0	Improbable	Good	Subject Property	Remove	Development	Yes	Some branch dieback.
564	Freeman's Maple	<i>Acer x freemanii</i>	Native	1	42.5	42.5					4.0	3.0	Improbable	Good	Subject Property, Road ROW	Remove	Development	Yes	Some branch dieback; poor crown structure.
565	White Ash	<i>Fraxinus americana</i>	Native	3	57.5	26	18	14			3.0	3.6	Possible	Poor	Subject Property	Remove	Development	No	EAB; branch dieback; bark peeling; epicormic growth.
566	White Ash	<i>Fraxinus americana</i>	Native	6	40.5	14	14	13	12	12	3.0	3.0	Possible	Poor	Subject Property	Remove	Development	No	Loose bark; galleries; crown dieback; epicormic growth.
567	Manitoba Maple	<i>Acer negundo</i>	Native	2	50	29	21				3.0	3.0	Possible	Fair	Subject Property	Remove	Development	Yes	Poor crown structure; epicormic growth; twig dieback.
568	Freeman's Maple	<i>Acer x freemanii</i>	Native	1	40.5	40.5					4.0	3.0	Improbable	Fair	Subject Property	Remove	Development	Yes	Previously failed branches but otherwise healthy crown; twig dieback.
569	Freeman's Maple	<i>Acer x freemanii</i>	Native	1	38.2	38.2					4.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Epicormic growth at root flare; included bark in scaffold unions; full, vigorous crown.
570	Freeman's Maple	<i>Acer x freemanii</i>	Native	1	43	43					4.0	3.0	Improbable	Fair	Subject Property	Remove	Development	Yes	Basal shoots; epicormic growth; twig dieback.
571	Freeman's Maple	<i>Acer x freemanii</i>	Native	1	32.3	32.3					5.0	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Full, vigorous crown; minor bark cracks.
572	Freeman's Maple	<i>Acer x freemanii</i>	Native	1	22	22					3.0	1.8	Improbable	Fair	Subject Property, Road ROW	Remove	Development	Yes	Bark seam with minor evidence of decay; soil high against root flare; snagged branch.
573	Siberian Elm	<i>Ulmus pumila</i>	Non-native	2	30	16.5	14				2.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Twig and branch dieback; in standing water.
574	Siberian Elm	<i>Ulmus pumila</i>	Non-native	1	13	13					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Crown dieback; in standing water.
575	Manitoba Maple	<i>Acer negundo</i>	Native	5	69.5	26.5	26	17	16	16	3.0	4.2	Improbable	Fair	Subject Property	Remove	Development	Yes	A few small broken branches; growing out of slope; some crown dieback.
576	Manitoba Maple	<i>Acer negundo</i>	Native	2	35	21	14				2.0	2.4	Possible	Fair	Subject Property	Remove	Development	Yes	Epicormic growth; twig and branch dieback; very irregular crown structure.
577	Manitoba Maple	<i>Acer negundo</i>	Native	8	169.5	70.5	52	47	45	42+37+35+28	10.0	10.17	Probable	Very Poor	Subject Property	Remove	Development	No	Large multi-stem tree with numerous stems that have failed; basal shoots and epicormic growth throughout; torsion breaks within failed stems and fungal fruiting bodies; many stems appear likely to fall.
578	Manitoba Maple	<i>Acer negundo</i>	Native	2	43.1	25.5	18				6.0	3.0	Possible	Very Poor	Subject Property	Remove	Development	No	Failed previously and is growing on 45 degree angle; extensive crown dieback; epicormic growth.
579	Manitoba Maple	<i>Acer negundo</i>	Native	4	97.7	35.4	27	35	32		7.0	6	Possible	Poor	Subject Property	Remove	Development	No	Small cavity on 1 stem with decay; fruiting bodies on upper stem; epicormic growth.
580	Manitoba Maple	<i>Acer negundo</i>	Native	1	48	48					4.0	3.0	Possible	Poor	Subject Property	Remove	Development	No	Numerous failed branches; twig and branch dieback; epicormic growth.
581	Manitoba Maple	<i>Acer negundo</i>	Native	1	45	45					7.0	3.0	Possible	Very Poor	Subject Property	Remove	Development	No	Stem almost parallel to ground; epicormic growth; fruiting bodies; decay throughout.
582	Manitoba Maple	<i>Acer negundo</i>	Native	2	57.5	38	20				5.0	3.6	Possible	Very Poor	Subject Property	Remove	Development	No	Main stem failed and secondary stems growing off of horizontal stem; numerous fruiting bodies; epicormic growth; basal shoots; full of decay.
583	Manitoba Maple	<i>Acer negundo</i>	Native	2	77	42	35				8.0	4.8	Possible	Very Poor	Subject Property	Remove	Development	No	Loose bark; epicormic growth; fruiting bodies; 1 large stem growing parallel to ground; decay throughout.
584	Eastern Cottonwood	<i>Populus deltoides</i>	Native	1	43	43					2.5	3.0	Improbable	Good	Subject Property	Remove	Development	Yes	Twig dieback; some epicormic branching.
585	Eastern Cottonwood	<i>Populus deltoides</i>	Native	1	23.2	23.2					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Narrow crown with some dieback.
586	Manitoba Maple	<i>Acer negundo</i>	Native	1	56	56					7.0	3.6	Improbable	Very Poor	Subject Property	Remove	Development	No	Catastrophic failure; entirely failed and hollowed out but +10 secondary stems growing out of main bole; epicormic growth.
587	Manitoba Maple	<i>Acer negundo</i>	Native	2	90.2	47.2	43				6.0	6	Possible	Poor	Subject Property	Remove	Development	No	Epicormic growth; woodpecker damage; shear plane crack in upper scaffold; crown dieback.
588	Manitoba Maple	<i>Acer negundo</i>	Native	1	39.5	39.5					4.0	2.4	Possible	Very Poor	Subject Property	Remove	Development	No	Primarily failed; secondary stems growing off the main stem; decay throughout; branch dieback; epicormic growth and basal shoots.
589	Manitoba Maple	<i>Acer negundo</i>	Native	4	97.5	44.5	29	24	12		3.0	6	Probable	Very Poor	Subject Property	Remove	Development	No	Bark loss; extensive decay; woodpecker cavity.
590	Eastern Red Cedar	<i>Juniperus virginiana</i>	Native	2	59.5	30.5	29				3.0	3.6	Improbable	Good	Subject Property	Remove	Development	Yes	Vines in crown; irregular crown.
591	Eastern Red Cedar	<i>Juniperus virginiana</i>	Native	2	54.5	28	27				2.5	3.6	Improbable	Fair	Subject Property	Remove	Development	Yes	Buckthorn growing within canopy; twig and branch dieback.
592	Eastern Red Cedar	<i>Juniperus virginiana</i>	Native	2	45	24	22				3.0	3.0	Improbable	Good	Subject Property	Remove	Development	Yes	Relatively full crown with minor dieback.
593	Eastern Red Cedar	<i>Juniperus virginiana</i>	Native	3	61.5	28	18	16			3.0	4.2	Improbable	Good	Subject Property	Remove	Development	Yes	Buckthorn growing within canopy.
594	Eastern Red Cedar	<i>Juniperus virginiana</i>	Native	3	72	32	22	18			3.0	4.8	Improbable	Good	Subject Property	Remove	Development	Yes	Relatively full, vigorous crown; lower scaffold competition with Buckthorn.
595	Red Pine	<i>Pinus resinosa</i>	Native	3	125.5	76	32	18			5.0	7.53	Improbable	Good	Subject Property	Remove	Development	Yes	Minor branch crowding; full, vigorous crown with minimal dieback.
596	Eastern Red Cedar	<i>Juniperus virginiana</i>	Native	4	53	19	18	16	16		4.0	3.6	Improbable	Good	Subject Property	Remove	Development	Yes	Widespread canopy.
597	White Spruce	<i>Picea glauca</i>	Native	1	53.5	53.5					3.0	3.6	Improbable	Good	Subject Property	Remove	Development	Yes	Minor twig dieback; full crown.
598	Norway Spruce	<i>Picea abies</i>	Non-native	1	40	40					4.0	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Full and healthy crown; trees growing within canopy.
599	Norway Spruce	<i>Picea abies</i>	Non-native	2	30.2	18	12				3.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Asymmetrical crown due to competition with adjacent tree; minor dieback.
600	Norway Maple	<i>Acer platanoides</i>	Non-native	1	26.5	26.5					2.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Some epicormic growth; twig dieback.
601	White Spruce	<i>Picea glauca</i>	Native	1	55.4	55.4					3.0	3.6	Improbable	Good	Subject Property	Remove	Development	Yes	Relatively balanced; healthy crown; well balanced root flare.
602	Norway Spruce	<i>Picea abies</i>	Non-native	1	38	38					2.0	2.4	Improbable	Fair	Road ROW	Retain	Development	No	Low bark vigor; twig and branch dieback.

Guelph Innovation District (Blocks 1 & 2) Tree Inventory and Preservation Plan  
Tree Inventory Data

Tree Number	Common Name	Scientific Name	Native/ Non-native	Stem Count	Summed DBH (cm)	DBH 1 (cm)	DBH 2 (cm)	DBH 3 (cm)	DBH 4 (cm)	DBH 5 (cm)	Crown Radius (m)	Tree Protection Zone (m)	Potential for Structural Failure Rating	Overall Condition	Location	Proposed Action	Rationale for Removal	Compensation Required	Comments
603	White Spruce	<i>Picea glauca</i>	Native	1	51.9	51.9					3.0	3.6	Improbable	Fair	Subject Property	Remove	Development	Yes	Old stem wound with compartmentalization; some crown dieback; light pruning dieback
604	Silver Maple	<i>Acer saccharinum</i>	Native	1	51.3	51.3					4.0	3.6	Improbable	Fair	Subject Property	Remove	Development	Yes	Twig and branch dieback; included bark.
605	Norway Spruce	<i>Picea abies</i>	Non-native	2	72	40	32				4.0	4.8	Improbable	Good	Subject Property	Remove	Development	Yes	Well balanced root flare; minor dieback
606	Norway Spruce	<i>Picea abies</i>	Non-native	1	46.5	46.5					3.0	3.5	Improbable	Good	Subject Property	Remove	Development	Yes	Slightly asymmetrical crown; small scale in mid stem
607	Norway Spruce	<i>Picea abies</i>	Non-native	1	53.2	53.2					6.0	3.6	Improbable	Fair	Subject Property	Remove	Development	Yes	Solid main stem, some branch tip dieback
608	Norway Spruce	<i>Picea abies</i>	Non-native	1	45	45					4.0	3.0	Improbable	Good	Subject Property	Remove	Development	Yes	Asymmetrical crown due to adjacent tree; minor twig dieback
609	Norway Maple	<i>Acer platanoides</i>	Non-native	1	28.1	28.1					3.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Minor crown dieback; wound wood over old bark seam
610	Black Pine	<i>Pinus nigra</i>	Non-native	1	56.5	56.5					4.5	3.6	Improbable	Good	Subject Property	Remove	Development	Yes	Asymmetrical crown due to adjacent tree; forked crown; twig m/z branch dieback; small scar omnis stem
611	Red Pine	<i>Pinus resinosa</i>	Native	1	55.7	55.7					4.0	3.6	Improbable	Fair	Subject Property	Remove	Development	Yes	Branch crowding; some dieback; solid main stem
612	Black Locust	<i>Robinia pseudacacia</i>	Non-native	1	11.5	11.5					1.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Some decay at lower branch union; otherwise healthy
613	White Spruce	<i>Picea glauca</i>	Native	1	24	24					3.0	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Slightly asymmetrical crown due to competition with adjacent tree; crown otherwise full
614	White Spruce	<i>Picea glauca</i>	Native	1	24.5	24.5					3.0	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Asymmetrical crown due to adjacent tree
615	White Spruce	<i>Picea glauca</i>	Native	1	25	25					2.5	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Natural pruning
616	White Spruce	<i>Picea glauca</i>	Native	1	17	17					3.0	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Slightly asymmetrical crown due to competition with adjacent tree; crown otherwise full
617	White Spruce	<i>Picea glauca</i>	Native	1	32.5	32.5					3.0	2.4	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Dead lower branches
618	White Spruce	<i>Picea glauca</i>	Native	2	45	23	22				3.5	3.0	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Slightly asymmetrical crown due to competition with adjacent tree; crown otherwise healthy
619	White Spruce	<i>Picea glauca</i>	Native	1	26.5	26.5					3.0	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	
620	White Spruce	<i>Picea glauca</i>	Native	1	29.5	29.5					3.0	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	
621	White Spruce	<i>Picea glauca</i>	Native	1	24	24					4.0	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Slightly asymmetrical crown due to competition with adjacent tree; crown otherwise healthy
622	White Spruce	<i>Picea glauca</i>	Native	1	30	30					3.5	2.4	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Dense lower branch structure
623	White Spruce	<i>Picea glauca</i>	Native	1	25	25					4.0	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Girdling root; heavy cone production; some dieback
624	White Spruce	<i>Picea glauca</i>	Native	1	32	32					3.0	2.4	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Well balanced crown; vigorous tree
625	White Spruce	<i>Picea glauca</i>	Native	1	28.5	28.5					3.0	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	
626	White Spruce	<i>Picea glauca</i>	Native	1	24.5	24.5					3.0	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Asymmetrical crown due to adjacent trees
627	White Spruce	<i>Picea glauca</i>	Native	2	37	19.5	18				3.0	2.4	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Codominant
628	White Spruce	<i>Picea glauca</i>	Native	1	26	26					2.5	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Well balanced root flare and crown; relatively vigorous
629	White Spruce	<i>Picea glauca</i>	Native	1	29.9	29.9					2.5	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	
630	Eastern White Pine	<i>Pinus strobus</i>	Native	1	22.9	22.9					3.0	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Full, vigorous crown; solid main stem
631	White Spruce	<i>Picea glauca</i>	Native	1	23.5	23.5					2.5	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	
632	Eastern White Pine	<i>Pinus strobus</i>	Native	1	27.7	27.7					4.0	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Slightly asymmetrical due to competition with adjacent tree; crown otherwise full and vigorous
633	Eastern White Pine	<i>Pinus strobus</i>	Native	1	18	18					1.5	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	
634	White Spruce	<i>Picea glauca</i>	Native	1	31	31					2.5	2.4	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	
635	Eastern White Pine	<i>Pinus strobus</i>	Native	1	11.5	11.5					3.0	1.8	Possible	Very Poor	Subject Property	Remove	Development - SWM	No	Leader dead; a few scaffold branches alive with necrotic needles; bark loss, impacted by pine weevil
636	Eastern White Pine	<i>Pinus strobus</i>	Native	1	15.5	15.5					1.5	1.8	Possible	Fair	Subject Property	Remove	Development - SWM	Yes	Chlorosis in crown; natural pruning
637	Eastern White Pine	<i>Pinus strobus</i>	Native	1	14	14					1.5	0	Possible	Dead	Subject Property	Remove	Development - SWM	No	
638	Eastern White Pine	<i>Pinus strobus</i>	Native	1	15.9	15.9					2.0	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Natural pruning
639	Eastern White Pine	<i>Pinus strobus</i>	Native	1	21	21					3.0	1.8	Improbable	Fair	Subject Property	Remove	Development - SWM	Yes	Stem crowding; asymmetrical crown due to competition with adjacent trees; some dieback
640	Eastern White Pine	<i>Pinus strobus</i>	Native	1	11.1	11.1					1.0	1.8	Improbable	Fair	Subject Property	Remove	Development - SWM	Yes	Narrow crown due to crowding; some dieback
641	Eastern White Pine	<i>Pinus strobus</i>	Native	1	19.5	19.5					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development - SWM	Yes	Irregular crown; lower branch dieback
642	Eastern White Pine	<i>Pinus strobus</i>	Native	1	23.7	23.7					3.5	1.8	Improbable	Fair	Subject Property	Remove	Development - SWM	Yes	Bark cracks with sap; narrow root flare; some dieback
643	Eastern White Pine	<i>Pinus strobus</i>	Native	1	26.5	26.5					1.5	1.8	Improbable	Fair	Subject Property	Remove	Development - SWM	Yes	Epicormic growth; low vigor
644	Eastern White Pine	<i>Pinus strobus</i>	Native	1	19.5	19.5					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development - SWM	Yes	Signs of blister rust
645	Eastern White Pine	<i>Pinus strobus</i>	Native	1	24	24					2.0	1.8	Possible	Poor	Subject Property	Remove	Development - SWM	No	Bark cracks with sap; relatively extensive crown dieback; crowding
646	Eastern White Pine	<i>Pinus strobus</i>	Native	1	16.5	16.5					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development - SWM	Yes	Signs of blister rust
647	Eastern White Pine	<i>Pinus strobus</i>	Native	1	19.5	19.5					3.0	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Slightly asymmetrical crown due to competition with adjacent tree; crown otherwise healthy
648	Eastern White Pine	<i>Pinus strobus</i>	Native	1	24.5	24.5					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development - SWM	Yes	Signs of blister rust; forked crown due to white pine weevil
649	Eastern White Pine	<i>Pinus strobus</i>	Native	1	19.8	19.8					2.0	1.8	Improbable	Poor	Subject Property	Remove	Development - SWM	No	Blister rust; relatively extensive crown dieback
650	Eastern White Pine	<i>Pinus strobus</i>	Native	1	21.5	21.5					2.5	1.8	Improbable	Fair	Subject Property	Remove	Development - SWM	Yes	Signs of blister rust; forked crown due to white pine weevil
651	Eastern White Pine	<i>Pinus strobus</i>	Native	1	22	22					3.0	1.8	Improbable	Fair	Subject Property	Remove	Development - SWM	Yes	Blister rust; some crown dieback; asymmetrical crown
652	Eastern White Pine	<i>Pinus strobus</i>	Native	1	19.6	19.6					1.5	1.8	Improbable	Fair	Subject Property	Remove	Development - SWM	Yes	Signs of blister rust; natural pruning; forked crown due to white pine weevil
653	Eastern White Pine	<i>Pinus strobus</i>	Native	1	16.5	16.5					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development - SWM	Yes	Signs of blister rust; natural pruning; forked crown due to white pine weevil
654	Eastern White Pine	<i>Pinus strobus</i>	Native	1	24	24					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development - SWM	Yes	Blister rust; impacted by pine weevil; some dieback
655	Eastern White Pine	<i>Pinus strobus</i>	Native	1	13.8	13.8					1.0	1.8	Improbable	Fair	Subject Property	Remove	Development - SWM	Yes	Signs of blister rust; natural pruning; forked crown due to white pine weevil
656	Eastern White Pine	<i>Pinus strobus</i>	Native	1	26.7	26.7					4.0	1.8	Improbable	Fair	Subject Property	Remove	Development - SWM	Yes	Blister rust; asymmetrical crown due to competition with adjacent tree; some dieback
657	Eastern White Pine	<i>Pinus strobus</i>	Native	1	24.5	24.5					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development - SWM	Yes	Signs of blister rust; natural pruning; forked crown due to white pine weevil
658	Eastern White Pine	<i>Pinus strobus</i>	Native	1	16.5	16.5					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development - SWM	Yes	Signs of blister rust; natural pruning; forked crown due to white pine weevil
659	Eastern White Pine	<i>Pinus strobus</i>	Native	1	11	11					1.5	0	Possible	Dead	Subject Property	Remove	Development - SWM	No	Pine weevil; blister rust; crown dead
660	Eastern White Pine	<i>Pinus strobus</i>	Native	1	34.5	34.5					2.5	2.4	Improbable	Fair	Subject Property	Remove	Development - SWM	Yes	Signs of blister rust; natural pruning; forked crown due to white pine weevil
661	Eastern White Pine	<i>Pinus strobus</i>	Native	1	20	20					4.0	1.8	Improbable	Fair	Subject Property	Remove	Development - SWM	Yes	Bark cracks with sap; blister rust; minor dieback
662	Eastern White Pine	<i>Pinus strobus</i>	Native	1	20.5	20.5					1.5	1.8	Improbable	Fair	Subject Property	Remove	Development - SWM	Yes	Signs of blister rust; natural pruning; forked crown due to white pine weevil
663	Eastern White Pine	<i>Pinus strobus</i>	Native	1	19.5	19.5					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development - SWM	Yes	Signs of blister rust; natural pruning; forked crown due to white pine weevil
664	Eastern White Pine	<i>Pinus strobus</i>	Native	1	20	20					3.0	1.8	Improbable	Fair	Subject Property	Remove	Development - SWM	Yes	Blister rust; slightly crowded crown with minor dieback
665	Eastern White Pine	<i>Pinus strobus</i>	Native	1	15.6	15.6					1.0	1.8	Improbable	Fair	Subject Property	Remove	Development - SWM	Yes	Signs of blister rust; natural pruning; forked crown due to white pine weevil
666	Eastern White Pine	<i>Pinus strobus</i>	Native	1	18	18					2.0	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Well balanced, vigorous crown; minor signs of blister rust
667	American Basswood	<i>Tilia americana</i>	Native	3	46.8	19.5	17	10			3.0	3.0	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Minor dieback; arrowing out of rock site
668	American Basswood	<i>Tilia americana</i>	Native	3	74.5	42	17	16			5.0	4.8	Possible	Fair	Rail ROW, Subject Property	Remove	Development - SWM	Yes	Multiple failed branches; decay throughout; small cavities forming
669	White Ash	<i>Fraxinus americana</i>	Native	2	30.7	17.3	13				2.0	2.4	Possible	Very Poor	Rail ROW, Subject Property	Remove	Development - SWM	No	1 stem dead with decay; extensive crown dieback; epicormic growth only
670	American Basswood	<i>Tilia americana</i>	Native	1	11.5	11.5					2.0	1.8	Possible	Fair	Subject Property	Remove	Development - SWM	Yes	Twigs and branch dieback; suppressed by buckthorn
671	American Elm	<i>Ulmus americana</i>	Native	1	23.5	23.5					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development - SWM	Yes	Sapsucker damage; staining at 1 branch union; dieback in lower scaffold
672	American Basswood	<i>Tilia americana</i>	Native	1	34.5	34.5					4.0	2.4	Possible	Poor	Rail ROW, Subject Property	Retain	Development - SWM		Numerous dead branches; multiple branch failures
673	White Ash	<i>Fraxinus americana</i>	Native	1	23	23					2.0	1.8	Possible	Very Poor	Subject Property	Retain	Development - SWM		Extensive crown dieback; bark loss in some scaffold branches
674	White Ash	<i>Fraxinus americana</i>	Native	1	19.5	19.5					2.0	1.8	Possible	Fair	Subject Property	Retain	Development - SWM		No evidence of EAB; minor twig and branch dieback
675	Black Walnut	<i>Juglans nigra</i>	Native	2	48	26	22				5.0	3.0	Improbable	Fair	Subject Property	Remove	Development - SWM	Yes	Few dead branches; overall good form
676	Black Locust	<i>Robinia pseudoacacia</i>	Non-native	1	11	11					1.5	1.8	Improbable	Fair	Subject Property	Remove	Development - SWM	Yes	Crown generally suppressed; competing with surrounding buckthorn
677	Black Walnut	<i>Juglans nigra</i>	Native	2	44	24	20				0.5	0	Possible	Dead	Subject Property	Remove	Development - SWM	No	Two snags; evidence of wildlife feeding; no bark

Guelph Innovation District (Blocks 1 & 2) Tree Inventory and Preservation Plan  
Tree Inventory Data

Tree Number	Common Name	Scientific Name	Native/Non-native	Stem Count	Summed DBH (cm)	DBH 1 (cm)	DBH 2 (cm)	DBH 3 (cm)	DBH 4 (cm)	DBH 5 (cm)	Crown Radius (m)	Tree Protection Zone (m)	Potential for Structural Failure Rating	Overall Condition	Location	Proposed Action	Rationale for Removal	Compensation Required	Comments
678	American Elm	<i>Ulmus americana</i>	Native	1	18	18					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development - SWM	Yes	Leader rub; vigorous crown.
679	American Elm	<i>Ulmus americana</i>	Native	1	11	11					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development - SWM	Yes	Crown generally suppressed; competing with surrounding buckhorn; slight lean.
680	White Spruce	<i>Picea glauca</i>	Native	1	27	27					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development - SWM	Yes	Evidence of pruning to accommodate trail.
681	Eastern White Pine	<i>Pinus strobus</i>	Native	1	21	21					4.0	1.8	Improbable	Good	Subject Property	Retain			Good form.
682	Eastern White Pine	<i>Pinus strobus</i>	Native	1	19	19					2.0	1.8	Improbable	Good	Subject Property	Retain			Good form.
683	Eastern White Pine	<i>Pinus strobus</i>	Native	1	16	16					2.5	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Good erect form; healthy crown; some sap ooze.
684	Eastern White Pine	<i>Pinus strobus</i>	Native	1	16	16					2.5	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Good erect form; healthy crown.
685	Eastern White Pine	<i>Pinus strobus</i>	Native	1	20	20					3.0	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Good form.
686	Eastern White Pine	<i>Pinus strobus</i>	Native	1	16	16					2.5	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Good form.
687	Eastern White Pine	<i>Pinus strobus</i>	Native	1	26	26					3.0	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Good erect form; full crown; some chlorotic foliage.
688	Eastern White Pine	<i>Pinus strobus</i>	Native	1	26	26					3.5	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Good form.
689	Eastern White Pine	<i>Pinus strobus</i>	Native	1	17	17					3.0	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Good form.
690	Eastern White Pine	<i>Pinus strobus</i>	Native	1	15	15					2.5	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Good erect form; full crown; some chlorotic foliage.
691	Eastern White Pine	<i>Pinus strobus</i>	Native	1	17	17					3.0	1.8	Possible	Very Poor	Subject Property	Remove	Development - SWM	No	Peeling bark; all but one section of lower crown has died off.
692	Eastern White Pine	<i>Pinus strobus</i>	Native	1	16	16					3.0	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Good form.
693	Eastern White Pine	<i>Pinus strobus</i>	Native	1	25	25					4.0	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Good erect form; full crown.
694	Eastern White Pine	<i>Pinus strobus</i>	Native	1	28	28					5.0	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Good form.
695	Eastern White Pine	<i>Pinus strobus</i>	Native	1	20	20					3.5	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Good erect form; full crown; generally chlorotic foliage.
696	Eastern White Pine	<i>Pinus strobus</i>	Native	1	28	28					5.0	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Good form.
697	Eastern White Pine	<i>Pinus strobus</i>	Native	1	18	18					3.5	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Good erect form; vigorous crown; somewhat suppressed by adjacent pine; some chlorotic foliage.
698	Eastern White Pine	<i>Pinus strobus</i>	Native	1	22	22					5.0	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Good form.
699	Eastern White Pine	<i>Pinus strobus</i>	Native	1	24	24					3.5	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Good erect form; vigorous crown; minor chlorotic foliage.
700	Eastern White Pine	<i>Pinus strobus</i>	Native	1	28	28					5.0	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Good form.
701	Eastern White Pine	<i>Pinus strobus</i>	Native	1	22	22					5.0	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Good form; double leader.
702	Eastern White Pine	<i>Pinus strobus</i>	Native	1	22	22					3.5	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Good erect form; vigorous crown; codominant leaders.
703	White Spruce	<i>Picea glauca</i>	Native	1	37	37					6.0	2.4	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Good form; evidence of self pruning.
704	Eastern White Pine	<i>Pinus strobus</i>	Native	1	17	17					3.0	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Good erect form; vigorous crown; slightly suppressed by adjacent trees.
705	Eastern White Pine	<i>Pinus strobus</i>	Native	1	22	22					4.0	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Good form.
706	Eastern White Pine	<i>Pinus strobus</i>	Native	1	10.5	10.5					1.5	1.8	Improbable	Fair	Subject Property	Remove	Development - SWM	Yes	Good erect form; dieback of lower crown; some chlorotic foliage.
707	Eastern White Pine	<i>Pinus strobus</i>	Native	1	18	18					4.0	1.8	Improbable	Good	Subject Property	Remove	Development - SWM	Yes	Good form.
708	Eastern White Pine	<i>Pinus strobus</i>	Native	1	27	27					3.0	1.8	Improbable	Good	Subject Property	Retain			Good erect form; vigorous crown.
709	Manitoba Maple	<i>Acer negundo</i>	Native	3	38	15		13	10		3.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Vigorous crown; epicormic shoots; codominant trunks.
710	Manitoba Maple	<i>Acer negundo</i>	Native	1	16	16					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Fair form; dead branches.
711	Manitoba Maple	<i>Acer negundo</i>	Native	1	11	11					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Vigorous crown; epicormic shoots; somewhat suppressed.
712	Manitoba Maple	<i>Acer negundo</i>	Native	1	11	11					3.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Fair form; dead branches.
713	Manitoba Maple	<i>Acer negundo</i>	Native	2	31	19		12			3.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Vigorous crown; epicormic shoots; at edge of rock pile.
714	Manitoba Maple	<i>Acer negundo</i>	Native	1	13	13					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Fair form; dead branches.
715	Manitoba Maple	<i>Acer negundo</i>	Native	1	12	12					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Vigorous crown; epicormic shoots; somewhat suppressed by adjacent maples.
716	Manitoba Maple	<i>Acer negundo</i>	Native	2	22	12	10				2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Fair form; dead branches.
717	Manitoba Maple	<i>Acer negundo</i>	Native	1	11	11					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Fair form; dead branches.
718	Manitoba Maple	<i>Acer negundo</i>	Native	1	10	10					1.5	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Vigorous crown; epicormic shoots; somewhat suppressed by adjacent maples.
719	Manitoba Maple	<i>Acer negundo</i>	Native	2	26	16	10				2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Vigorous crown; epicormic shoots; somewhat suppressed by adjacent maples.
720	Norway Maple	<i>Acer platanoides</i>	Non-native	2	74	57	17				5.0	4.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Vigorous full dense crown; open trunk wound, mostly callused.
721	Norway Maple	<i>Acer platanoides</i>	Non-native	1	59	59					6.5	3.6	Possible	Fair	Subject Property	Remove	Development	Yes	Very poor attachment of main branches; numerous dead branches.
722	Manitoba Maple	<i>Acer negundo</i>	Native	1	18	18					5.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Suppressed by other maple; twisted trunk.
723	Manitoba Maple	<i>Acer negundo</i>	Native	1	15	15					3.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Fair form.
724	White Ash	<i>Fraxinus americana</i>	Native	1	13	13					1.5	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Wounded trunk; codominant leaders; galleries.
725	Manitoba Maple	<i>Acer negundo</i>	Native	1	12	12					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Fair form; some epicormic shoots; few dead branches.
726	Manitoba Maple	<i>Acer negundo</i>	Native	1	10	10					1.5	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Codominant trunks; dead epicormic shoots; crown somewhat suppressed.
727	Manitoba Maple	<i>Acer negundo</i>	Native	1	11	11					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Fair form; some epicormic shoots; few dead branches.
728	Manitoba Maple	<i>Acer negundo</i>	Native	1	19	19					3.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Lower epicormic shoots; top of slope along buckhorn thicket; twig dieback.
729	Manitoba Maple	<i>Acer negundo</i>	Native	2	32	19	13				3.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Fair form; some epicormic shoots; few dead branches.
730	White Ash	<i>Fraxinus americana</i>	Native	1	13	13					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Lower epicormic shoots; top of slope along buckhorn thicket; vigorous.
731	Norway Maple	<i>Acer platanoides</i>	Non-native	2	82	44	38				5.0	5.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Large wound where large branch failure was; branch failures.
732	Norway Maple	<i>Acer platanoides</i>	Non-native	1	21	21					5.0	1.8	Possible	Fair	Subject Property	Remove	Development	Yes	On edge of rocky culvert, eroded at base of trunk; crown asymmetrical to field.
733	Norway Maple	<i>Acer platanoides</i>	Non-native	1	42	42					6.0	3.0	Improbable	Fair	Subject Property	Remove	Development	Yes	Poor branch attachment; numerous dead branches.
734	Norway Maple	<i>Acer platanoides</i>	Non-native	3	42	16	14	12			3.0	3.0	Improbable	Fair	Subject Property	Remove	Development	Yes	Codominant trunks with weak attachment; crown partially suppressed by adjacent trees.
735	Norway Maple	<i>Acer platanoides</i>	Non-native	2	30	15					4.0	2.4	Improbable	Fair	Subject Property	Remove	Development	Yes	Fair form.
736	Norway Maple	<i>Acer platanoides</i>	Non-native	1	17	17					3.5	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Erect trunk; crown partially suppressed by adjacent trees.
737	Norway Maple	<i>Acer platanoides</i>	Non-native	1	13	13					4.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Healing wounds up trunk; smaller dead stem and other smaller live stem.
738	Norway Maple	<i>Acer platanoides</i>	Non-native	1	17	17					3.5	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Erect trunk; vigorous crown; crown partially suppressed by adjacent trees.
739	Norway Maple	<i>Acer platanoides</i>	Non-native	1	10.5	10.5					2.0	1.8	Improbable	Fair	Subject Property	Retain - Impact			Large wound on trunk healing.
740	Manitoba Maple	<i>Acer negundo</i>	Native	2	54	29	25				4.0	3.6	Improbable	Fair	Subject Property	Remove	Development	Yes	Vigorous low crown; epicormic shoots throughout; lower trunk wound.
741	Manitoba Maple	<i>Acer negundo</i>	Native	1	14.5	14.5					2.5	1.8	Improbable	Fair	Subject Property	Retain			Two smaller stems; fair form.
742	Manitoba Maple	<i>Acer negundo</i>	Native	1	12	12					1.5	1.8	Improbable	Fair	Subject Property	Retain			Epicormic shoots throughout; multistem; at edge of slope.
743	Manitoba Maple	<i>Acer negundo</i>	Native	1	10.4	10.4					1.5	1.8	Improbable	Fair	Subject Property	Retain			Fair form.
744	Manitoba Maple	<i>Acer negundo</i>	Native	5	58.5	20.5	18	20	16	15	4.0	3.6	Possible	Poor	Subject Property	Remove	Development	No	Epicormic shoots throughout; at edge of slope; crown dieback; broken branches; deadwood small.
745	Manitoba Maple	<i>Acer negundo</i>	Native	5	58	20	20	18	14	14	5.0	3.6	Improbable	Fair	Subject Property	Retain - Impact			One stem leaning almost touching ground then growing straight; numerous dead branches.
746	Manitoba Maple	<i>Acer negundo</i>	Native	1	12	12					2.5	1.8	Improbable	Good	Subject Property	Remove - Retain Stump	Hazard Mitigation	Yes	Fairly vigorous crown; erect form.
747	Manitoba Maple	<i>Acer negundo</i>	Native	3	48	19	16	13			6.0	3.0	Improbable	Poor	Subject Property	Remove - Retain Stump	Hazard Mitigation	No	Peeling bark; live crown but numerous dead branches; large branch failures.
748	White Ash	<i>Fraxinus americana</i>	Native	1	27	27					3.0	1.8	Improbable	Good	Subject Property	Retain			Full vigorous crown; no evidence of EAB.
1050	Manitoba Maple	<i>Acer negundo</i>	Native	2	37.5	20.5					4.5	1.8	Improbable	Fair	Subject Property	Retain			Full crown; vigorous epicormic shoots; low branching.
1051	Manitoba Maple	<i>Acer negundo</i>	Native	1	49.5	25	25				5.0	1.8	Improbable	Fair	Subject Property	Retain			Full large crown; vigorous epicormic shoots; low branching.
A	Blue Spruce	<i>Picea pungens</i>	Non-native	1	22	22					2.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Good form.
B	Washington Hawthorn	<i>Crataegus phaenopyrum</i>	Non-native	2	21	11	10				2.5	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Trunks not accessible; estimated DBH.
C	White Ash	<i>Fraxinus americana</i>	Native	3	31.5	11	11	10			2.0	2.4	Possible	Very Poor	Subject Property	Remove	Development	No	EAB; little remaining live tissue.
D	Thornless Honey Locust	<i>Gleditsia triacanthos</i> var. <i>inermis</i>	Non-native	1	22	22					3.0	1.8	Improbable	Fair	Subject Property, Road ROW	Remove	Development	Yes	Aggressive basal and epicormic shoots; dead leaders.

Gulph Innovation District (Blocks 1 & 2) Tree Inventory and Preservation Plan  
Tree Inventory Data

Tree Number	Common Name	Scientific Name	Native/Non-native	Stem Count	Summed DBH (cm)	DBH 1 (cm)	DBH 2 (cm)	DBH 3 (cm)	DBH 4 (cm)	DBH 5 (cm)	Crown Radius (m)	Tree Protection Zone (m)	Potential for Structural Failure Rating	Overall Condition	Location	Proposed Action	Rationale for Removal	Compensation Required	Comments
E	Thornless Honey Locust	<i>Gleditsia triacanthos var. inermis</i>	Non-native	1	28	28					3.0	1.8	Improbable	Good	Subject Property, Road ROW	Remove	Development	Yes	Full vigorous crown, epicormic shoots along laterals and trunk.
F	Amur Corktree	<i>Phellodendron amurense</i>	Non-native	1	15	15					2.0	1.8	Improbable	Fair	Road ROW	Retain			Good form; few dead branches.
G	Thornless Honey Locust	<i>Gleditsia triacanthos var. inermis</i>	Non-native	1	30.5	30.5					3.5	2.4	Improbable	Good	Subject Property, Road ROW	Remove	Development	Yes	Large full vigorous crown; epicormic shoots along laterals.
H	Eastern Cottonwood	<i>Populus deltoides</i>	Native	1	26	26					2.0	1.8	Improbable	Good	Road ROW	Retain			Good erect form and vigor.
I	Willow sp.	<i>Salix sp.</i>	Native	4	57	24.5	13	20	23		4.5	3.6	Improbable	Fair	Road ROW	Retain	Development		Good form; few dead branches.
J	Thornless Honey Locust	<i>Gleditsia triacanthos var. inermis</i>	Non-native	1	34	34					5.0	2.4	Improbable	Fair	Subject Property, Road ROW	Remove	Development	Yes	Good form; few dead branches.
K	Manitoba Maple	<i>Acer negundo</i>	Native	1	10.5	10.5					2.0	1.8	Improbable	Fair	Road ROW	Retain			Vigorous growth; coccidial form; within highway ROW slope.
L	Thornless Honey Locust	<i>Gleditsia triacanthos var. inermis</i>	Non-native	1	36.5	36.5					5.0	2.4	Improbable	Fair	Subject Property, Road ROW	Remove	Development	Yes	Good form; double leader, few dead branches.
M	Thornless Honey Locust	<i>Gleditsia triacanthos var. inermis</i>	Non-native	1	39.5	39.5					4.0	2.4	Improbable	Fair	Subject Property, Road ROW	Remove	Development	Yes	Good form; double leader.
N	Thornless Honey Locust	<i>Gleditsia triacanthos var. inermis</i>	Non-native	1	36.5	36.5					4.0	2.4	Improbable	Good	Subject Property, Road ROW	Remove	Development	Yes	Large full vigorous crown; epicormic shoots along laterals and trunk.
O	White Ash	<i>Fraxinus americana</i>	Native	3	71	39	19	13			3.0	4.8	Probable	Poor	Rail ROW	Retain			EAB, advanced crown dieback; buckthorn surrounding base.
P	American Elm	<i>Ulmus americana</i>	Native	2	32	17	15				3.0	2.4	Improbable	Fair	Rail ROW	Retain			Crown suppressed; few dead branches.
Q	American Basswood	<i>Tilia americana</i>	Native	5	68	26	20	22	20	20	4.2	4.8	Improbable	Fair	Rail ROW	Retain			Overgrown copice form; vigorous crown; epicormic shoots.
R	White Mulberry	<i>Morus alba</i>	Non-native	1	12	12					2.0	1.8	Improbable	Poor	Rail ROW	Retain			Numerous dead branches; very small crown.
S	White Ash	<i>Fraxinus americana</i>	Native	1	10	10					1.5	1.8	Improbable	Poor	Rail ROW	Retain			Epicormic growth; bark starting to peel.
T	American Elm	<i>Ulmus americana</i>	Native	2	26	14	12				2.0	1.8	Improbable	Fair	Rail ROW	Retain			Some poor branch attachment.
1663	White Ash	<i>Fraxinus americana</i>	Native	1	15	15					2.0	1.8	Probable	Very Poor	Subject Property	Remove	Development	No	Exfoliating bark; broken previously codominant leader; asymmetrical crown to N.
1664	Eastern White Pine	<i>Pinus strobus</i>	Native	1	10.5	10.5					1.0	1.8	Improbable	Fair	Subject Property	Retain	Development	Yes	Suppressed lower branches.
1665	Eastern White Pine	<i>Pinus strobus</i>	Native	1	14.5	14.5					2.0	1.8	Improbable	Good	Subject Property	Retain			Good form and structure.
1666	American Elm	<i>Ulmus americana</i>	Native	1	19	19					2.0	1.8	Possible	Fair	Subject Property	Remove	Development	Yes	Minor lower branch dieback.
U	American Basswood	<i>Tilia americana</i>	Native	5	82.5	20	19	16	16	12	5.5	3.6	Possible	Fair	Rail ROW	Retain			Stem and branch rub; few broken branches, additional stems under 10.
V	American Basswood	<i>Tilia americana</i>	Native	4	87	32.5	28	16	11		6.0	4.8	Possible	Fair	Rail ROW	Retain - Impact			Stem and branch rub; asymmetrical crown to S; additional stems under 10.
W	American Basswood	<i>Tilia americana</i>	Native	3	82	30.5	29	23			6.5	5.4	Possible	Fair	Rail ROW	Retain - Impact			Asymmetrical crown to NW; few broken branches; Sapsucker feeding holes.
1667	White Spruce	<i>Picea glauca</i>	Native	1	16	16					3.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Asymmetrical crown to N.
1668	White Spruce	<i>Picea glauca</i>	Native	1	32	32					3.0	2.4	Improbable	Good	Subject Property	Remove	Development	Yes	Codominant leaders.
1669	White Spruce	<i>Picea glauca</i>	Native	1	16.5	16.5					2.5	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Slightly suppressed by competition.
1670	White Spruce	<i>Picea glauca</i>	Native	1	20.5	20.5					3.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Good form and structure.
1671	White Spruce	<i>Picea glauca</i>	Native	1	15	15					2.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Resin; couple small, acutely angled branches.
1672	Norway Spruce	<i>Picea abies</i>	Non-native	1	26	26					4.0	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Good form and structure.
1673	White Spruce	<i>Picea glauca</i>	Native	1	19.5	19.5					2.0	1.8	Possible	Fair	Subject Property	Remove	Development	Yes	Minor branch dieback.
1674	White Spruce	<i>Picea glauca</i>	Native	2	43	24	19				2.0	3.0	Possible	Fair	Subject Property	Remove	Development	Yes	Codominant stems with included bark.
1675	White Spruce	<i>Picea glauca</i>	Native	1	21	21					2.5	1.8	Possible	Good	Subject Property	Retain			Good form and structure.
1676	White Spruce	<i>Picea glauca</i>	Native	1	27	27					4.0	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Good form and structure; heavy lower branches.
1677	American Elm	<i>Ulmus americana</i>	Native	1	40.5	40.5					4.0	3.0	Possible	Fair	Rail ROW	Retain			Codominant leaders with included bark.
1678	American Basswood	<i>Tilia americana</i>	Native	1	18.5	18.5					4.0	1.8	Possible	Fair	Rail ROW	Retain			Slight stem lean to S; low branching structure.
1679	American Basswood	<i>Tilia americana</i>	Native	1	16	16					2.0	1.8	Possible	Poor	Rail ROW	Retain			Asymmetrical crown to N; codominant leaders; stem rub.
1680	American Basswood	<i>Tilia americana</i>	Native	1	12	12					2.0	1.8	Possible	Poor	Rail ROW	Retain			Stem lean SE; stem rub; rocks piled at base; dead lower branches.
X	White Ash	<i>Fraxinus americana</i>	Native	1	13	13					1.0	1.8	Probable	Very Poor	Rail ROW	Retain			Mostly dead; exfoliating bark.
Y	American Basswood	<i>Tilia americana</i>	Native	1	28	28					2.0	1.8	Improbable	Fair	Rail ROW	Retain			Full branching structure; included bark.
Z	American Basswood	<i>Tilia americana</i>	Native	5	155	35	32	30	29	29	6.0	6	Improbable	Fair	Rail ROW	Retain			Twelve stems total; some broken branches; spreading form due to abundance of stems.
1681	Eastern White Pine	<i>Pinus strobus</i>	Native	1	13	13					1.5	1.8	Improbable	Fair	Subject Property	Retain			Lower branch dieback.
1682	Eastern White Pine	<i>Pinus strobus</i>	Native	1	28.5	28.5					4.0	1.8	Improbable	Fair	Subject Property	Retain			Asymmetrical crown to N.
1683	Norway Spruce	<i>Picea abies</i>	Non-native	1	28	28					3.0	1.8	Improbable	Fair	Subject Property	Retain			Codominant leaders at top of tree.
1684	Eastern White Pine	<i>Pinus strobus</i>	Native	1	23	23					3.5	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Long low branches creating short, wide form.
1685	White Spruce	<i>Picea glauca</i>	Native	1	35	35					5.0	2.4	Improbable	Good	Subject Property	Retain			Good form and structure.
1686	Norway Spruce	<i>Picea abies</i>	Non-native	1	38	38					4.5	2.4	Improbable	Good	Subject Property	Retain			Good form and structure.
1687	White Ash	<i>Fraxinus americana</i>	Native	1	17	17					2.0	1.8	Possible	Poor	Subject Property	Remove - Retain Stump	Hazard Mitigation	No	Epicormic growth; stem wounds; codominant leaders.
1688	Eastern White Pine	<i>Pinus strobus</i>	Native	1	20	20					4.0	0	Probable	Dead	Subject Property	Retain			No live branches.
1689	Eastern White Pine	<i>Pinus strobus</i>	Native	1	26	26					4.5	1.8	Improbable	Fair	Subject Property	Retain			Stem rub; resin; light pruning.
1690	Eastern White Pine	<i>Pinus strobus</i>	Native	1	36	36					5.0	2.4	Improbable	Fair	Subject Property	Retain			Codominant leaders; light pruning.
1691	White Ash	<i>Fraxinus americana</i>	Native	1	23.5	23.5					3.0	1.8	Improbable	Fair	Subject Property	Retain			EAB exit holes and galleries.
1692	Manitoba Maple	<i>Acer negundo</i>	Native	1	107	62	45				5.0	6.42	Probable	Very Poor	Subject Property	Retain			Broken stem; large cavity in lower stem; epicormic growth; multiple broken branches.
1693	Eastern Cottonwood	<i>Populus deltoides</i>	Native	1	12	12					1.0	1.8	Possible	Fair	Subject Property	Remove	Development	Yes	Curved stem; sticks and other yard waste piled at base; stem wound.
1694	Manitoba Maple	<i>Acer negundo</i>	Native	1	36.5	36.5					8.0	2.4	Possible	Fair	Subject Property	Retain			History of pruning on southside branches towards footpath; one scaffold branch cracked and failed through center.
1695	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	12	12					1.0	1.8	Possible	Poor	Subject Property	Remove	Development	No	Multiple stem wounds; asymmetrical crown to N.
1696	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	11.5	11.5					2.0	1.8	Possible	Very Poor	Subject Property	Remove	Development	No	Multiple stem wounds; asymmetrical crown to N; exfoliating bark.
1697	White Ash	<i>Fraxinus americana</i>	Native	1	50.5	50.5					11.0	3.6	Probable	Very Poor	Subject Property	Retain			Multiple broken branches; history of pruning; one large, hazardous scaffold branch extending south over existing footpath; exfoliating bark.
1698	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	19.5	19.5					2.0	1.8	Probable	Very Poor	Subject Property	Remove	Development	No	Multiple stem wounds; epicormic growth; multiple leaders with included bark.
1699	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	15	15					2.5	1.8	Probable	Very Poor	Subject Property	Remove	Development	No	Multiple stem wounds; epicormic growth.
1700	White Ash	<i>Fraxinus americana</i>	Native	1	19	19					1.0	1.8	Possible	Very Poor	Subject Property	Retain			Stem wound.
1701	Manitoba Maple	<i>Acer negundo</i>	Native	1	13	13					2.5	1.8	Possible	Poor	Subject Property	Retain			Stem lean to SW; stem rub with compartmentalized wound.
1702	Manitoba Maple	<i>Acer negundo</i>	Native	1	14.5	14.5					2.0	1.8	Possible	Poor	Subject Property	Retain			Stem lean to S; dead lower branches.
1703	Manitoba Maple	<i>Acer negundo</i>	Native	4	68.5	20.5	17	16	15		2.5	3.6	Possible	Poor	Subject Property	Retain			Multiple dead branches.
1704	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	3	59.5	25.5	19	16			5.0	3.6	Possible	Very Poor	Subject Property	Remove - Retain Stump	Hazard Mitigation	No	EAB exit holes and galleries; stem wounds.
1705	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	12.5	12.5					4.0	1.8	Possible	Poor	Subject Property	Remove - Retain Stump	Hazard Mitigation	No	EAB exit holes and galleries; stem wounds; second stem under 10; asymmetrical crown to NE.
1706	Green Ash	<i>Fraxinus pennsylvanica</i>	Native	1	11.5	11.5					1.5	1.8	Improbable	Good	Subject Property	Remove	Development	Yes	Good form and structure; some lichen or fungus along lower stem.
1707	Manitoba Maple	<i>Acer negundo</i>	Native	1	26	26					3.0	1.8	Possible	Fair	Subject Property	Retain			Stem lean to N; epicormic growth.
1708	Common Apple	<i>Malus pumila</i>	Non-native	5	89	22	21	18	15	14	5.0	3.6	Possible	Fair	Subject Property	Retain			Codominant stems; included bark; crooked growth form; multiple dead branches.
1709	Common Apple	<i>Malus pumila</i>	Non-native	5	60	14	13	11	11	11	2.5	2.4	Probable	Poor	Subject Property	Remove	Development	No	Multiple dead branches; exfoliating bark.
1710	White Ash	<i>Fraxinus americana</i>	Native	1	13	13					1.0	1.8	Probable	Very Poor	Subject Property	Remove	Development	No	Exfoliating bark; epicormic growth.
1711	Manitoba Maple	<i>Acer negundo</i>	Native	1	29.5	29.5					3.5	1.8	Possible	Fair	Subject Property	Remove	Development	Yes	Significant stem lean to N; included bark.
1712	Manitoba Maple	<i>Acer negundo</i>	Native	3	57	23	17	17			4.0	3.6	Possible	Poor	Subject Property	Retain			On rocky slope; history of pruning; codominant stems and leaders; epicormic growth.
1713	Manitoba Maple	<i>Acer negundo</i>	Native	3	69	28	21	20			6.0	4.2	Possible	Fair	Subject Property	Retain			On rocky slope; codominant stems and leaders; epicormic growth.
1714	Manitoba Maple	<i>Acer negundo</i>	Native	1	10	10					1.0	1.8	Improbable	Good	Subject Property	Remove - Retain Stump	Hazard Mitigation	Yes	No notable defects.
1715	Norway Maple	<i>Acer platanoides</i>	Non-native	1	22	22					2.0	1.8	Improbable	Good	Subject Property	Retain			Straight form.

Guelph Innovation District (Blocks 1 & 2) Tree Inventory and Preservation Plan  
Tree Inventory Data

Tree Number	Common Name	Scientific Name	Native/ Non-native	Stem Count	Summed DBH (cm)	DBH 1 (cm)	DBH 2 (cm)	DBH 3 (cm)	DBH 4 (cm)	DBH 5 (cm)	Crown Radius (m)	Tree Protection Zone (m)	Potential for Structural Failure Rating	Overall Condition	Location	Proposed Action	Rationale for Removal	Compensation Required	Comments
1716	Norway Maple	<i>Acer platanoides</i>	Non-native	2	80	54	26				8.0	4.8	Possible	Poor	Subject Property	Remove - Retain Stump	Hazard Mitigation	No	Included bark; reaction wood at base, with rot and fungus; large cavity with heartwood rot; few broken branches.
1717	Norway Maple	<i>Acer platanoides</i>	Non-native	1	18.5	18.5					5.5	1.8	Improbable	Fair	Subject Property	Remove	Development	Yes	Slight stem lean and asymmetrical crown to N.
1718	Norway Maple	<i>Acer platanoides</i>	Non-native	2	53.5	28	26				5.0	3.6	Improbable	Fair	Subject Property	Remove	Development	Yes	Codominant leaders with included bark.
1720	Norway Maple	<i>Acer platanoides</i>	Non-native	1	90.5	90.5					11.0	6	Probable	Poor	Subject Property	Remove - Retain Stump	Hazard Mitigation	No	Multiple broken branches and one stem; compartmentalized lower stem wound with heartwood rot; included bark.
1723	White Ash	<i>Fraxinus americana</i>	Native	2	26	14	11				2.0	1.8	Probable	Very Poor	Subject Property	Remove - Retain Stump	Hazard Mitigation	No	Stem wounds, bark beginning to exfoliate.
1722	White Ash	<i>Fraxinus americana</i>	Native	1	12.5	12.5					1.0	1.8	Probable	Very Poor	Subject Property	Remove - Retain Stump	Hazard Mitigation	No	Stem wounds, bark beginning to exfoliate.
1721	White Ash	<i>Fraxinus americana</i>	Native	3	46	17	17	14			4.5	3.0	Probable	Very Poor	Subject Property	Remove - Retain Stump	Hazard Mitigation	No	Stem wounds, bark beginning to exfoliate; epicormic growth.
1724	White Ash	<i>Fraxinus americana</i>	Native	1	17.5	17.5					2.0	1.8	Possible	Fair	Subject Property	Retain	Hazard Mitigation	No	Good form and structure, little to no defects.
1725	White Ash	<i>Fraxinus americana</i>	Native	1	14.5	14.5					2.5	1.8	Possible	Fair	Subject Property	Remove	Development	Yes	Smaller second stem; codominant leaders.
1726	White Ash	<i>Fraxinus americana</i>	Native	1	16.5	16.5					2.5	1.8	Possible	Fair	Subject Property	Remove	Development	Yes	Codominant leaders.
1727	White Ash	<i>Fraxinus americana</i>	Native	2	34	15	16				2.5	2.4	Possible	Fair	Subject Property	Remove	Development	Yes	Codominant stems with included bark; asymmetrical crown to W.
1728	White Ash	<i>Fraxinus americana</i>	Native	1	24	24					3.0	1.8	Probable	Poor	Subject Property	Remove	Development	No	EAB exit holes and galleries; epicormic growth.
1729	White Ash	<i>Fraxinus americana</i>	Native	1	37	21	16				3.0	0	Probable	Dead	Subject Property	Remove - Retain Stump	Hazard Mitigation	No	No live branches; exfoliating bark.
1730	Manitoba Maple	<i>Acer negundo</i>	Native	1	12	12					4.0	0	Probable	Dead	Subject Property	Remove - Retain Stump	Hazard Mitigation	No	Dead lower branches; stem lean to S.
1731	Manitoba Maple	<i>Acer negundo</i>	Native	2	37	19.5	18				5.0	2.4	Possible	Fair	Subject Property	Remove - Retain Stump	Hazard Mitigation	Yes	Stem lean to NE; codominant stems with leaders.
1732	Manitoba Maple	<i>Acer negundo</i>	Native	4	165.5	46.5	46	37	37		11.0	7.74	Probable	Poor	Subject Property	Remove	Development	No	Two stems nearly horizontal; multiple broken branches; epicormic growth.
1733	Norway Maple	<i>Acer platanoides</i>	Non-native	4	50	50					5.0	3.0	Improbable	Fair	Subject Property	Remove	Development	Yes	Relatively good form; codominant leaders; few minor dead branches.

## **Appendix II**

### **Tree Health and Potential for Structural Failure Assessment Criteria**

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## Tree Health Assessment Criteria

Assessment Criteria	Definition <sup>1</sup>
Excellent	Represents a tree in near perfect form, health, and vigour. This tree would exhibit no deadwood, no decline, and no visible defects.
Good	Represents a tree ranging from a generally healthy tree to a near perfect tree in terms of health, vigour and structure. This tree exhibits a complete, balanced crown structure with little to no deadwood and minimal defects as well as a properly formed root flare.
Fair	Represents a tree with minor health, balance or structural issues with minimal to moderate deadwood. Branching structure shows signs of included bark or minor rot within the branch connections or trunk wood. The root flare shows minimal signs of mechanical injury, decay, poor callusing, or girdling roots. Trees in the category require minor remedial actions to improve the vigour and structure of the tree.
Poor	Represents a tree that exhibits a poor vigour, reduced crown size (<70% <sup>2</sup> of crown typical of species caused by overcrowding or decline), extreme crown imbalance, or extensive rot in the branching and trunk wood. Fungus could be seen from these rotting areas, suggesting further decay. These trees have extensive crown die back with a large amount of deadwood, and possibly dead sections. These weakened areas can lead to a potential failure of tree sections. Rooting zones show signs of extensive root decay or damage (fruiting bodies or mechanical damage) or girdling roots. Trees in this category require more extensive actions to prevent failure. A tree identified as poor would be a candidate for removal in the near future.
Very Poor	Represents a tree that exhibits major health and structural defects. Quite often the defects or diseases affecting this tree will be fatal. Large quantities of fungus, large dead sections with possible cavities and bark falling off all are signs that a tree is in a major state of decline and would be identified as very poor. These trees have a probable or imminent potential for structural failure. These trees should be identified for removal.
Dead	Represents a tree that exhibits no sign of new growth, including buds, foliage, or shoot growth. These trees have a probable or imminent potential for structural failure. These trees should be identified for removal.

<sup>1</sup> (Dunster 2009)

<sup>2</sup> The percentage of crown deadwood was adjusted from 30% to 70%, to align with the City of Guelph's compensation exemption criteria.

## Potential for Structural Failure Assessment Criteria

Assessment Criteria*	Definition <sup>1</sup>
Improbable	The tree or branch is not likely to fail during normal weather conditions and may not fail in many severe weather conditions within the specified time frame.
Possible	Failure could occur, but it is unlikely during normal weather conditions within the specified time frame.
Probable	Failure may be expected under normal weather conditions within the specified time frame.
Imminent	Failure has started or is most likely to occur in the near future, even if there is no significant wind or increased load. This is a rare occurrence for an assessor to encounter, and it may require immediate action to protect people from harm.
*A specified time frame of 1 year will be used when assessing potential for structural failure.	

<sup>1</sup> (Dunster et al. 2013)

**Appendix III**  
Conditions of Tree Assessment

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## **Conditions of Tree Assessment**

### **Limitations**

This tree inventory and assessment is based on the circumstances and observations by Natural Resource Solutions Inc. (NRSI) as they existed at the time of the site inspection(s) of the Client's Property as described in this report (the "Property") and the trees situated thereon, and upon information provided by the Client to NRSI. The opinions in this assessment are given based on observations made and using generally accepted professional judgment, however, because trees are living organisms and subject to change, damage and disease, the results, observations, recommendations, and analysis as set out in this assessment are valid only at the date any such observations and analysis took place. No guarantee, warranty, representation or opinion is offered or made by NRSI as to the length of the validity of the results, observations, recommendations and analysis contained within this assessment. As a result, the Client shall not rely upon this assessment, save and except for representing the circumstances and observations at the date of site inspection(s), and the analysis and recommendations made in relation to the proposed undertaking. It is recommended that the inventoried trees discussed in this assessment should be re-assessed periodically, where required (i.e., after 2 years).

### **Further Services**

Neither NRSI, nor any assessor employed or retained by NRSI (the "Assessor") for the purpose of preparing or assisting in the preparation of this assessment shall be required to provide any further consultation or services to the Client including, without limitation, acting as an expert witness or witness in any court in any jurisdiction unless the Client has first made specific arrangements with respect to such further services, including providing payment of the Assessor's regular hourly billing fees.

NRSI accepts no responsibility for the implementation of all or any part of this report, unless specifically requested to examine the implementation of such activities recommended herein. Any request for the inspection or supervision of all or part of the implementation shall be made in writing and the details agreed to in writing by both parties.

### **Assumptions**

The Client is hereby notified that where any of the information set out and referenced in this assessment are based on assumptions, facts or information provided to NRSI, NRSI will in no way be responsible for the veracity or accuracy of any such information. Further, the Client acknowledges and agrees that NRSI has, for the purposes of preparing their assessment, assumed that the Property is in full compliance with all applicable federal, provincial, municipal and local statutes, regulations, by-laws, guidelines and other related laws. NRSI explicitly denies any legal liability for any and all issues with respect to non-compliance with any of the above-referenced statutes, regulations, by-laws, guidelines and laws as it may pertain to or affect the Property.

## **Restriction of Assessment**

The assessment carried out was restricted to the areas as described in this report. NRSI is not legally liable for any other trees except those expressly discussed herein. The conclusions of this assessment do not apply to any areas, trees, or any other property not covered or referenced in this assessment.

## **Professional Responsibility**

In carrying out this assessment, NRSI and any Assessor appointed for and on behalf of NRSI to perform and carry out the assessment has exercised a reasonable standard of care, skill and diligence. The assessment has been made using accepted arboricultural techniques. These include a visual examination of each tree for structural defects, scars, external indications of decay such as fungal fruiting bodies, evidence of insect attack, discolored foliage (during the leaf-on period), 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 current or planned proximity of property and people. Except where specifically noted in the assessment, none of the trees examined on the property were dissected, cored, probed, or climbed, and detailed root crown examinations involving excavation were not undertaken.

No guarantees are offered, or implied, that trees recommended for retention, or all parts of them, will remain standing. It is professionally impossible to predict with absolute certainty the behaviour of any single tree or group of trees, or all their component parts, in all given circumstances. Inevitably, a standing tree will always pose some risk. Most trees have the potential to fall, lean, or otherwise pose a danger to property and persons in the event of extreme weather conditions, and this risk can only be eliminated if the tree is removed.

Without limiting the foregoing, no liability is assumed by NRSI or its directors, officers, employers, contractors, agents or Assessors for:

- a) Any legal description provided with respect to the Property;
- b) Issues of title and/or ownership with respect to the Property;
- c) The accuracy of the Property line locations or boundaries with respect to the Property; and
- d) The accuracy of any other information provided to NRSI by the Client or third parties;
- e) Any consequential loss, injury or damages suffered by the Client or any third parties, including but not limited to replacement costs, loss of use, earnings and business interruption; and,
- f) The unauthorized distribution of the assessment.

## **Third Party Liability**

This assessment was prepared by NRSI for the Client. The data collected reflect NRSI's best assessment of the inventoried trees situated on the Property with the information available at the time of observation. Data analysis and the assessment of potential impacts to inventoried trees is specific to the proposed undertaking as described in this report. NRSI accepts no responsibility for any damages or loss suffered by any third party or by the Client as a result of decisions made or actions based upon the use of this assessment for purposes unrelated to the proposed undertaking.

**General**

Any plans and/or illustrations in this assessment are included only to help the Client visualize the issues in this assessment and shall not be relied upon for any other purpose.

This report shall be considered as a whole, no sections are severable, and the assessment shall be considered incomplete if any pages are missing.

**Appendix IV**  
Tree Data and Summary Tables

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## Summary of Inventoried Trees

Common Name	Scientific Name	Excellent	Good	Fair	Poor	Very Poor	Dead	Overall Total
<b>Native Species</b>								
American Basswood	<i>Tilia americana</i>		3	18	4			25
American Elm	<i>Ulmus americana</i>			11				11
Balsam Fir	<i>Abies balsamea</i>	1	2					3
Black Walnut	<i>Juglans nigra</i>		2	2	1		1	6
Bur Oak	<i>Quercus macrocarpa</i>		1	1				2
Common Hackberry	<i>Celtis occidentalis</i>		1					1
Eastern Cottonwood	<i>Populus deltoides</i>		5	5				10
Eastern Red Cedar	<i>Juniperus virginiana</i>		5	1				6
Eastern White Cedar	<i>Thuja occidentalis</i>		18	15	5			38
Eastern White Pine	<i>Pinus strobus</i>	1	40	33	2	2	4	82
Freeman's Maple	<i>Acer x freemanii</i>		4	8				12
Green Ash	<i>Fraxinus pennsylvanica</i>		3	16	42	20	2	83
Manitoba Maple	<i>Acer negundo</i>		7	57	10	10	1	85
Northern Red Oak	<i>Quercus rubra</i>		4				1	5
Paper Birch	<i>Betula papyrifera</i>			1				1
Red Maple	<i>Acer rubrum</i>			1				1
Red Pine	<i>Pinus resinosa</i>		1	1				2
Silver Maple	<i>Acer saccharinum</i>			1				1
Sugar Maple	<i>Acer saccharum</i>		8	3				11
White Ash	<i>Fraxinus americana</i>		1	16	17	31	10	75
White Spruce	<i>Picea glauca</i>	1	31	9				41
Willow sp.	<i>Salix sp.</i>		7	6				13
<b>Total</b>		<b>3</b>	<b>143</b>	<b>205</b>	<b>81</b>	<b>63</b>	<b>19</b>	<b>514</b>
<b>Non-native Species</b>								
Amur Corktree	<i>Phellodendron amurense</i>		15	2				17
Black Locust	<i>Robinia pseudoacacia</i>		3	5	1			9
Black Pine	<i>Pinus nigra</i>		4	3			1	8
Blue Spruce	<i>Picea pungens</i>		5	2				7
Common Apple	<i>Malus pumila</i>			26	26	11		63
European Larch	<i>Larix decidua</i>		4	3				7
Hawthorn sp.	<i>Crataegus sp.</i>		1	3				4
Little-leaf Linden	<i>Tilia cordata</i>		18	12				30

Common Name	Scientific Name	Excellent	Good	Fair	Poor	Very Poor	Dead	Overall Total
Maiden-hair Tree	<i>Ginkgo biloba</i>		1					1
Northern Catalpa	<i>Catalpa speciosa</i>			1				1
Norway Maple	<i>Acer platanoides</i>		25	68	5			98
Norway Spruce	<i>Picea abies</i>	2	11	11				24
Ohio Buckeye	<i>Aesculus glabra</i>		1	3				4
Scots Pine	<i>Pinus sylvestris</i>		5	7				12
Siberian Elm	<i>Ulmus pumila</i>		3	11	5	1	4	24
Sweet Cherry	<i>Prunus avium</i>			5				5
Thornless Honey Locust	<i>Gleditsia triacanthos</i> var. <i>inermis</i>		10	4				14
Washington Hawthorn	<i>Crataegus phaenopyrum</i>		1					1
White Mulberry	<i>Morus alba</i>				1			1
<b>Total</b>		<b>2</b>	<b>107</b>	<b>166</b>	<b>38</b>	<b>12</b>	<b>5</b>	<b>330</b>
<b>Grand Total</b>		<b>5</b>	<b>250</b>	<b>371</b>	<b>119</b>	<b>75</b>	<b>24</b>	<b>844</b>

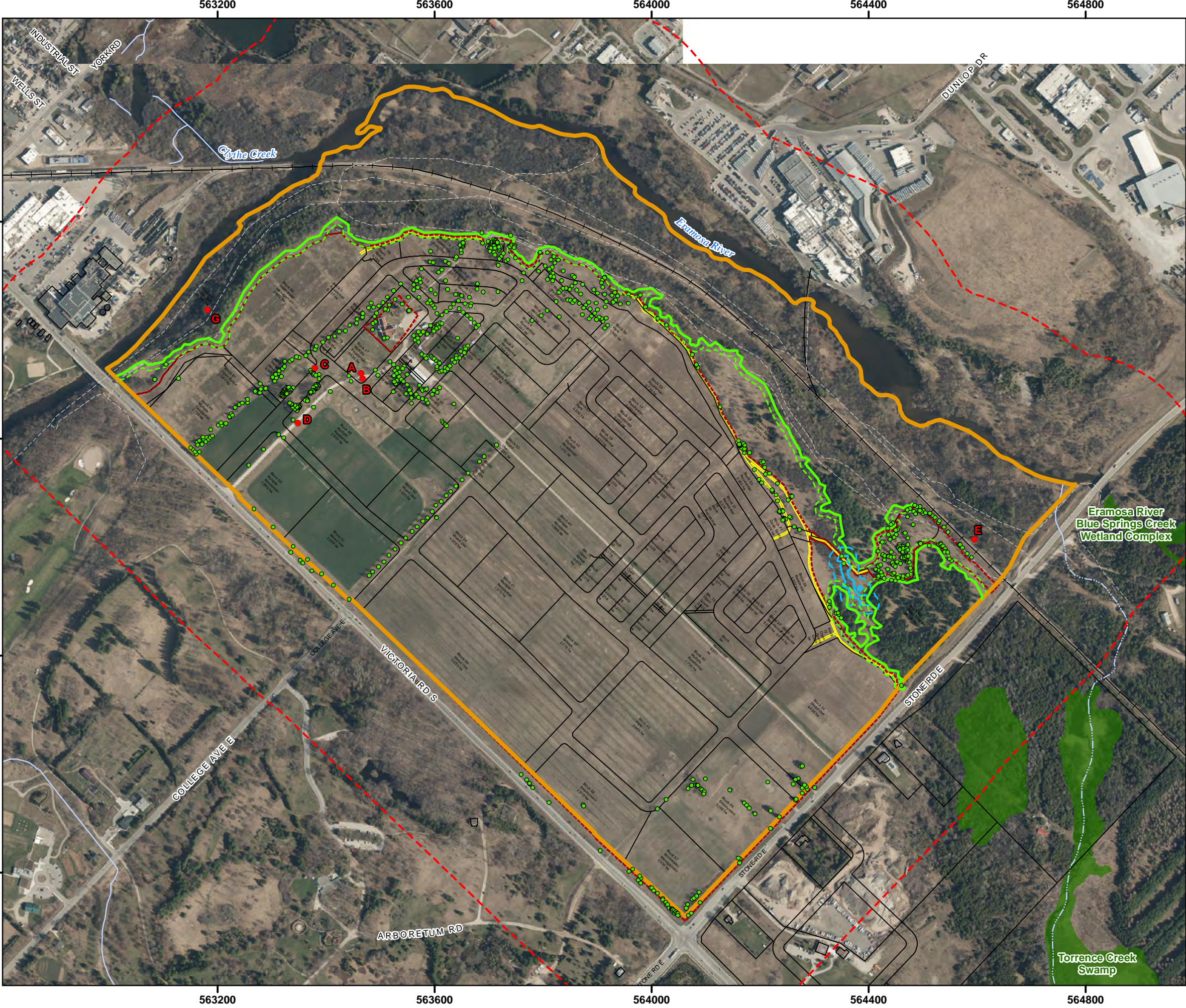
### Overall Condition of Trees Inventoried

Potential for Structural Failure Rating	Overall Condition						Total
	Excellent	Good	Fair	Poor	Very Poor	Dead	
Improbable	5	249	318	17	4	0	<b>593</b>
Possible	0	1	46	73	32	13	<b>165</b>
Probable	0	0	7	29	39	9	<b>84</b>
Imminent	0	0	0	0	0	2	<b>2</b>
<b>Total</b>	<b>5</b>	<b>250</b>	<b>371</b>	<b>119</b>	<b>75</b>	<b>24</b>	<b>844</b>

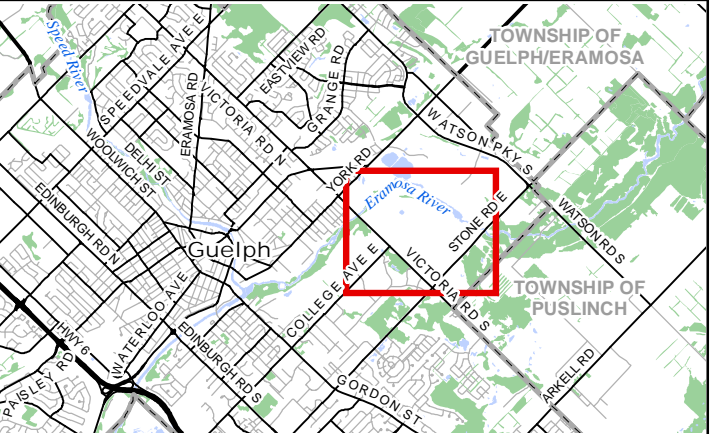
## Maps

**Map 1. Subject Property and Natural Features**

**Map 2a-2e. Tree Inventory and Preservation Plan**



**Map 1**  
**Guelph Innovation District**  
**(Blocks 1 and 2)**  
**Subject Property**  
**and Natural Features**



- Legend**
- [Red dashed line] Study Area (240m)
  - [Orange solid line] Subject Property (GID Blocks 1 and 2)
  - [Green dot] Inventoried Tree
  - [Red dot] Candidate Bat Roost Tree
  - [Red dashed line] Proposed Grading Limit
  - [Black line] Proposed Site Plan
  - [Yellow line] Proposed Trail
  - [Grey line] Existing Conditions
  - [Grey line with cross-ticks] Existing Fence
  - [Grey dashed line] Existing Trails
  - [Black line with cross-ticks] Railway
  - [Blue line] Permanent Watercourse
  - [Blue dashed line] Intermittent Watercourse
  - [Green line] Surveyed Dripline
  - [Green dashed line] Significant Woodland Buffer (10m)
  - [Blue outline] Other Wetland (GRCA Confirmed July 14, 2022)
  - [Blue dashed outline] Other Wetland (15m)
  - [Green outline] Provincially Significant Wetland (PSW)

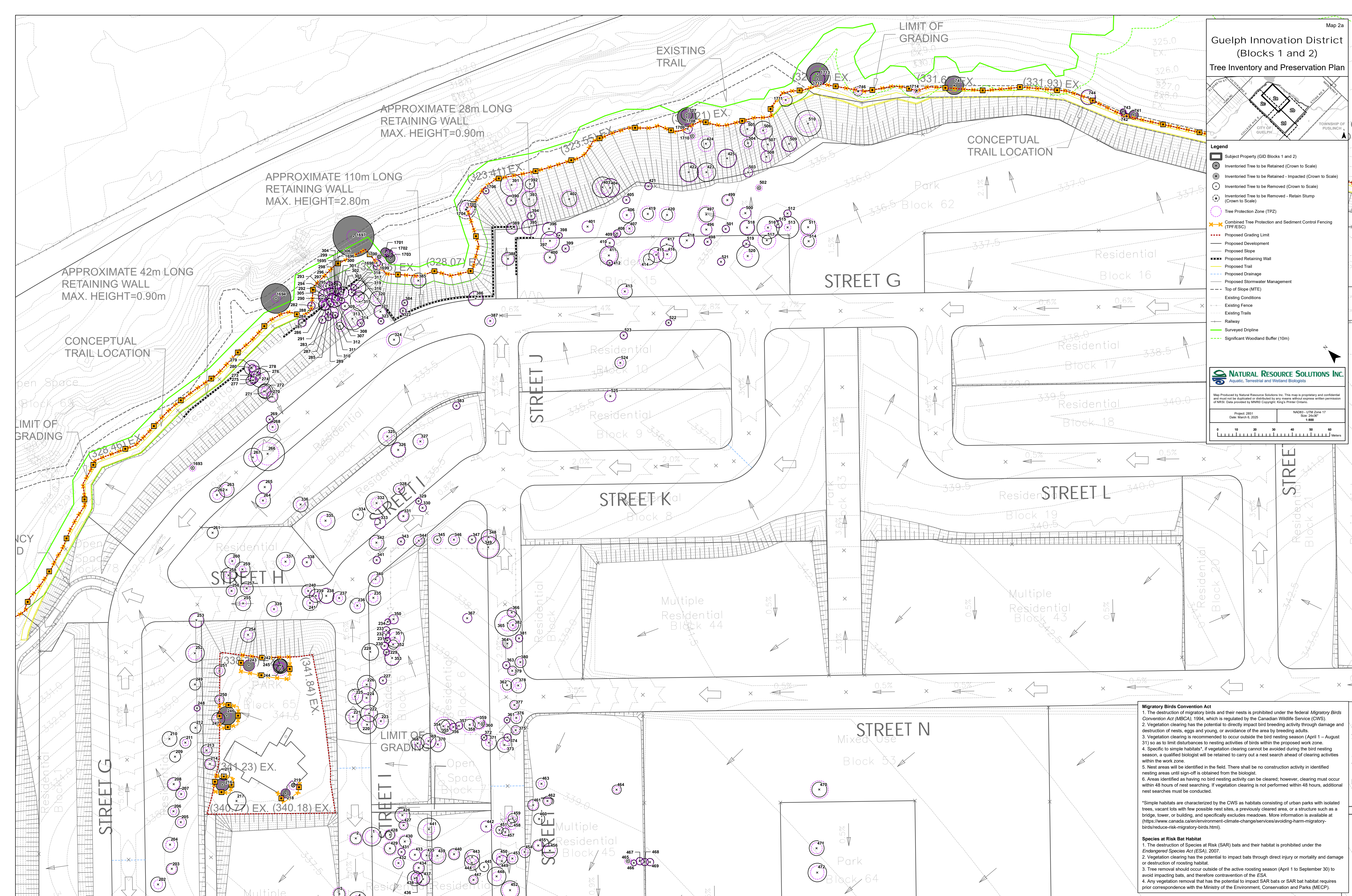
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Aquatic, Terrestrial and Wetland Biologists

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Project: 2851 Date: February 18, 2025	NAD83 - UTM Zone 17 Size: 11x17" 1:7,000
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0 100 200 300 400 Metres

N







Map 2c

### Guelph Innovation District (Blocks 1 and 2)

#### Tree Inventory and Preservation Plan

CITY OF GUELPH  
TOWNSHIP OF PUSLINCH

**Legend**

- Subject Property (GID Blocks 1 and 2)
- Inventoried Tree to be Retained (Crown to Scale)
- Inventoried Tree to be Retained - Impacted (Crown to Scale)
- Inventoried Tree to be Removed (Crown to Scale)
- Inventoried Tree to be Removed - Retain Stump (Crown to Scale)
- Candidate Bat Roost Tree
- Tree Protection Zone (TPZ)
- Combined Tree Protection and Sediment Control Fencing (TPF/ESC)
- Proposed Grading Limit
- Proposed Development
- Proposed Slope
- Proposed Drainage
- Proposed Stormwater Management
- Top of Slope (MTE)
- Existing Conditions
- Existing Fence
- Existing Trails
- Road
- Surveyed Dripline
- Significant Woodland Buffer (10m)

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Project 2851	NAD83 - UTM Zone 17
Date: March 6, 2025	Size: 24x30"
	1:500

0 10 20 30 40 50 60

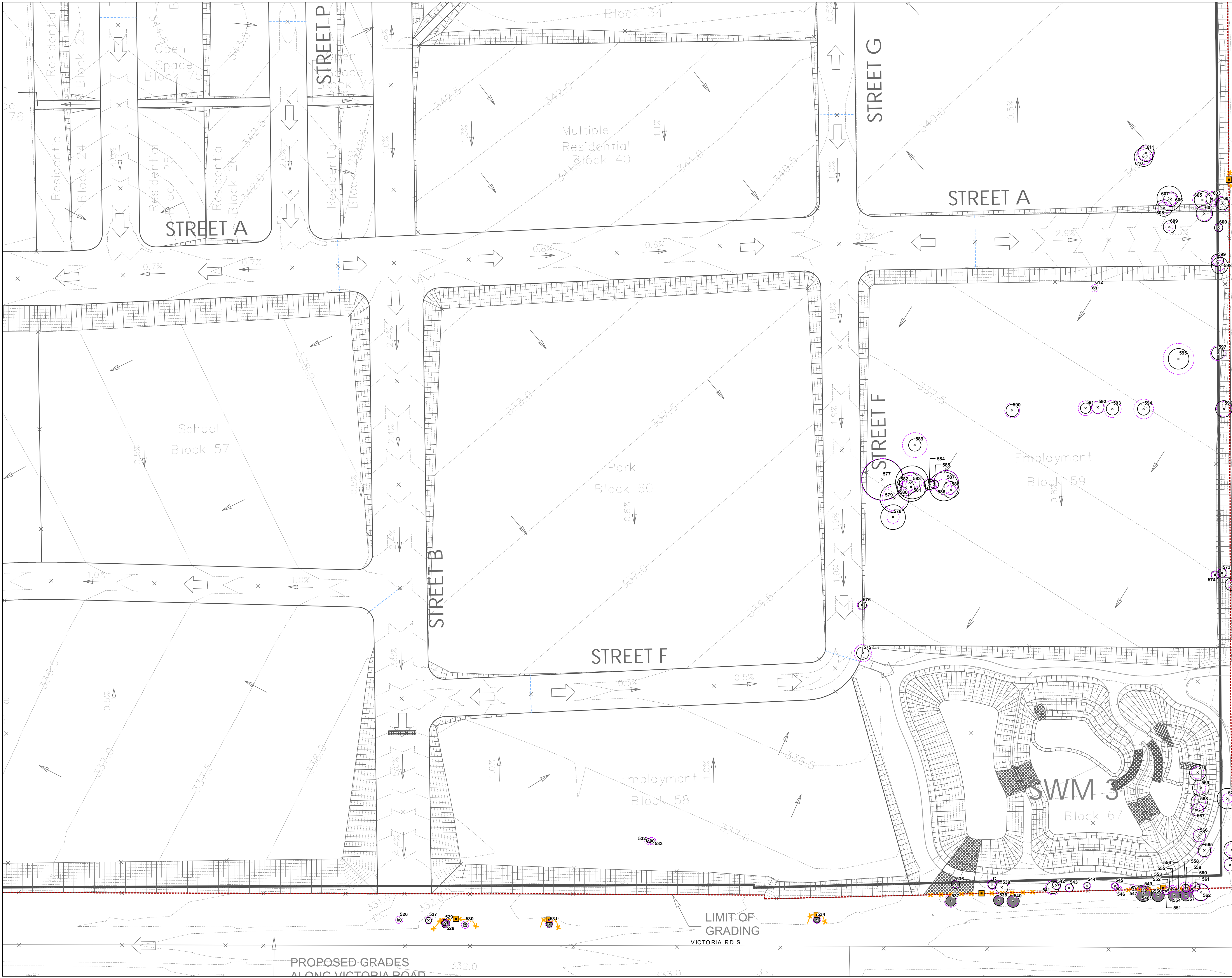
Meters

- Migratory Birds Convention Act**

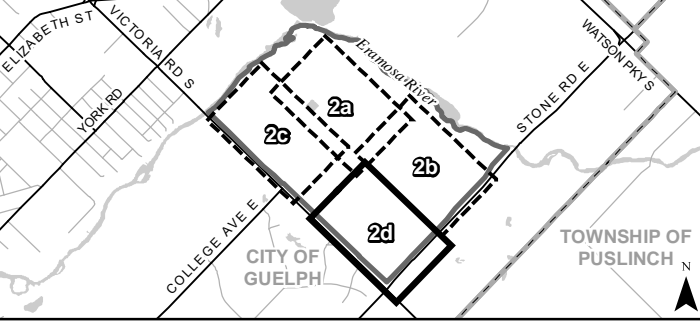
  - The destruction of migratory birds and their nests is prohibited under the federal *Migratory Birds Convention Act (MBCA)*, 1994, which is regulated by the Canadian Wildlife Service (CWS).
  - Vegetation clearing has the potential to directly impact bird breeding activity through damage and destruction of nests, eggs and young, or avoidance of the area by breeding adults.
  - Vegetation clearing is recommended to occur outside the bird nesting season (April 1 – August 31) so as to limit disturbances to nesting activities of birds within the proposed work zone.
  - Specific to simple habitats\*, if vegetation clearing cannot be avoided during the bird nesting season, a qualified biologist will be retained to carry out a nest search ahead of clearing activities within the work zone.
  - Nest areas will be identified in the field. There shall be no construction activity in identified nesting areas until sign-off is obtained from the biologist.
  - Areas identified as having no bird nesting activity can be cleared; however, clearing must occur within 48 hours of nest searching. If vegetation clearing is not performed within 48 hours, additional nest searches must be conducted.

\*Simple habitats are characterized by the CWS as habitats consisting of urban parks with isolated trees, vacant lots with few possible nest sites, a previously cleared area, or a structure such as a bridge, tower, or building, and specifically excludes meadows. More information is available at (<https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/reduce-risk-migratory-birds.html>).
- Species at Risk Bat Habitat**

  - The destruction of Species at Risk (SAR) bats and their habitat is prohibited under the *Endangered Species Act (ESA)*, 2007.
  - Vegetation clearing has the potential to impact bats through direct injury or mortality and damage or destruction of roosting habitat.
  - Tree removal should occur outside of the active roosting season (April 1 to September 30) to avoid impacting bats, and therefore contravention of the ESA.
  - Any vegetation removal that has the potential to impact SAR bats or SAR bat habitat requires prior correspondence with the Ministry of the Environment, Conservation and Parks (MECP).



Guelph Innovation District  
(Blocks 1 and 2)  
Tree Inventory and Preservation Plan



- Legend**
- Subject Property (GID Blocks 1 and 2)
  - Inventoried Tree to be Retained (Crown to Scale)
  - Inventoried Tree to be Retained - Impacted (Crown to Scale)
  - Inventoried Tree to be Removed (Crown to Scale)
  - Inventoried Tree to be Removed - Retain Stump (Crown to Scale)
  - Tree Protection Zone (TPZ)
  - Combined Tree Protection and Sediment Control Fencing (TPF-FSC)
  - Proposed Grading Limit
  - Proposed Development
  - Proposed Slope
  - Proposed Drainage
  - Proposed Stormwater Management
  - Road

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Aquatic, Terrestrial and Wetland Biologists

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Project: 2851 Date: March 6, 2025	NAD83 - UTM Zone 17 Size: 24x36" 1:500
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0 10 20 30 40 50 60 Meters

- Migratory Birds Convention Act**
- The destruction of migratory birds and their nests is prohibited under the federal *Migratory Birds Convention Act (MBCA)*, 1994, which is regulated by the Canadian Wildlife Service (CWS).
  - Vegetation clearing has the potential to directly impact bird breeding activity through damage and destruction of nests, eggs and young, or avoidance of the area by breeding adults.
  - Vegetation clearing is recommended to occur outside the bird nesting season (April 1 – August 31) so as to limit disturbances to nesting activities of birds within the proposed work zone.
  - Specific to "simple habitats", if vegetation clearing cannot be avoided during the bird nesting season, a qualified biologist will be retained to carry out a nest search ahead of clearing activities within the work zone.
  - Nest areas will be identified in the field. There shall be no construction activity in identified nesting areas until sign-off is obtained from the biologist.
  - Areas identified as having no bird nesting activity can be cleared; however, clearing must occur within 48 hours of nest searching. If vegetation clearing is not performed within 48 hours, additional nest searches must be conducted.
- \*Simple habitats are characterized by the CWS as habitats consisting of urban parks with isolated trees, vacant lots with few possible nest sites, a previously cleared area, or a structure such as a bridge, tower, or building, and specifically excludes meadows. More information is available at (<https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/reduce-risk-migratory-birds.html>).
- Species at Risk Bat Habitat**
- The destruction of Species at Risk (SAR) bats and their habitat is prohibited under the *Endangered Species Act (ESA)*, 2007.
  - Vegetation clearing has the potential to impact bats through direct injury or mortality and damage or destruction of roosting habitat.
  - Tree removal should occur outside of the active roosting season (April 1 to September 30) to avoid impacting bats, and therefore contravention of the ESA.
  - Any vegetation removal that has the potential to impact SAR bats or SAR bat habitat requires prior correspondence with the Ministry of the Environment, Conservation and Parks (MECP).

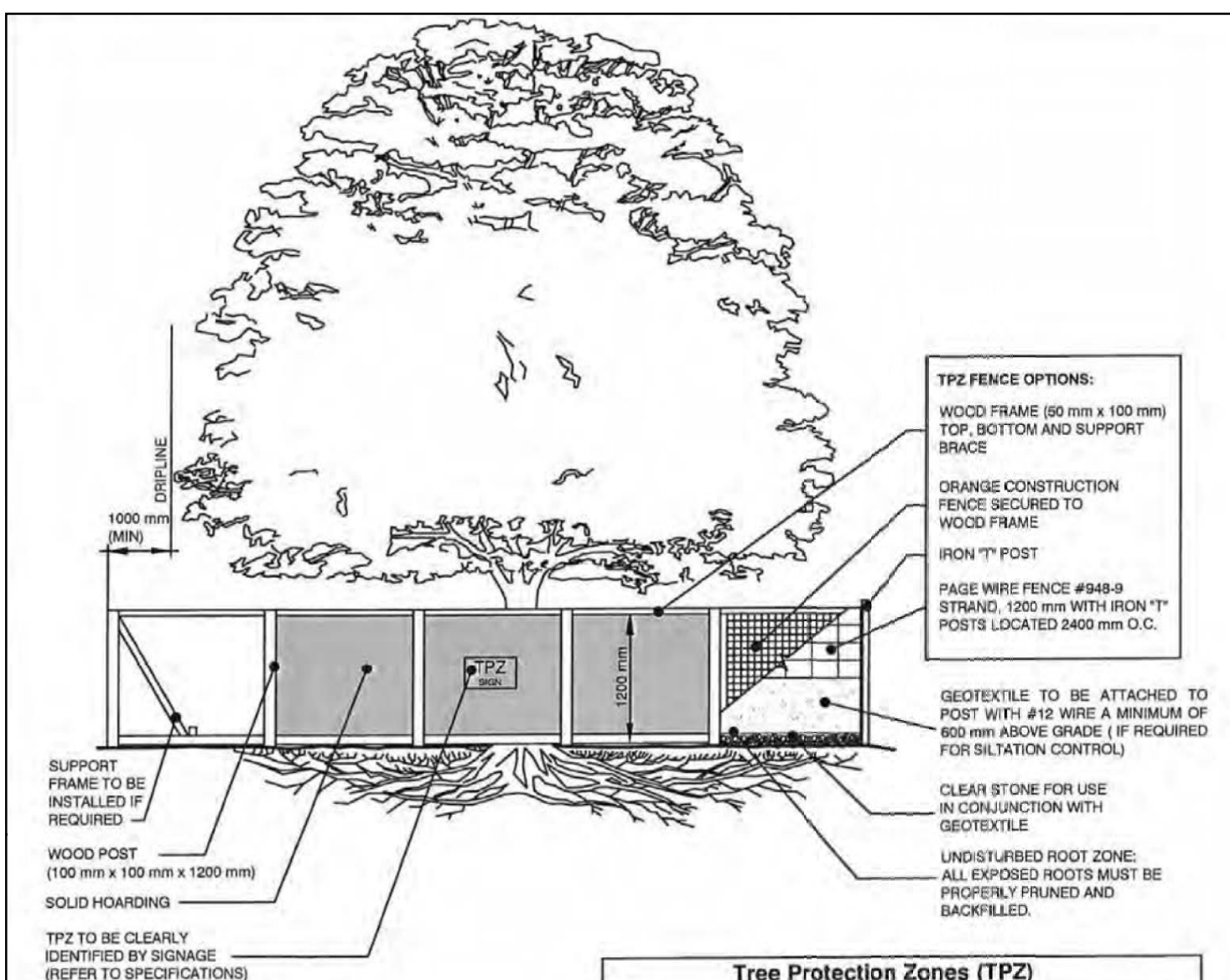
# Guelph Innovation District (Blocks 1 and 2)

## Tree Inventory and Preservation Plan - Tree Tables



Project: 2651  
Date: February 26, 2025  
Size: 24x36"

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- TREE PROTECTION BARRIER NOTES:**
- ALL TREE PROTECTION TO BE IN ACCORDANCE WITH THE "TREE TECHNICAL MANUAL".
  - REFER TO SPECIFICATION FOR ADDITIONAL DETAILS AND REQUIREMENTS RELATED TO THIS DETAIL.
  - 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 OR UNDER THE SUPERVISIONS OF AN ARBORIST.
  - CONSTRUCTION ACTIVITIES, GRADE CHANGES, AND STORAGE OF EQUIPMENT AND MATERIALS ARE NOT ALLOWED WITHIN THE TREE PROTECTION ZONE.

Tree Protection Zones (TPZ)			
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 NRSI parks, open spaces and other significant natural heritage areas	
<10	1.2	2.4	
10-29	1.8	3.6	
30-49	2.4	4.8	
50-69	3.0	6.0	
70-89	3.6	7.2	
90-109	4.2	8.4	
110-129	4.8	9.6	
130-149	5.4	10.8	
150-169	6.0	12.0	
>170	6 cm per 1 cm DBH	12 cm per 1 cm DBH	

Note:  
1- Or dipline plus 1 metre, whichever is greater.  
2- Natural Heritage System

CITY OF GUELPH STANDARD DRAWING			
TREE PROTECTION ZONE (TPZ) FENCE DETAIL			
DATE DRAWN: MAY/19	REV. No: N.T.S.	Guelph	
REV. DATE: T.F.	REV. BY: T.F.	PARKS OPERATIONS AND FORESTRY	
APPROVED BY: [Signature]	MANAGER PARKS OPERATIONS AND FORESTRY	UF 1.1	

### TREE PROTECTION ZONE (TPZ)

40 CM MIN.

**NO GRADE CHANGE DUMPING STORAGE OF MATERIALS UNAUTHORIZED ENTRY TREE INJURY OR REMOVAL DISTURBANCE OF ANY KIND**

**THIS FENCING MUST NOT BE DAMAGED OR MOVED**

**CONTACT: Contractor name and telephone number of contact**

**City of Guelph: Forestry 519-837-5626 (parks@guelph.ca) Planning 519-837-5616 (planning@guelph.ca)**

60 CM MIN.

**Sign Design, Installation and Maintenance:** TPZ information signs shall be constructed from metal, corrugated plastic, Gatorboard or wood, and shall be installed in an appropriate manner such that it will be able to withstand inclement weather conditions. Signage shall be maintained in good condition and in the original location throughout the duration of site development works. Signage shall be clearly legible, with black text on a white background being the preferred design.

**Sign Content:** The TPZ information sign shall, at minimum, provide a list of activities prohibited within the TPZ. Such activities shall include, but not be limited to: grade change, dumping, storage of equipment and materials, unauthorized entry by personnel, tree injury or removal, or other disturbance of any kind. The signage shall also note that TPZ fencing shall not be damaged or removed. The signage shall also provide the contact information for the City of Guelph. A City of Guelph corporate logo shall be displayed on the TPZ information sign.

**Sign Placement:** TPZ information signs shall be affixed no more than 20 m apart on each side of tree protection fencing, at a height of no less than 100 cm.

**Sign Size:** TPZ information signs shall be a minimum of 40 cm x 60 cm in size

CITY OF GUELPH STANDARD DRAWING			
TREE PROTECTION ZONE (TPZ) INFORMATION SIGNAGE DETAIL			
DATE DRAWN: MAY/19	REV. No: N.T.S.	Guelph	
REV. DATE: T.F.	REV. BY: T.F.	PARKS OPERATIONS AND FORESTRY	
APPROVED BY: [Signature]	MANAGER PARKS OPERATIONS AND FORESTRY	UF 1.2	