Environmental Approvals

Fisheries & Aquatic Ecology

Terrestrial & Wetland Ecology

Environmental Engineering

Hydrogeology & Contaminant Hydrogeology

Arborist Services

Environmental Site Assessment

Species at Risk

Project Management

Environmental Impact Assessment

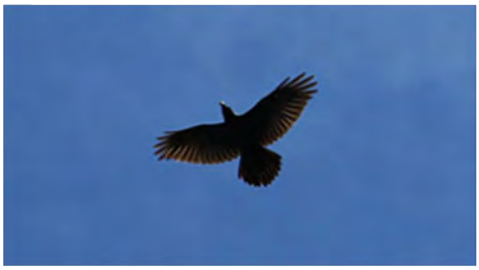
Water and Wastewater Engineering

Environmental Site Inspection / Construction Monitoring











Tree Inventory and Preservation Plan Update

316 Grange Road

City of Guelph

Prepared for 1001232683 Ontario Inc.

AEC Project No. 25-341 | October 2026

AZIMUTH ENVIRONMENTAL CONSULTING, INC.

Environmental Assessments & Approvals

October 20, 2026 AEC 25-341

1001232683 Ontario Inc.

Attention: Joe Harris, Project Director, Land Development

Re: **Tree Inventory and Preservation Plan Update (Arborist Report Update) for a Proposed Development at 316 Grange Road, City of Guelph**

Dear Joe Harris:

Azimuth Environmental Consulting, Inc. was retained to complete a provide a Tree Inventory and Preservation Plan (Arborist Report) for the proposed development of a residential subdivision at 316 Grange Road, City of Guelph. It is our understanding that the Tree Preservation Plan is required to satisfy the development requirements for the City of Guelph. The purpose of this updated report is to address recent City of Guelph comments on the first submission, as well as to include subsequent design revisions.

This report includes the results of our tree inventory completed for all trees (10 centimetres diameter breast height or greater) located on the subject lands or within approximately 6 metres of the boundaries of the subject lands (off-site). The report includes recommendations pertaining to which trees included in the tree inventory should be preserved/removed, measures to protect retainable trees during construction, and compensation for tree removal.

Should you have any questions or require additional information please do not hesitate to contact the undersigned.

Yours truly,

642 Welham Road, Barrie, Ontario L4N 9A1
telephone: 705.721.8451 • info@azimuthenvironmental.com • www.azimuthenvironmental.com

AZIMUTH ENVIRONMENTAL CONSULTING, INC.



David d'Entremont, H.B.Sc.
Certified Arborist (ISA# ON-3073A)

Table of Contents

page

Letter of Transmittal i

1.0 INTRODUCTION 1

2.0 METHODOLOGY 1

3.0 DISCUSSION 3

3.1 Existing Conditions Summary 3
3.2 Tree Removal 4
3.3 Tree Preservation 4
3.4 Arboricultural Maintenance 5

4.0 TREE PROTECTION SPECIFICATIONS 6

5.0 TREE COMPENSATION 7

5.1 Number of Eligible Trees 7
5.2 Tree Compensation 8

6.0 RECOMMENDED MITIGATION 8

6.1 Timing Windows 8

7.0 CONCLUSIONS 9

8.0 REFERENCES 9

List of Figures

Figure 1 Site Location
Figure 2 Tree Preservation Plan

List of Tables

Table 1: Tree Inventory and Assessment List
Table 2: Tree Grouping Inventory and Assessment

List of Appendices

Appendix A: Site Photos
Appendix B: City of Guelph Tree Protection Zone Fence and Sign Design Detail and Standard Notes

1.0 INTRODUCTION

Azimuth Environmental Consulting, Inc. (Azimuth) was retained by 1001232683 Ontario Inc. to complete a Tree Inventory and Preservation Plan (TIPP or "Arborist Report") for the proposed development on two (2) parcels of land located within the City of Guelph (the City). The parcels include the property at 316 Grange Road (GPID 2,000,006,282) and a second abutting parcel without a street address (GPID 2,000,042,089), and together these parcels comprise the subject lands. The subject lands are located within Part of Lot 2, Concession 3, City of Guelph. A map illustrating the limits of the subject lands in their regional context is shown on Figure 1. It is our understanding that the City has requested that a TIPP be undertaken to document the extent of trees ≥10 centimetres (cm) diameter at breast height (DBH) within the subject lands and on adjacent lands. To this end, Azimuth completed an initial Arborist Report ("Tree Inventory and Preservation Plan – 316 Grange Road, City of Guelph"; February 2026) for submission to the City. The purpose of this Arborist Report Update is to address City comments as well as to apply the most recent design revisions.

The subject lands comprise about 2.65 hectares (ha) and are designated as Low Density Residential Lands by Schedule 2 of the City of Guelph Official Plan (City of Guelph, 2024), although they are not yet developed and appear to have an agricultural land use history, with a small derelict house located near Grange Road. The majority of trees are associated with parcel boundaries and old hedgerows, with trees predominantly established within a matrix of Common Buckthorn (*Rhamnus cathartica*) shrubs in these areas. The subject lands are bordered by Grange Road to the southeast, small segments of the Kemp Crescent to the northeast, and are otherwise largely surrounded by active residential lands, with a small municipal park near the southeast corner.

In total, fifty-four (54) individual trees and one (1) tree grouping of twenty (20) trees were assessed for this report, which includes all trees ≥10cm DBH within the property boundary, as well as boundary and near-boundary trees.

The Tree Preservation Plan showing the proposed site plan, tree locations and tree removal/protection recommendations can be found within this report (Figure 2). Tree inventory and assessment tables are provided separately for specific data relating to individual trees (Table 1) and tree groupings (Table 2). City of Guelph compensation considerations are discussed in Section 5.

2.0 METHODOLOGY

A tree inventory was completed for the trees located with within proximity of the proposed

development on November 13th, 2025 by David d'Entremont, ISA Certified Arborist (ON-3073A) after recent leaf-drop, with leaves remaining on some late-season trees but recently fallen from most others. All trees ≥10cm DBH located within the subject lands and within approximately 6m of the subject lands with potential to be impacted by the proposed development were included in the inventory. This inventory included the following elements:

- Inventory of all trees described above, including all specimens with a DBH of at least 10cm. Trunk diameter measurements were taken at approximately 1.4m (4.5') above ground surface at the base of each tree, and were estimated where access was limited due to property boundary limitations;
- Recorded details as required in Section 3.1.1 of the City of Guelph Tree Technical Manual (the "Tree Technical Manual"; City of Guelph, 2019), including identification number, species (common and botanical name), size (DBH and height), form, spread of canopy, biological health, structural condition, risk assessment, overall condition, identification of Designated Heritage Trees, Tree Ownership, compensation eligibility, notes and recommendations, and reason for removal/relocation. Photos of City boundary trees, City trees, and overall treed areas of the subject lands were taken and are provided in Appendix A;
- Assessed one (1) relatively homogeneous tree grouping located within the proposed development limit within the subject lands. Species, DBH, height and condition of all trees ≥10 cm DBH in this feature were documented. Detail within this grouping was limited to pragmatic details required to account for tree loss, as proposed site disturbance and grading is anticipated to broadly interfere with this feature. Any outlier trees (*i.e.* trees that were much different in size) and all property boundary and boundary-adjacent trees were documented individually out of an abundance of caution. Photos are provided in Appendix A;
- Recorded location of each tree inventoried using a sub-metre accuracy GPS unit (accuracy +/- 10-30cm) to plot tree locations relative to proposed site plan features; and,
- Identified each individually inventoried tree using a unique number corresponding to the Tree Inventory and Assessment List (Table 1) and tree preservation plan (Figure 2). Trees located on-property, or on property boundaries with a portion of the trunk located on-property, were tagged in the field with engraved metal tree tags, each with unique numbers corresponding to the tree inventory table (Table 1). Trees occurring entirely on adjacent lands and were not tagged, and were identified with a letter (e.g. A, B, C, AA, AB, etc.) instead of a number.

Using all field data gathered during the inventory and assessment process, a tree inventory table was created including the following information:

- Information as collected during field work as described above;
- The required Minimum Tree Protection Zone (TPZ) for trees recommended for the protection of trees identified for preservation, in metres, as outlined in Section 4.3 of the Guelph Tree Technical Manual. Given that the subject lands are not located within the NHS and are not designated (wholly or in part) parks, open spaces or significant natural heritage areas, the Minimum TPZs discussed in Table 1 were used, and compared against the tree driplines +1m, with the larger of the two measurements used as the Final TPZ as required by Section 4.3 of the Technical Manual; and,
- Proposed Action based on the location of each tree, its Final TPZ area and the proposed site plan features.

3.0 DISCUSSION

3.1 Existing Conditions Summary

The subject lands are primarily level tablelands associated with historical farmlands. Much of the northeast parcel of the subject lands is slightly hilly/elevated and slightly rolling, but this location is highly disturbed and the topography is not likely to be natural. Given that the northeast parcel is adjacent to the abutting new subdivision to the northeast, and considering the disturbance/changes visible between 2009 and 2012 Google aerial imagery associated with that subdivision, it is expected that some or all of this uneven topography relates to site alteration on adjacent lands. No surface drainage, groundwater, or wetland elements were observed within the subject lands. Soils in the subject lands appeared typical of local regional upland soils, which are generally classified as a Loam or Sandy Loam (LIO, 2026).

54 individual trees and one (1) tree grouping comprised of 20 trees were inventoried as during the November 13, 2025 site visit (see Tables 1 and 2). Together, a cumulative total of seventy-four (74) trees ≥10 cm DBH were documented within 6m of the subject lands.

No Provincially rare tree species or tree species listed Provincially as Endangered, Threatened or Special Concern were documented within or adjacent to the subject lands during the tree inventory. This includes no Butternut (*Juglans cinerea;* Endangered) and no Black Ash (*Fraxinus nigra*; Endangered).

3.2 Tree Removal

Of the 74 trees included within the tree inventory, a total of 59 trees (this number including all trees in Grouping #1) are expected to require removal as a result of the proposed development due to the extent of proposed grading and site alteration relating to the proposed site plan feature. The 59 trees includes three [3] dead trees and eight [8] with a poor overall condition.

Fourty-seven (47) of the 59 trees expected to require removal are located fully within the proponent's property boundaries, while the remaining 12 (trees #572, 573, 574, 575, 576, 577, 578, 579, 580, 585, L and M; Figure 2) are either boundary trees abutting City property or wholly located on City property. The consent of the City is expected to be required to harm and/or remove these 12 trees. Per the City's comments, removal of trees located on City property or boundary trees shared with the City will require permission from an Urban Forester within the Parks Department.

3.3 Tree Preservation

Of the 74 trees included within the tree inventory, a total of 15 trees are recommended for preservation. The limits of the proposed development have been refined to avoid site disturbance within the TPZ of these trees. All of these trees are boundary trees abutting private land parcels and/or fully private trees located on adjacent lands. The TPZs for all preserved trees are depicted within the Tree Preservation Plan (Figure 2). In accordance with Section 4.3 of the Guelph Tree Technical Manual, the City-prescribed TPZs based on DBH range were compared against the requirement to accommodate the tree dripline +1m (see Table 1), with the larger of the two measurements implemented. The provided TPZs should provide sufficient root and canopy protection during construction.

In one circumstance (Tree #560), the proposed development encroaches slightly into the TPZ of this tree. As per section 4.3 of the Guelph Tree Technical Manual, the City requires TPZ avoidance for preserved trees in all cases except where this cannot be avoided. It is our understanding that grading and construction limitations associated with the proposed residential lots abutting the Tree #560 TPZ make complete TPZ avoidance infeasible in this case. While a minimum distance of 6m to this tree can be maintained, as depicted by proposed Tree Protection Fencing in Figure 2, the proposed disturbance footprint does not fully avoid the City's preferred TPZ (8.5m, based on dripline + 1m; see Table 1, Figure 2) or the TPZ based on the formula accepted by the International Society for Arboriculture (7.2m, based on 1 inch DBH = 1 foot protection zone; Figure 2). However, Azimuth notes that a 6m setback to Tree #560 greatly exceeds the Guelph Tree Technical Manual's DBH-based TPZ expectation (3.6m for trees up to 60cm DBH). Further, according to the publication "Protecting Trees from Construction

Damage: A Homeowner's Guide (Johnson, 1999), the target amount of disturbance to a tree's root zone is 25% or less to provide the tree with the greatest chance of post-construction survival. The proposed development would involve encroachment of only 15% of the City's preferred 8.5m canopy-based TPZ, and only 8.5% of the ISA-based TPZ. Based on the avoidance of works in vast majority of the TPZ, and the large extent of retained TPZ (>75%), there is no expectation of negative impacts to this tree. As such, there is no expectation that Tree #560 would require removal in this circumstance.

Provided that the Tree Protection Specifications in Section 4.0 below are adhered to, there is no expectation that preserved trees will be impacted/harmed as a result of the proposed development.

3.4 Arboricultural Maintenance

It should be noted that a Certified Arborist is recommended to be retained to supervise the installation of the tree protection fencing (further discussed in Section 4.0 below) in order to verify the TPZ of the trees are sufficiently protected.

Should additional tree removals be required, these would require pre-approval by the City and would be expected to require any compensation to be updated. Azimuth notes that all preserved trees are owned or co-owned by adjacent private landowners, and any harm to trees on property boundaries or adjacent lands should not be contemplated without permission from the relevant landowner. Nothing within this report should be construed as permission from external private landowners to harm/remove boundary trees, or to harm/remove trees located on external private lands.

Conversely, if the on-site establishment of the Tree Protection Fencing (delimiting the full extent of proposed disturbance) is determined to be suitably set back from other trees with a Good or Fair health rating, these trees should be retained, and compensation requirements should be recommended for updates accordingly.

Per Section 4.8 of the Guelph Tree Technical Manual, tree(s) approved for removal are to be clearly marked on-site with orange or yellow spray paint, at breast height and at the base of the stem. Tree removals should not proceed until the TIPP is approved by the City.

If live roots are exposed during excavations the Arborist should be on-site to prune them and do whatever else is necessary to increase the chances of post-construction survival of these trees. Crown pruning may also be necessary for branches growing over site boundaries which are at risk of being impacted by construction activities.

4.0 TREE PROTECTION SPECIFICATIONS

Specifications for protecting the TPZs of trees to be preserved during construction are detailed below. The TPZ is a defined protection area around an existing tree which is set out to maintain the existing condition of the root zone, canopy and trunk. This zone is implemented if site disturbance is planned within the area, or if there is a reasonable likelihood of inadvertent encroachment of any form into the area during site disturbance.

Areas where the proposed development abuts the TPZ of preserved trees are protected from site disturbance through the use of Tree Protection Fencing. The proposed Tree Protection Fencing fully respects the Final TPZs outlined in Table 1 and depicted in Figure 2. It is recommended that tree protection fencing be compliant with the specifications of the Guelph Tree Technical Manual, which requires wooden protection hoarding (fencing) to be constructed of 1.2m plywood sheets on either a T-bar post or 2"x4" wood frame, supported upright using L-shaped supports to prevent root damage, and installed in such a way that bracing minimizes damage to roots. Where traffic or pedestrian visibility is a safety concern, 1.2m tall paige wire fencing may be used in lieu of wooden protection hoarding, with supporting T-bars spaced a maximum of 2.4m apart. Clear tree protection signage of a minimum size of 40cm x 60cm, constructed of metal, corrugated plastic, gatorboard or plywood, should be installed no more than 20m apart along the hoarding in a weatherproof manner to withstand inclement weather conditions. See Appendix B for design specifications of tree protection signage and hoarding. Sediment control fencing should be included where fill or excavated materials are expected to be located near a TPZ, and may be attached to the wooden protection hoarding.

The following activities shall be strictly prohibited within the TPZ area that is protected by Tree Protection Fencing prior to, during and following site disturbance:

- Installation or attachment of any items to the tree(s).
- Operation of equipment or machinery.
- Storage of equipment, machinery or materials.
- Access by any personnel.
- Placement of trailers, temporary buildings or structures.
- Flushing, storage or dumping of fuels, chemicals or other contaminants.
- Stockpiling of soil/stone.
- Digging, trenching or excavation (where unnecessary).
- Change of existing grade.

The Guelph Tree Technical Manual recommends that Tree Protection Fencing be installed prior to tree removals; however, in the case of trees #62, #63, and potentially select trees at the northwest edge of Tree Grouping #1, the construction of Tree Protection Fencing hoarding may interfere with tree removal. Azimuth recommends that the trees recommended and approved for removal that will interfere with the construction and maintenance of Tree Protection Fencing should be removed prior to the installation of Tree Protection Fencing. The proposed location of the Tree Protection Fencing should be clearly marked on-site prior to any tree removal. No machinery should enter the area to be protected by Tree Protection Fencing, and the necessary trees should be removed while avoiding this protected area (and the TPZs it encompasses) to the extent possible to accomplish this task. The Tree Protection Fencing should then be installed prior to the remainder of approved tree removals and prior to any construction, to ensure protection and isolation of trees to be preserved on property boundaries and on adjacent lands.

As discussed in Section 3.3 above, it should be noted that a Certified Arborist is recommended to be retained to supervise the installation of the tree protection fencing in order to verify the TPZ of the trees are sufficiently protected.

5.0 TREE COMPENSATION

5.1 Number of Eligible Trees

Based on a review of the proposed development, provided that a City Urban Forester within the Parks Department confirms permission to remove the City-owned and City boundary trees recommended for removal in Table 1, the proposed development has potential to result in the removal of fifty-nine (59) trees.

According to Section 3.3 of the Guelph Tree Technical Manual, compensation is required when development requires the removal of trees ≥10cm DBH that are not otherwise exempt under By-law Number (2025) – 21059, hereafter referred to as the Guelph Tree By-law. Exemptions are listed under Section 5.2 of the Guelph Tree By-law, and include as part of this list: dead trees, high risk trees as certified by an Arborist or Forester, and five (5) explicitly listed woody species, including *Rhamnus cathartica, Rhamnus frangula* (note: this species is now called *Frangula alnus* according to the Province of Ontario's Natural Heritage Information Centre [NHIC]), *Alnus glutinosa, Elaeagnus umbellata* and *Morus alba*.

The City has clarified in their response comments that no other tree species other than the above species are considered exempt from the requirement for compensation; further, the City

has also clarified that high-risk trees are only considered high-risk where they may strike existing tree-strike targets prior to development, rather than prospective targets post-development.

Based on the City's feedback, a revised total of **fifty-four (54) trees proposed for removal are considered eligible for compensation** by the Guelph Tree Technical Manual standards.

5.2 Tree Compensation

Where compensation is deemed required by the City, compensation may take the form of on- or off-site tree plantings, which would be detailed within a VCP. Alternatively, as discussed in Sections 3.3.1 and 5.1.4 of the Guelph Tree Technical Manual, cash-in-lieu payment to the City may be considered at the discretion of the City, at an amount necessary to fund the establishment of replacement trees off-site, based on a standardized formula.

The City has indicated that compensation in this instance should be calculated as one Replacement Tree per 15cm DBH removed, and that cash-in-lieu payments are to be calculated based on a fee of $350.00 per replacement tree. The sum of the DBH measurements of all 54 trees detailed in Section 5.1 above is 1295cm, which equates to approximately **87 Replacement Trees**. Should all 87 Replacement Trees be addressed through cash-in-lieu payment, **the expected total payment would be estimated at $30,450.00.**

It is our understanding that a degree of tree planting may be feasible on-site pending site layout specifics at the detail design phase of the site plan. As such, should this final layout permit the inclusion of Replacement Trees within the proposed development, it is recommended that the total payment to the City be reduced by $350.00 per Replacement Tree. The size of replacement stock should adhere to the Guelph standards; *i.e.* a caliper of 60 millimetres (mm) is considered the standard replacement size for deciduous trees, and a height of 250cm is considered the standard replacement size for coniferous trees.

6.0 RECOMMENDED MITIGATION

6.1 Timing Windows

Construction activities involving the removal of trees should be restricted from occurring during the combined migratory bird nesting window and Species at Risk (SAR) bat active season. Trees within the subject lands are individual and/or hedgerow trees and are not associated with broader, complex treed habitats in the Natural Heritage System. However, there remains potential for migratory bird nesting and Endangered bat day roosting within the subject lands.

Migratory birds, nests, and eggs are protected by the *Migratory Birds Convention Act*, 1994 (MBCA) and the *Fish and Wildlife Conservation Act,* 1997 (FWCA). Environment Canada outlines dates when activities in any region have potential to impact nests at the Environment Canada Website (https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/general-nesting-periods/nesting-periods.html). In Zone C2 vegetation clearing should be avoided between April 1 through August 31 of any given year. However, the migratory bird nesting window is fully encompassed within the bat active season. Any future **activities involving tree removal should be avoided between March 15 through November 30 on any given year** (*i.e.* trees should only be cleared between December 1 – March 14), during the active period for bat species that may utilize trees for maternity roosting or day roosting purposes (recognizing the expanded window due for potential for Eastern Small-footed Myotis per current MECP direction). Through the use of this timing window, tree removals are expected to avoid disruption of migratory bird nesting (protected under the MBCA and FWCA) and Endangered bat roosting (protected under the *Endangered Species Act*, 2007 [ESA]).

7.0 CONCLUSIONS

A total of 74 trees ≥10cm DBH identified within 6m of the subject lands (54 individual trees and one [1] tree grouping comprised of 20 trees) were documented and assessed. A total of 15 trees are proposed for preservation which are located outside of the proposed development features. Fifty-nine (59) trees (including all of Grouping #1) are proposed for removal, including 47 trees wholly on the proponent's property and 12 trees along shared property boundaries with the City and/or wholly on City property. The proposed removals are anticipated to be necessary due to the expectation of impacts from construction relating to the proposed development.

Provided that the recommended tree protection measures and recommendations identified in this report are adhered to, and provided there is assistance from a Certified Arborist to prune roots exposed by construction and supervise the installation of tree protection fencing, impacts to protected trees should be minimized. Per the City's requirement, permission should also be secured from a City Urban Forester within the Parks Department prior to the removal of any City boundary trees recommended for removal in Table 1.

8.0 REFERENCES

Azimuth Environmental Consulting, Inc. (Azimuth). 2026. Tree Inventory and Preservation Plan – 319 Grange Road, City of Guelph. Issued February 2026.

Azimuth Environmental Consulting, Inc. (Azimuth). 2026. Tree Removal and Preservation Summary: Site Alteration Permit Application, 316 Grange Road, City of Guelph. Issued October 2026.

City of Guelph. 2024. The City of Guelph Official Plan.

City of Guelph. 2019. City of Guelph Tree Technical Manual
Endangered Species Act, Ontario. 2007. An Act to protect species at risk and to make related changes to other Acts. Bill 184 Chapter 6, Statutes of Ontario 2007.

Endangered Species Act, Ontario. 2007. An Act to protect species at risk and to make related changes to other Acts. Bill 184 Chapter 6, Statutes of Ontario 2007.

Fish and Wildlife Conservation Act, Ontario. 1997. S.O. 1997, c.41.

Government of Canada. 2014. Migratory Birds Convention Act. Available at (https://laws-lois.justice.gc.ca/eng/acts/m-7.01/). Accessed January 2026.

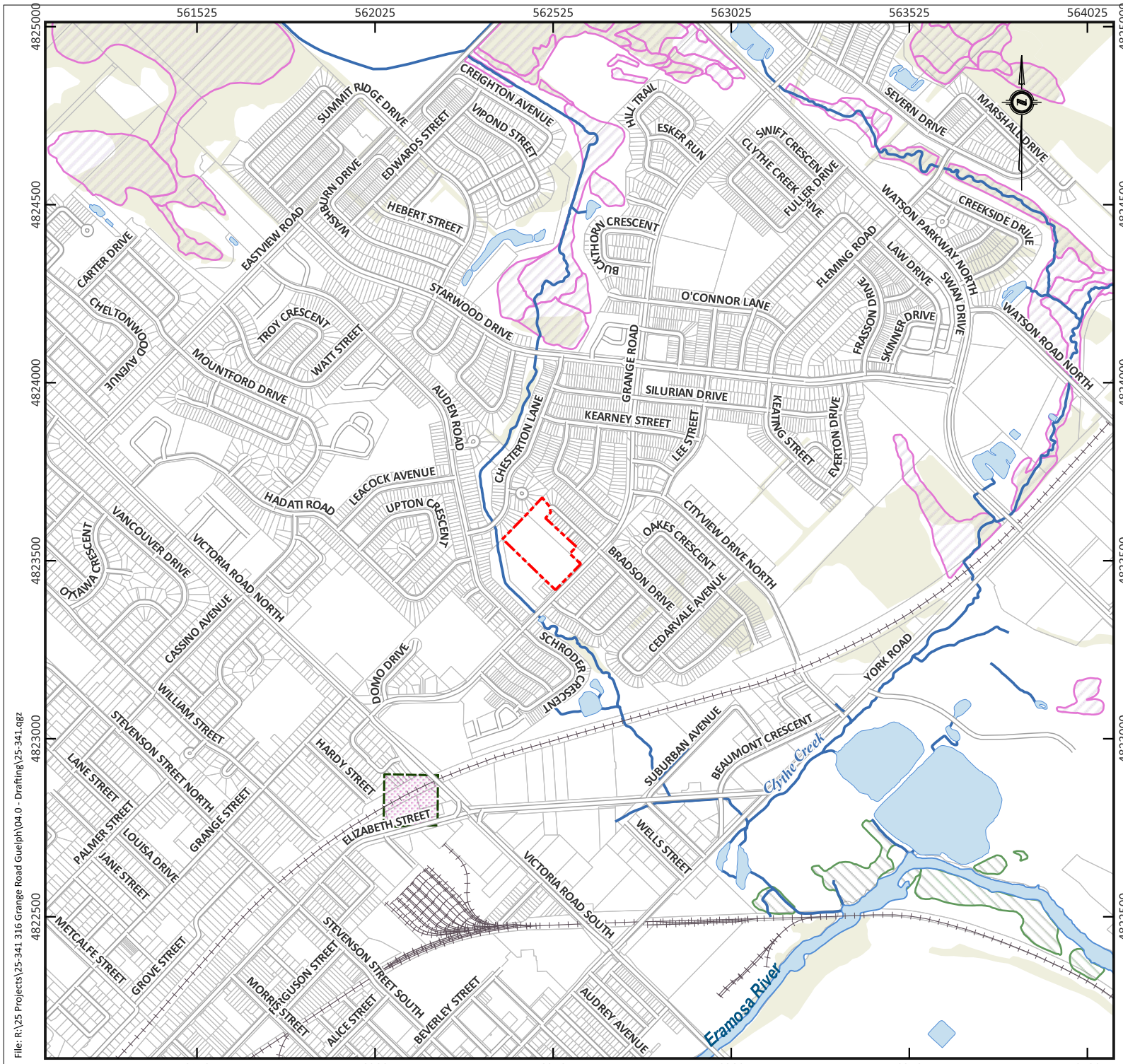
Johnson, G.R.. 1999. Protecting Trees From Construction Damage: *A Homeowner's Guide.*

Land Information Ontario (LIO). 2026. Ontario Soil Survey Complex Viewer, Soil Survey Complex. Ontario Soils Geohub. Available online: https://experience.arcgis.com/experience/d4a8d3d5173e440094dc4a93bdc34adc. Accessed January 2026.

Ministry of Natural Resources (MNR). 2026. Natural Heritage Information Centre (NHIC) Get Natural Heritage Information Page, Ontario Species List. Available online: https://www.publicdocs.mnr.gov.on.ca/srb/Ontario_Species_list.xlsx. Accessed January 2026.

Simkovic, Vicki. 2024. Manitoba Maple (Acer negundo): Best Management Practices in Ontario. Ontario Invasive Plant Council, ON.

Simkovic, Vicki. 2020. Norway Maple (Acer platanoides): Best Management Practices in Ontario. Ontario Invasive Plant Council, Peterborough, ON.



File: R:\25 Projects\25-341 316 Grange Road Guelph\04.0 - Drafting\25-341.qgz

LEGEND

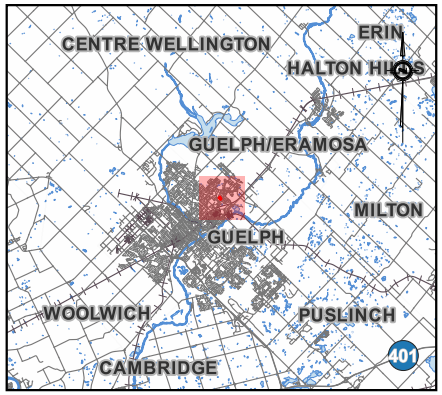
- Approx. Property Boundary
- Waterbody
- Mapped Watercourse
- Unevaluated Wetland
- Provincially Significant Wetland
- Rail
- Wooded Area
- Road
- ANSI, Earth Science

NOTES

1. Watercourse, Waterbody, Wetland, Woodland and ANSI layers are derived from MNRF GIS data, retrieved December 2022.
2. The metric grid displayed on the map corresponds to NAD83 / UTM zone 17N (EPSG:26917).

REGIONAL MAP

SCALE 1:500000



0 0.25 0.5 0.75

KILOMETERS

AZIMUTH ENVIRONMENTAL CONSULTING, INC.
ENVIRONMENTAL ASSESSMENTS & APPROVALS

SITE LOCATION

316 GRANGE ROAD
GUELPH, ON

DATE ISSUED:	JANUARY 2026
CREATED BY:	A.L.
PROJECT NO.:	25-341
BASE MAP:	MNRF

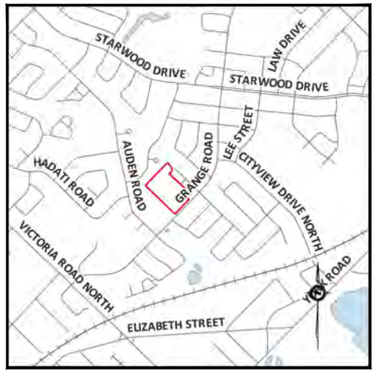
Figure No. 1



LEGEND:

- APPROX. PROPERTY BOUNDARY
- MAPPED WATERCOURSE
- EXISTING TREE TO BE PRESERVED – LOCATED ON PROPERTY
- EXISTING TREE TO BE PRESERVED – LOCATED ON PROPERTY LINE
- EXISTING TREE TO BE PRESERVED – LOCATED OFF PROPERTY
- EXISTING TREE TO BE REMOVED
- TREE GROUPING
- TREE PROTECTION ZONE (TPZ)
- ISA STANDARD TPZ
- TREE PROTECTION FENCING

LOCATION PLAN



0 25.00 50.0

HORIZONTAL SCALE 1:1000

AZIMUTH ENVIRONMENTAL CONSULTING, INC.
ENVIRONMENTAL ASSESSMENTS & APPROVALS

TREE PRESERVATION PLAN

316 GRANGE ROAD GUELPH, ON

DATE ISSUED:	OCTOBER 2026	Figure No. 2
CREATED BY:	A.L.	
PROJECT NO.:	25-341	
REFERENCE:	WELLINGTON COUNTY	

Plotted by: ALU on October 16, 2026 at 5:08pm
File: \\azmuthsrv\data\projects\25_Projects\25-341 316 Grange Road Guelph\04.0 - Drafting\25-341 Tree Preservation Plan.dwg Layout: PD Plotscale: 1

Tree ID Number/ Tree Tag Number	Common Name	Scientific Name	DBH (cm)	DBH (cm) (Additional stem(s))	Height (m)	Form	Canopy Spread/ Crown Diameter (m)	Health	Structural Condition	Risk	Overall Condition (health + structure)	Ownership	Recommended Action	Rationale	Tree Eligible for Compensation if Removed?	Minimum TPZ (Guelph)	Dripline + 1m	Final TPZ	Notes
558	Basswood	*Tilia americana*	94	31, 26	20	Rounded	10	Fair to poor, clearly declining with dieback and hollowing in limbs and trunk	Poor, many structural defects including hollows, dead limbs, deadwood, and cracks.	Low Hazard Risk due to lack of existing target	Poor	Proponent	Remove	Very large tree with high risk of failure. Hazardous to any target in striking distance if left unmanaged.	Y	-	-	-	Individually assessed as an outlier to Tree Grouping #1
559	Black Maple	*Acer nigrum*	76	-	20	Rounded	10	Good	Good (subject lands); primary stem appearing structurally sound, secondary stem at 2m, on adjacent lands side, facing adjacent lands, with narrow cracked union at 2m, some hollowing	Low Hazard Risk (subject lands) Moderate to High Hazard Risk (adjacent lands)	Fair	Boundary Tree with Private Landowner	**Preserve**	Avoided by proposed development	Y	4.8	6	6	Pruning or removal of secondary stem at/above 2m may be advisable by adjacent landowner, on adjacent lands
560	Eastern Hop-hornbeam	*Ostrya virginiana*	60	-	12	Rounded, Broad	15	Good, only minor dead limbs	Good; generally good structure, some minor dead or hollow limbs on subject lands side	Low Hazard Risk	Good	Boundary Tree with Private Landowner	**Preserve**	Avoided by proposed development	Y	3.6	8.5	8.5	Minor limb pruning recommended on subject lands side.
561	Common Apple	*Malus pumila*	33	-	6	Rounded	6	Fair; part of canopy dead, suckering	Fair; some dead limbs observed, but on far side of tree/adjacent landowner side	Low Hazard Risk to subject lands	Fair	Boundary Tree with Private Landowner	**Preserve**	Avoided by proposed development	Y	2.4	4	4	Minor limb pruning by adjacent landowner over adjacent lands may be advisable
562	Basswood	*Tilia americana*	66	-	20	Rounded	10	Good	Good; base with minor bark deformity, but generally good structure	Low Hazard Risk	Good	Proponent	Remove	Proposed disturbance footprint requires removal.	Y	-	-	-	-
563	Sugar Maple	*Acer saccharum*	38	-	12	Rounded	8	Good	Good to Fair; minor hollow at 2m, dead minor limbs	Low to Moderate Hazard Risk	Good	Proponent	Remove	Proposed disturbance footprint requires removal.	Y	-	-	-	-
564	Poplar species	*Populus sp.*	41	-	12	Rounded	10	Good	Good	Low Hazard Risk	Good	Proponent	Remove	Proposed disturbance footprint requires removal.	Y	-	-	-	-
565	Manitoba Maple	*Acer negundo*	29	21	10	Rounded	8	Good	Fair to Poor; leaning, cracked narrow union at 1m with hollowing	Moderate Hazard Risk	Fair	Proponent	Remove	Proposed disturbance footprint requires removal.	Y	-	-	-	-
567	Black Walnut	*Juglans nigra*	13	-	5	Rounded	4	Good	Good	Low Hazard Risk	Good	Proponent	Remove	Proposed disturbance footprint requires removal.	Y	-	-	-	-
568	Black Walnut	*Juglans nigra*	12	-	5	Rounded	3	Good	Good	Low Hazard Risk	Good	Proponent	Remove	Proposed disturbance footprint requires removal.	Y	-	-	-	-
569	Manitoba Maple	*Acer negundo*	13	-	6	Rounded	3	Good	Good	Low Hazard Risk	Good	Proponent	Remove	Proposed disturbance footprint requires removal.	Y	-	-	-	-
570	Black Walnut	*Juglans nigra*	40	-	8	Rounded	6	Good	Poor; deadwood observed 0-3m up trunk side, with internal crack/hollow likely to 5m, lower limbs with wounds and hollow. Tree in process of hollowing.	Low Hazard Risk due to lack of existing target	Poor	Proponent	Remove	Poor structure, proposed disturbance footprint requires removal. Re-evaluated as low hazard in spite of structural deficiencies due to the absence of a strike target.	Y	-	-	-	-
571	Manitoba Maple	*Acer negundo*	30	-	8	Rounded	8	Good	Good	Low Hazard Risk	Good	Proponent	Remove	Proposed disturbance footprint requires removal.	Y	-	-	-	-
572	White Spruce	*Picea glauca*	55	-	14	Columnar/ Typical Spruce	7	Good	Good	Low Hazard Risk	Good	City and Proponent (Boundary Tree)	Remove	Renovation of City sidewalk as part of proposed development requires removal	Y	-	-	-	Minor dead limbs and vines present
573	Eastern White Cedar	*Thuja occidentalis*	16	-	6	Columnar/ Hedgerow Tree	3 - 4	Good	Fair; one stem with good structure, one bowed over	Low Hazard Risk due to short height	Fair	City and Proponent (Boundary Tree)	Remove	Renovation of City sidewalk as part of proposed development requires removal	Y	-	-	-	2 additional stems <10cm DBH
574	Eastern White Cedar	*Thuja occidentalis*	12	11	6	Columnar/ Hedgerow Tree	3 - 4	Good (live stem), with dead stem attached	Good (live stem), Poor (dead stem)	Low Hazard Risk due to short height	Fair	City and Proponent (Boundary Tree)	Remove	Renovation of City sidewalk as part of proposed development requires removal	Y	-	-	-	-
575	Eastern White Cedar	*Thuja occidentalis*	16	11	6	Columnar/ Hedgerow Tree	3 - 4	Fair, deadwood and dieback, broken stem at 3m	Fair to poor; narrow unions, dieback, deadwood on underside of leaning side of stem,	Low Hazard Risk due to short height	Poor	City and Proponent (Boundary Tree)	Remove	Fair to poor structure; renovation of City sidewalk as part of proposed development requires removal	Y	-	-	-	2 additional stems <10cm DBH
576	Eastern White Cedar	*Thuja occidentalis*	13	11	6	Columnar/ Hedgerow Tree	3 - 4	Good	Fair, narrow union with crack at base of tree.	Low Hazard Risk due to short height	Fair	City and Proponent (Boundary Tree)	Remove	Renovation of City sidewalk as part of proposed development requires removal	Y	-	-	-	2 additional stems <10cm DBH
577	Eastern White Cedar	*Thuja occidentalis*	19	-	6	Columnar/ Hedgerow Tree	3 - 4	Good	Good	Low Hazard Risk	Good	City and Proponent (Boundary Tree)	Remove	Renovation of City sidewalk as part of proposed development requires removal	Y	-	-	-	-
578	Eastern White Cedar	*Thuja occidentalis*	17	10	6	Columnar/ Hedgerow Tree	3 - 4	Good	Fair to poor; dead wood at base facing sidewalk, narrow union at 2m with large vertical crack	Low Hazard Risk due to short height	Fair	City and Proponent (Boundary Tree)	Remove	Fair to poor structure; renovation of City sidewalk as part of proposed development requires removal	Y	-	-	-	3 additional stems <10cm DBH
579	Eastern White Cedar	*Thuja occidentalis*	20	15, 14	6	Columnar/ Hedgerow Tree	3 - 4	Good	Good	Low Hazard Risk	Good	City and Proponent (Boundary Tree)	Remove	Renovation of City sidewalk as part of proposed development requires removal	Y	-	-	-	2 additional stems <10cm DBH
580	Eastern White Cedar	*Thuja occidentalis*	16	12	6	Columnar/ Hedgerow Tree	3 - 4	Good	Fair; narrow stem union present at 0.5m but not compromised at time of survey	Low Hazard Risk	Good	City and Proponent (Boundary Tree)	Remove	Proposed disturbance footprint requires removal.	Y	-	-	-	-
581	White Poplar	*Populus alba*	14	-	5	Rounded	4	Good	Good, slight lean	Low Hazard Risk	Good	Proponent	Remove	Proposed disturbance footprint requires removal.	Y	-	-	-	-
582	White Poplar	*Populus alba*	31	-	9	Rounded	4	Good	Fair to Poor; stem wound at 3m healing but hollowing, wound at 1.5m with weeping fluids, also hollowing.	High Hazard Risk	Poor	Proponent	Remove	High Hazard Risk, and proposed disturbance footprint requires removal. Tree exhibits structural deficiencies and is within striking distance of the existing right-of-way corridor, including the existing footpath.	N	-	-	-	-
583	White Poplar	*Populus alba*	29	-	8	Rounded	7	Good	Good, slight lean	Low Hazard Risk	Good	Proponent	Remove	Proposed disturbance footprint requires removal.	Y	-	-	-	-
584	White Poplar	*Populus alba*	21	-	7	Rounded	7	Good	Good, slight lean	Low Hazard Risk	Good	Proponent	Remove	Proposed disturbance footprint requires removal.	Y	-	-	-	-
585	White Poplar	*Populus alba*	14	13	6	Rounded	5	Good	Fair	Low Hazard Risk	Fair	City and Proponent (Boundary Tree)	Remove	Proposed disturbance footprint requires removal.	Y	-	-	-	Renovation of City sidewalk as part of proposed development requires removal
586	Black Walnut	*Juglans nigra*	12	11	6	Rounded	5	Good	Fair, narrow basal union with cracks	Low Hazard Risk due to short height	Fair	Proponent	Remove	Proposed disturbance footprint requires removal.	Y	-	-	-	-
587	Black Walnut	*Juglans nigra*	14	13	6	Rounded	5	Good	Fair; basal narrow union with crack present	Low Hazard Risk due to short height	Fair	Proponent	Remove	Proposed disturbance footprint requires removal.	Y	-	-	-	-
588	Manitoba Maple	*Acer negundo*	24	-	6	Rounded	5	Good	Good, slight lean	Low Hazard Risk	Good	Proponent	Remove	Proposed disturbance footprint requires removal.	Y	-	-	-	-
590	Apple species	*Malus sp.*	27	-	5	Rounded	6	Good, minor dead lower limbs	Good, slight lean	Low Hazard Risk	Good	Proponent	Remove	Proposed disturbance footprint requires removal.	Y	-	-	-	-
591	Horticultural Cherry species	*Prunus sp.*	13	-	5	Rounded	2	Poor	Poor	Low Hazard Risk due to short height	Poor	Proponent	Remove	Poor condition, proposed disturbance footprint requires removal	Y	-	-	-	Stem interwoven into adjacent Buckthorn
592	Apple species	*Malus sp.*	20	19, 10	5	Rounded	7	Poor, tree in decline	Poor	Low Hazard Risk due to short height	Poor	Proponent	Remove	Poor condition, proposed disturbance footprint requires removal	Y	-	-	-	-
593	Horticultural Cherry species	*Prunus sp.*	12	11	5	Rounded	3	Dead	Poor	Low Hazard Risk due to short height	Dead, Poor Structure	Proponent	Remove	Dead, and proposed disturbance footprint requires removal	N	-	-	-	-
594	Manitoba Maple	*Acer negundo*	28		8	Rounded	6	Good	Good	Low Hazard Risk	Good	Proponent	Remove	Proposed disturbance footprint requires removal.	Y	-	-	-	-

Tree ID Number/ Tree Tag Number	Common Name	Scientific Name	DBH (cm)	DBH (cm) (Additional stem(s))	Height (m)	Form	Canopy Spread/ Crown Diameter (m)	Health	Structural Condition	Risk	Overall Condition (health + structure)	Ownership	Recommended Action	Rationale	Tree Eligible for Compensation if Removed?	Minimum TPZ (Guelph)	Dripline + 1m	Final TPZ	Notes
595	Manitoba Maple	*Acer negundo*	18	-	5	Rounded	3	Good	Good, slight lean	Low Hazard Risk	Good	Proponent	Remove	Proposed disturbance footprint requires removal.	Y	-	-	-	-
596	Manitoba Maple	*Acer negundo*	29	15, 12	6	Rounded	7	Good	Fair, one major stem with deadwood, lean, narrow basal union	Low Hazard Risk due to lack of existing target	Fair	Proponent	Remove	Proposed disturbance footprint requires removal. Hazardous to features within striking distance if retained, but lacking current targets.	Y	-	-	-	-
597	Manitoba Maple	*Acer negundo*	19	17	6	Rounded	4	Good	Good, slight lean	Low Hazard Risk	Good	Proponent	Remove	Proposed disturbance footprint requires removal.	Y	-	-	-	
598	Black Walnut	*Juglans nigra*	12.5	-	6	Rounded	5	Good	Good	Low Hazard Risk	Good	Proponent	Remove	Proposed disturbance footprint requires removal.	Y	-	-	-	-
599	Horticultural Cherry species	*Prunus sp.*	21	-	6	Rounded	6	Fair, some decline/dieback	Fair	Low Hazard Risk due to short height	Fair	Proponent	Remove	Tree in decline, proposed disturbance footprint requires removal	Y	-	-	-	-
600	Eastern White Cedar	*Thuja occidentalis*	33	-	7	Rounded	5	Good	Good. One rear stem previously removed but otherwise healthy.	Low Hazard Risk	Good	Boundary Tree with Private Landowner	**Preserve**	Good condition, external ownership	Y	2.4	3.5	3.5	-
A	Red Maple	*Acer rubrum*	15	-	6	Rounded	5	Good	Good, minor healing wound on trunk.	Low Hazard Risk	Good	Adjacent Private Landowner	**Preserve**	Good condition, external ownership	Y	1.8	3.5	3.5	-
B	Trembling Aspen	*Populus tremuloides*	20	-	7	Rounded	4	Good	Good	Low Hazard Risk	Good	City and Adjacent Landowner (Boundary Tree)	**Preserve**	Good condition, external ownership	Y	1.8	3	3	-
C	Red Ash (syn. Green Ash)	*Fraxinus pennsylvanica*	25	20	9	Rounded	8	Poor, extensive galleries from Emerald Ash Borer infestation	Good, though in decline; slight lean away from subject lands towards adjacent lands. Note: obvious structural defects are not present, although EAB decline may make trees more brittle than apparent	Low Hazard Risk (subject lands) Moderate Hazard Risk (adjacent lands)	Good*	Adjacent Private Landowner	**Preserve**	Avoided by proposed development	Y	1.8	5	5	*Pruning, removal or other management by adjacent landowner may be advisable for adjacent lands. Note: adjacent landowner on-site indicated desire to retain this tree.
D	Common Apple	*Malus pumila*	30	25	8	Rounded	8	Good	Fair; narrow stem union, dead limbs, but not facing subject lands	Low Hazard Risk (subject lands) Moderate Hazard Risk (adjacent lands)	Fair	Adjacent Private Landowner	**Preserve**	Avoided by proposed development	Y	2.4	5	5	Pruning or removal by adjacent landowner may be advisable for adjacent lands.
E	Common Apple	*Malus pumila*	27	-	12	Rounded	7	Fair to Poor	Poor; rear of stem with exposed deadwood on back of lean, risk to adjacent lands	Low Hazard Risk (subject lands) Moderate Hazard Risk (adjacent lands)	Poor	Adjacent Private Landowner	**Preserve**	Avoided by proposed development	Y	1.8	4.5	4.5	Pruning or removal by adjacent landowner may be advisable for adjacent lands.
F	Norway Maple	*Acer platanoides*	10	-	4	Rounded	2	Good	Good	Low Hazard Risk	Good	Adjacent Private Landowner	**Preserve**	Avoided by proposed development	Y	1.8	2	2	Abutting property fencing on far side.
G	White Mulberry	*Morus alba*	10	10	5	Rounded	5	Good	Fair; narrow basal union	Low Hazard Risk	Good	Adjacent Private Landowner	**Preserve**	Avoided by proposed development	N	1.8	3.5	3.5	Abutting property fencing on far side.
H	Norway Maple	*Acer platanoides*	20	-	6	Rounded	6	Good	Good	Low Hazard Risk	Good	Adjacent Private Landowner	**Preserve**	Avoided by proposed development	Y	1.8	4	4	Abutting property fencing on far side.
I	Blue Spruce	*Picea pungens*	15	-	5	Columnar/ Typical Spruce	3	Good	Good	Low Hazard Risk	Good	Adjacent Private Landowner	**Preserve**	Avoided by proposed development	Y	1.8	2.5	2.5	-
J	Blue Spruce	*Picea pungens*	15	-	5	Columnar/ Typical Spruce	3	Good	Good	Low Hazard Risk	Good	Adjacent Private Landowner	**Preserve**	Avoided by proposed development	Y	1.8	2.5	2.5	-
K	Blue Spruce	*Picea pungens*	20	-	6	Columnar/ Typical Spruce	3	Good	Good	Low Hazard Risk	Good	Adjacent Private Landowner	**Preserve**	Avoided by proposed development	Y	1.8	2.5	2.5	-
L	Balsam Poplar	*Populus balsamifera*	17	15	7	Rounded	5	Fair, trunk wounds at 1m on second stem	Good (first stem), Poor (second stem)	Low to Moderate Hazard Risk	Fair	City and Proponent (Boundary Tree)	Remove	Continuation of City Road (Marks Avenue) in conjunction with proposed development requires removal	Y	-	-	-	Extension of Marks Road right-of-way corridor into subject lands will require removal of this tree
M	Norway Maple	*Acer platanoides*	15	-	4	Rounded	4	Good	Fair, weakened base, 2 old stems broken near base exposing deadwood	Low Hazard Risk due to short height	Fair	City	Remove	Weakened base/suboptimal structure, proposed disturbance footprint requires removal	Y	-	-	-	Renovation of City sidewalk as part of proposed development requires removal

Grouping #	Primary Species	DBH Range (cm)	Condition Rating	Ownership	Recommended Action	Rationale	Notes
1	Common Apple, Basswood, Hawthorn, Manitoba Maple, Green Ash, and White Mulberry	10 - 49	Predominantly Good, some Fair, Poor and Dead	Proponent	Remove	Proposed disturbance footprint requires removal of grouping.	Grouping includes twenty (20) stems meeting or exceeding 10cm DBH, comprising at least six (6) tree species with sizes ranging from 10cm DBH to 49cm DBH, and and 6m height to 12m height. 70% of stems are 25cm DBH or smaller. 15 stems are considered eligible for compensation, if required.

Detailed Breakdown:

Common Name	Scientific Name	DBH (cm)	DBH (cm) (Additional stem(s))	Height (m)	Health/Condition	Tree Eligible for Compensation if Removed?
Apple species	*Malus sp.*	19	16	8	Fair health, Poor structure, Poor overall, High Hazard Risk but lacking target	Y
Apple species	*Malus sp.*	36		10	Good	Y
Common Apple	*Malus pumila*	16	15, 10	8	Fair	Y
Common Apple	*Malus pumila*	16	-	6	Dead	N
Common Apple	*Malus pumila*	17	-	6	Dead	N
Common Apple	*Malus pumila*	25	11	8	Good health, Fair structure	Y
Common Apple	*Malus pumila*	36	32	10	Good health, Fair structure	Y
Basswood	*Tilia americana*	18	16	10	Fair health, Poor structure, Poor overall, High Hazard Risk but lacking	Y
Basswood	*Tilia americana*	22	-	10	Good health, Fair structure	Y
Basswood	*Tilia americana*	23		10	Good	Y
Basswood	*Tilia americana*	29	10, 10	10	Good	Y
Basswood	*Tilia americana*	36	-	12	Good	Y
Hawthorn species	*Crataegus sp.*	15	13	6	Good health, Fair structure	Y
Manitoba Maple	*Acer negundo*	12	-	6	Good	Y
Manitoba Maple	*Acer negundo*	14	-	6	Good	Y
Manitoba Maple	*Acer negundo*	16	-	6	Good	Y
Manitoba Maple	*Acer negundo*	49	30	10	Good health, Fair structure	Y
Red Ash (syn. Green Ash)	*Fraxinus pennsylvanica*	10	-	8	Fair but likely to decline, EAB galleries observed	Y
Red Ash (syn. Green Ash)	*Fraxinus pennsylvanica*	11	-	8	Fair but likely to decline, EAB galleries observed	Y
White Mulberry	*Morus alba*	31	-	12	Good	N

APPENDICES

Appendix A: Site Photos

Appendix B: City of Guelph Tree Protection Zone Fence and Sign Design Detail and Standard Notes

APPENDIX A

Site Photos



Photograph 1: SE corner of property facing NE, showing end of hedgerow with boundary trees abutting City right-of-way, starting with tree #572.



Photograph 2: View of same hedgerow as Photo #1, from NW of the feature facing SE. Trees #572 (right) to 585 and M (left) depicted, including several boundary trees to City lands.



Photograph 3: View from same angle as Photo #2, but closer to Cedars.



Photograph 4: View from same angle as Photos #2 and 3, but close to Tree #585.



Photograph 5: View of City Tree M, from road right-of-way facing NW into property.



Photograph 6: View of boundary tree L abutting City right-of-way. Photo taken SE of tree facing NW towards adjacent residential parcel.



Photograph 7: View of private tree A (adjacent lands).



Photograph 8: View of boundary tree (boundary with adjacent private lands) #600.



Photograph 9: General view of middle property, from SW property facing NE towards hedgerow (Tree #571 visible in middle right of photo).



Photograph 10: View from adjacent old barn facing NW, showing Tree Grouping #1 (right), NW property boundary with treed residential lots behind (middle) and tree #590 (left).



Photograph 11: View of NW property boundary, middle facing W. View includes inventoried trees, though some other trees are visible behind that were confidently measured at >6m beyond the subject lands using a digital laser measurement device.



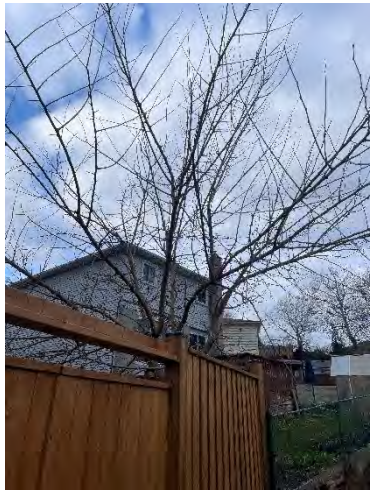
Photograph 12: View NE towards middle of tree Grouping #1, from SW edge facing across feature.



Photograph 13: E corner of property S of Marks Ave, facing NNW. Tree #564 is depicted on right hand side.



Photograph 14: Private Trees I, J and K (from left to right).



Photograph 15: Private Tree G, as observed from NW subject lands edge.

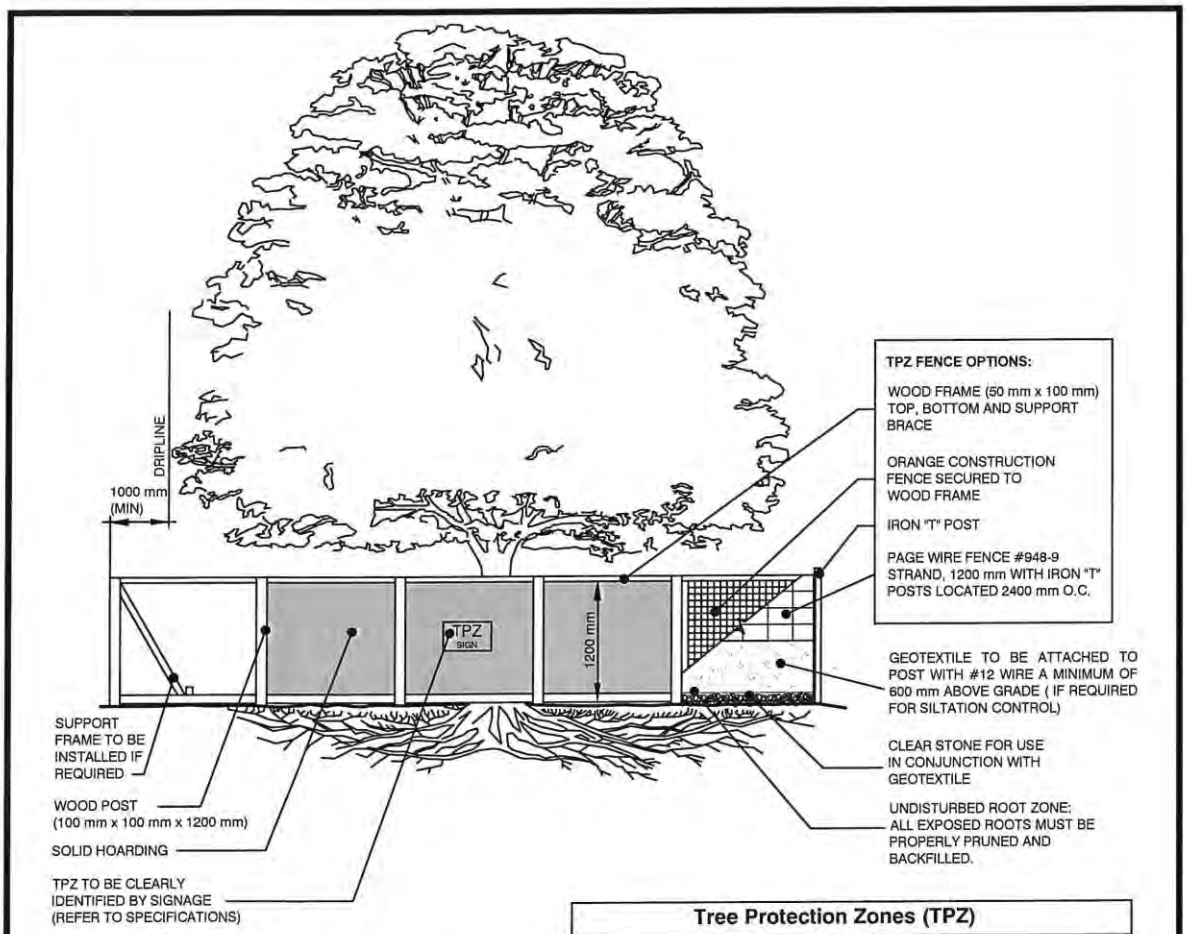


Photograph 16: Private Tree F, as observed from NW subject lands edge.

APPENDIX B

City of Guelph Tree Protection Zone Fence and Sign Design Detail and Standard Notes

Schedule B: Tree protection standard drawings



TREE PROTECTION BARRIER NOTES:

1. ALL TREE PROTECTION TO BE IN ACCORDANCE WITH THE "TREE TECHNICAL MANUAL".
2. REFER TO SPECIFICATION FOR ADDITIONAL DETAILS AND REQUIREMENTS RELATED TO THIS DETAIL.
3. HOARDING TYPE SHOULD BE DETERMINED IN CONSULTATION WITH THE CITY.
4. ALL TREE PROTECTION HOARDING SHALL BE IN PLACE AND MUST BE INSPECTED AND APPROVED BY THE CITY PRIOR TO ANY CONSTRUCTION ACTIVITIES.
5. ALL ARBORICULTURE WORK SUCH AS PRUNING OF BRANCHES AND ROOTS SHALL BE CONDUCTED BY OR UNDER THE SUPERVISIONS OF AN ARBORIST.
6. 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.[1]	Potential Rooting Area (PRA) for all trees and TPZ for trees in NHS,[2] parks, open spaces and other significant natural heritage areas.[1]
<10	1.2	2.4
10-29	1.8	3.6
30-40	2.4	4.8
41-50	3.0	6.0
51-60	3.6	7.2
61-70	4.2	8.4
71-80	4.8	9.6
81-90	5.4	10.8
91-100	6.0	12.0
>100	6 cm per 1 cm DBH	12 cm per 1 cm DBH

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

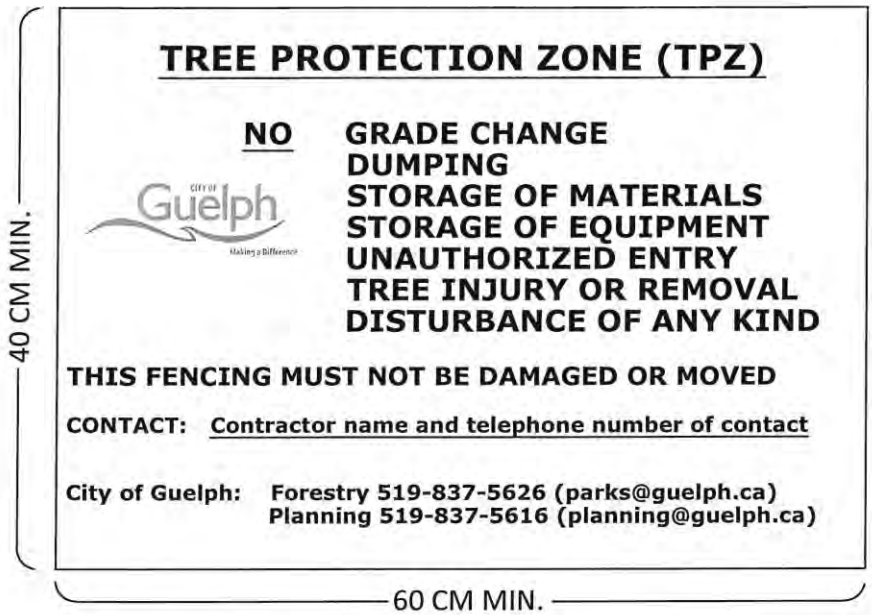
CITY OF GUELPH STANDARD DRAWING

TREE PROTECTION ZONE (TPZ) FENCE DETAIL

DATE DRAWN: MAY/19 | REV. No.: -
DESCRIPTION: N.T.S.
REV. DATE: - | REV. BY.: T.F.
APPROVED BY: MANAGER PARKS, OPERATIONS AND FORESTRY

Guelph
PARKS OPERATIONS AND FORESTRY

UF 1.1



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 × 60 cm in size

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