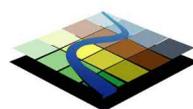




# ARBORIST REPORT & TREE PROTECTION PLAN

Subdivision Application  
1035 Highway 8 & 220 McNeilly Road, City of Hamilton

5 May 2022



**TERRASTORY**  
environmental consulting inc.

# Arborist Report & Tree Protection Plan

Subdivision Application

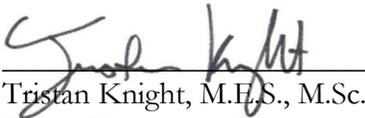
1035 Highway 8 & 220 McNeilly Road, City of Hamilton

**Prepared for:**

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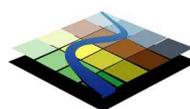
Project No.: 21052

5 May 2022

This report has been prepared by Terrastory Environmental Consulting Inc. (hereinafter "Terrastory") for the client. All information, conclusions, and recommendations contained in this report are subject to the scope and limitations set out in the agreement between Terrastory and the client and qualifications contained in this report. This report shall not be relied upon by any third parties without the prior written consent of Terrastory. Terrastory is not responsible for any injury, loss, or damages arising from improper use of this report by third parties. Excerpts of this report or alterations to this report taken without the authorization of Terrastory invalidates the report and any conclusions therein.

Notwithstanding the determinations of tree health and structural integrity made herein (e.g., good, fair, poor), it must be recognized that all trees (in good health or otherwise) have the potential for failure given adverse weather, damage due to mechanical injury, or other factors that cause stress.

Notwithstanding any recommendations concerning tree preservation or removal made herein, this report does not supersede or expunge any civil or common law property rights as they pertain to shared/boundary trees or trees occurring on adjacent properties. This report does not confirm tree ownership nor authorize the client to encroach or enter onto adjacent properties to destroy or injure trees situated on adjacent properties without the owner's consent.



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## 1 INTRODUCTION

Terrastory Environmental Consulting Inc. (hereinafter “Terrastory”) was retained by Seferian Design Group to prepare this Arborist Report and Tree Protection Plan (TPP) in support of a subdivision application at 1035 Highway 8 and 220 McNeilly Road (hereinafter “Study Area”) in Hamilton. The Subject Property is situated at the northeast corner of Highway 8 and McNeilly Road, and abuts residential parcels at 224/228 McNeilly Road and 1059 Highway 8. Portions of the Study Area (i.e., 1035 Highway 8) appear to have been formerly maintained as a nursery.

The subdivision application considered herein will facilitate the construction of a residential townhouse community, including resident and visitor parking and common amenity space. The subdivision will be accessed from McNeilly Road and demarcated by a constructed retaining wall along the northern and eastern property lines. Concurrent Official Plan Amendment (OPA) and Zoning By-law Amendment (ZBA) applications will be submitted to redesignate and rezone the lands for residential purposes, respectively.

Several private and public trees occur within or adjacent to the proposed development area. The purpose of this study is to inventory and characterize trees with the potential to be adversely affected by the proposed development plan (over the short- or long-term), and to provide mitigation measures and other recommendations to address relevant tree protection requirements. The City regulates the injury or removal of private trees  $\geq 10$  cm diameter at breast height (DBH) through site plan control per their *Tree Protection Guidelines* (revised October 2010). The City also regulates the injury or removal of public trees (all sizes) pursuant to By-law No. 06-151. Removal or injury of private trees in portions of the former City of Stoney Creek is regulated pursuant to By-law No. 4401-96; however, this by-law only applies to woodlots  $\geq 0.5$  ha in size and privately owned lands within the Niagara Escarpment Development Control Area.

An Arborist Report must be prepared in support of the application, which identifies potential tree impacts/removals, provides mitigation measures to protect retainable trees, and establishes minimum tree replacement requirements.

## 2 APPROACH AND METHODS

This Arborist Report is composed of three discrete components which are outlined briefly below and further described in the following sections.

- **Conduct a tree inventory and health assessment** for trees that may be impacted by the proposed development plan (see **Section 2.1**).
- **Predict the effects** of the application on the assessed trees and ascertain the net effects once mitigation measures and other technical recommendations are implemented (see **Section 2.2**).
- **Determine whether the application considered herein addresses applicable tree protection and related policies** (see **Section 2.3**).

### 2.1 Tree Inventory and Health Assessment

A tree inventory and health assessment was carried out by a Terrastory ISA-certified Arborist (J. Consiglio) on 14 March 2022. All private trees 10 cm diameter at breast height (DBH) or greater and all municipal trees regardless of size (where present), located within or immediately adjacent to the proposed area of disturbance (e.g., building envelopes, grading, servicing), were inventoried and

assessed from the ground. Trees situated on adjacent private properties within 6 m and those with driplines overlapping or near the proposed areas of disturbance were reviewed as necessary and to the extent possible from areas in which access was granted, with DBH estimated to the nearest 5 cm. Unless otherwise specified all assessed trees were: (1) labeled using metal number-stamped tags, (2) identified to species, (3) measured at breast-height (approximately 1.37 metres above ground) with calipers and/or DBH tape, (4) assessed for crown diameter, and (5) assessed for risk features, indicators of decline, and growth constraints (e.g., open wounds, live crown ratio, disease). Trees assessed on private properties to which access was not granted were not tagged; where possible tags were affixed to the nearest fence. The tree health and structural assessment was undertaken consistent with accepted arboricultural techniques and is reflective of a “Level 1 (Limited Visual Assessment)” as defined by the ISA. None of the assessed trees were cored, probed, or climbed, nor were their roots exposed for detailed assessment. As the tree inventory was undertaken during leaf-off, certain indicators of tree health and structural integrity (e.g., live crown ratio) could not be reliably assessed.

Based on the information collected an overall visual assessment of tree health and structural integrity as viewed from the ground is provided, supported by preservation/removal direction based on each tree’s characteristics (e.g., health, location, ecological value, cultural value) and the nature of the proposed development plan. Locations of the assessed trees were recorded on-site with a high-accuracy GPS to corroborate the surveyed tree locations, and to plot the locations of trees which had not been surveyed. Where access was restricted, the location of trees on adjacent private properties was approximated using current orthorectified aerial photographs.

Notwithstanding the determinations of tree health and structural integrity made herein (e.g., good, fair, poor), it must be recognized that all trees (in good health or otherwise) have the potential for failure given adverse weather, damage due to mechanical injury, or other factors that cause stress.

## 2.2 Effects Assessment and Mitigation

Trees may be negatively impacted during construction, grading, and/or other activities associated with implementation of the proposed development plan via the following pathways:

- Direct tree removal in areas where trees conflict with the development envelopes or areas of site alteration (e.g., grading).
- Physical injury to the trunk, roots, branches, and/or foliage during construction, excavation, or grading.
- Soil compaction within the rooting zone.
- Smothering or exposure of roots due to changes in grade.
- Alterations to any biophysical condition or parameter (e.g., light regime, soil moisture regime) in which a tree was previously accustomed.

An assessment of the potential for tree impacts associated with implementation of the proposed development plan is provided in **Section 4.2**.

## 2.3 Tree Protection Policy Context

This study has been prepared to address the City’s *Tree Protection Guidelines* which apply to *Planning Act* applications. This study has also been prepared to address the requirements of By-law 06-151 given the presence of municipal trees (or shared private/municipal trees) along the road allowances

of Highway 8 and McNeilly Road. The former City of Stoney Creek also regulates the injury or removal of private trees >30 cm DBH (for deciduous trees) or 15 cm DBH (for coniferous trees) per By-law No. 4401-96; however, this by-law is not applicable to the application considered herein as no woodlots ≥0.5 ha in size are present and the Study Area falls outside the Niagara Escarpment Development Control Area.

Provincial/federal legislative requirements related to the protection of breeding birds and bird nests apply to on-site trees (and vegetation of any size) pursuant to the *Migratory Birds Convention Act* (for designated migratory birds) and *Fish and Wildlife Conservation Act* (for certain Corvids and other designated non-migratory birds). Several bat species may roost in cracks/crevices and/or foliage of the larger-diameter on-site trees, some of which (particularly Myotis species and Tri-colored Bat) are afforded protection under the provincial *Endangered Species Act*.

Subsection 10(3) of the provincial *Forestry Act* prohibits the injury or destruction of a tree growing on the boundary of an adjoining property without the neighbouring landowners' consent. Per case law in Ontario a tree is considered shared if any portion of its trunk (i.e., area between the root collar and lowest canopy branch) extends across a property line.

The mitigation measures and technical recommendations offered herein are aimed at demonstrating consistency of the application with the aforementioned municipal, provincial, and federal requirements.

### 3 TREE INVENTORY AND HEALTH ASSESSMENT

A total of 51 trees situated within or adjacent to the proposed area of disturbance were inventoried and assessed. The full results of the tree inventory and health assessment are provided in **Appendix 1**. The locations of all trees assessed are shown in **Figure 1**. Select photographs of the assessed trees and Subject Property are provided in **Appendix 2**. A summary of the overall tree composition and conditions observed is provided in **Table 1**.

Most trees situated within the McNeilly Road allowance represent multi-stem sprouts/suckers from cut stumps. Previous cutting in this area may have been undertaken for hydro clearance or ditch maintenance, though this is not known with certainty.

**Table 1.** Composition and Abundance of Trees within and/or adjacent to the proposed Areas of Development and Disturbance.

Species	Total Assessed	Percentage of Total (%)
Black Walnut ( <i>Juglans nigra</i> )	3	5.9
Cherry species ( <i>Prunus</i> sp.)	6	11.8
Common Apple ( <i>Malus pumila</i> )	1	2.0
Eastern White Cedar ( <i>Thuja occidentalis</i> )	3	5.9
English Oak ( <i>Quercus robur</i> )	1	2.0
European Ash ( <i>Fraxinus excelsior</i> )	1	2.0
European Beech ( <i>Fagus sylvatica</i> )	1	2.0

Species	Total Assessed	Percentage of Total (%)
Manitoba Maple ( <i>Acer negundo</i> )	6	11.8
Norway Maple ( <i>Acer platanoides</i> )	5	9.8
Siberian Elm ( <i>Ulmus pumila</i> )	14	27.5
Silver Fir ( <i>Abies concolor</i> )	1	2.0
Silver Maple ( <i>Acer saccharinum</i> )	2	3.9
Sugar Maple ( <i>Acer saccharum</i> )	1	2.0
Weeping Birch ( <i>Betula pendula</i> )	3	5.9
White Mulberry ( <i>Morus alba</i> )	3	5.9
<b>TOTAL</b>	<b>51</b>	<b>~100</b>

## 4 TREE EFFECTS ASSESSMENT AND MITIGATION

### 4.1 Proposed Development Plan

The following tree effects assessment provides an evaluation of the potential for the proposed development plan to result in negative effects to regulated trees and offers several technical recommendations to mitigate such effects. The effects assessment herein is based on preliminary Grading/ESC and Servicing Plans by S. Llewellyn & Associates Ltd. provided in **Appendix 3**, which are overlaid with the assessed tree locations in on the TPP in **Figure 1**. The proposed development plan consists of the following elements:

- 147 townhouse unit types;
- 339 parking spaces;
- Sidewalks and common amenity space;
- Two access driveways from McNeilly Road;
- Servicing connections to McNeilly Road;
- Stormwater management features (e.g., underground storage tank); and
- Grading to the property lines, including construction of a retaining wall along the eastern and northern property lines.

### 4.2 Tree Effects Assessment and Technical Recommendations

#### 4.2.1 Trees to be Removed

Based on the proposed development plan shown in **Figure 1**, a total of 36 assessed trees (70.6%) require removal. A rationale for the removal of each individual tree is provided in **Appendix 1**. Tree removals are required to facilitate site alteration and/or construction of the following proposed development features:

- Townhouse block envelopes;
- Driveways;
- Retaining wall along on the eastern and northern property boundaries; or
- Grade changes (including silt fence installation at the grading limit).

Per the preliminary Grading/ESC and Servicing Plans by S. Llewellyn & Associates Ltd., Terrastory does not consider tree retention within the site to be feasible or appropriate. It is emphasized that most trees to be removed are either invasive species (e.g., Manitoba Maple, Norway Maple, Siberian Elm, White Mulberry), represent landscape plantings (e.g., Cherry species, Common Apple, English Oak), and/or are in poor health or structural condition (e.g., sprouting suckers from cut stumps within the McNeilly Road allowance). The Subject Property lacks trees considered to exhibit high ecological or cultural value, particularly in light of the challenges associated with tree retention for infill lots and/or developments where grading is proposed to the property lines.

This determination of tree preservation potential is based on overlaying the Grading/ESC Plan upon the assessed tree locations as determined either by the OLS survey or Terrastory staff in the field, without the aid of a staked limit of disturbance, development envelopes, or property lines. The exact tree locations (i.e., centimetre-level accuracy) may differ slightly from what is depicted on **Figure 1**.

Given the possibility that nesting birds or roosting bats may occupy certain on-site trees during their activity periods, the following measures are recommended to guide the necessary tree removals:

- **All necessary tree removals will be completed outside the primary bird nesting and bat activity periods (i.e., to be completed between October 1 and March 31). If limited tree removal is required during this period, a survey will be conducted by a qualified Ecologist within two (2) days of the commencement of tree removal activities to determine habitat suitability and/or confirm the presence/absence of nesting birds and roosting bats.**
- **Should a nesting bird or roosting bat be identified, a mitigation plan must be developed (which may include discussions with relevant agencies) to address regulatory requirements.**

It is emphasized that all development plans prepared at this application stage (e.g., subdivision, OPA, ZBA) are understood to be conceptual and preliminary. Revisions to the limit of grading along the property boundaries, including the location of the retaining wall, may allow for additional tree retention (particularly for shared/boundary and neighbouring trees, see **Section 4.2.3** below) and should be considered at detailed design.

#### 4.2.2 Trees to be Retained

Protection of the remaining 15 assessed trees (29.4%) can be accommodated by the proposed development plan. In general, tree protection on development sites is effectuated by restricting development and/or site alteration from the prescribed minimum Tree Protection Zone (TPZ). A minimum TPZ is generally accepted to be the minimum setback distance required to maintain the structural integrity of a tree's anchor roots (i.e., "root plate"). In Ontario, minimum TPZs are often established by multiplying a tree's diameter at breast height (DBH) by a factor of 6. Trees with a similar diameter (e.g., 41-50 cm DBH) are lumped into a single size class, with the minimum TPZ established by the largest diameter tree in that size class. For example, all trees which are 41-50 cm DBH would be afforded a 3 m setback as 50 cm is the largest tree in that size class (50 cm x 6 = 300 cm or 3 m). The calculated TPZ represents the radius of a circle that extends from a tree's base to

the specified distance (or up to existing hard surfaces, where applicable). Minimum TPZs for each tree inventoried (per the City's ROW Utility Installation and Permit Manual) are shown on **Figure 1**. The dripline of certain private trees to be retained (00N and 00A) are also shown on **Figure 1** to facilitate City Natural Heritage review.

The most effective approach to protecting retainable trees situated in proximity to development and/or site alteration activities is the installation of a tree protection barrier (e.g., hoarding, fencing) per City guidelines. The following measures are recommended to protect retainable trees situated near the proposed development limit:

- **Construction activities will treat all trees recommended for retention on Figure 1 as constraints.**
- **Tree protection fence will be installed per Figure 1 prior to the commencement of site preparation and other construction activities.**
- **A qualified Arborist will inspect the tree protection fence following installation and prior to the commencement of site preparation or other construction activities.**
- **No development, site alteration (e.g., grading, excavation, soil stockpiling), machinery movement, or storage of equipment or materials will occur within any area isolated by tree protection fence.**
- **Tree protection fence will remain in place and be in good condition during implementation of the proposed development plan. Tree protection fence will not be removed until all site disturbances associated with the proposed development plan have concluded.**
- **A Verification of Tree Protection Letter is to be provided to the Director of Planning by a qualified Arborist to confirm that all tree protection measures as shown herein have been appropriately installed.**

As the tree protection fence locations per the TPP in **Figure 1** overlap with silt fencing as shown on the Grading and ESC Plan by S. Llewellyn & Associates Ltd., the silt fence itself may be considered an appropriate and sufficient tree protection barrier (subject to City review and confirmation).

Trees to be retained may require minor pruning to facilitate clearance (e.g., for construction vehicles), improve crown structure, or eliminate deadwood. Should pruning be deemed necessary, the following measure is recommended.

- **All necessary pruning of branches and/or roots shall be conducted by a qualified Arborist and shall be in accordance with good arboricultural standards and practices.**

#### 4.2.3 Shared/Boundary and Neighbouring Trees

A total of nine assessed trees proposed for removal are either neighbouring (i.e., occur entirely on an adjacent private property) or possess shared ownership (i.e., straddle the boundary between the

Subject Property and an adjacent private property). This includes neighbouring trees situated at 224/228 McNeilly Road and 1059 Highway 8, and boundary trees along the eastern property line that are shared with 1059 Highway 8. Tree ownership has been determined herein primarily on the basis of the property survey, in the absence of on-site property boundary markers or direction from a licensed surveyor. It is also noted that some apparent neighbouring or shared/boundary trees were not surveyed and have been plotted by Terrastory on the TPP in **Figure 1**.

Per case law in Ontario, a tree is considered shared if any portion of its trunk (i.e., area between the root collar and lowest canopy branch) extends across a property line. Section 10(3) of the *Forestry Act* prohibits the injury or destruction of a tree growing on the boundary of adjoining properties without the landowners' consent. The following measure is recommended to address legislative requirements related to the removal of shared/boundary and neighbouring trees:

- **The Applicant must secure approval to remove all shared/boundary or neighbouring trees from relevant property owners prior to construction.**

#### 4.2.4 Tree Replacements

The City's *Tree Protection Guidelines* (revised October 2010) require a minimum 1:1 replacement ratio for private tree removals. Where insufficient space is available to replant trees on-site, cash-in-lieu is to be provided to the City to facilitate replacement. Street tree plantings as required under a Subdivision Agreement count towards satisfying the minimum tree replacement requirements. Of the 36 trees to be removed, 32 are private trees; as such, the following recommendation is provided:

- **A minimum of thirty-two (32) private tree replacements (i.e., 1:1 replacement ratio) are to be installed. If insufficient space is available to accommodate thirty-two (32) private tree replacements, cash-in-lieu is to be applied at standard City rates.**

For public trees, City Forestry requests that municipal tree assets be appraised in accordance with the procedures outlined in the *Design and Preservation Standards for Public Property* (July 2021). The Reproduction Method of the Trunk Formula Method (TFM) per the Guide to Plant Appraisal (10th Edition) is to be applied to estimate loss of canopy value. Clause 1(1)(z) of By-law 06-151 directs that tree ownership is determined based on overall percentage of trunk diameter straddling the property line; if a tree has greater than 50 % of its trunk diameter (measured at the ground level) on the City side of a road allowance, it is considered a public tree. Determining ownership of City versus private trees within the Study Area is difficult as such trees are not indicated on the property survey and there were no boundary markers available for review on-site. Further, three (3) of the four (4) presumed City trees to be removed have recently been cut and are only survived by stump sprouts.

The Applicant is encouraged to confirm tree ownership (and suitability of appraisals for trees which are only survived by stump sprouts) with City Forestry staff. For the purposes of this subdivision application, the following recommendation is provided:

- **The Reproduction Method of the Trunk Formula Method (TFM) per the Guide to Plant Appraisal (10th Edition) will be applied to estimate loss of canopy value associated with removal of public trees (if any), unless this**

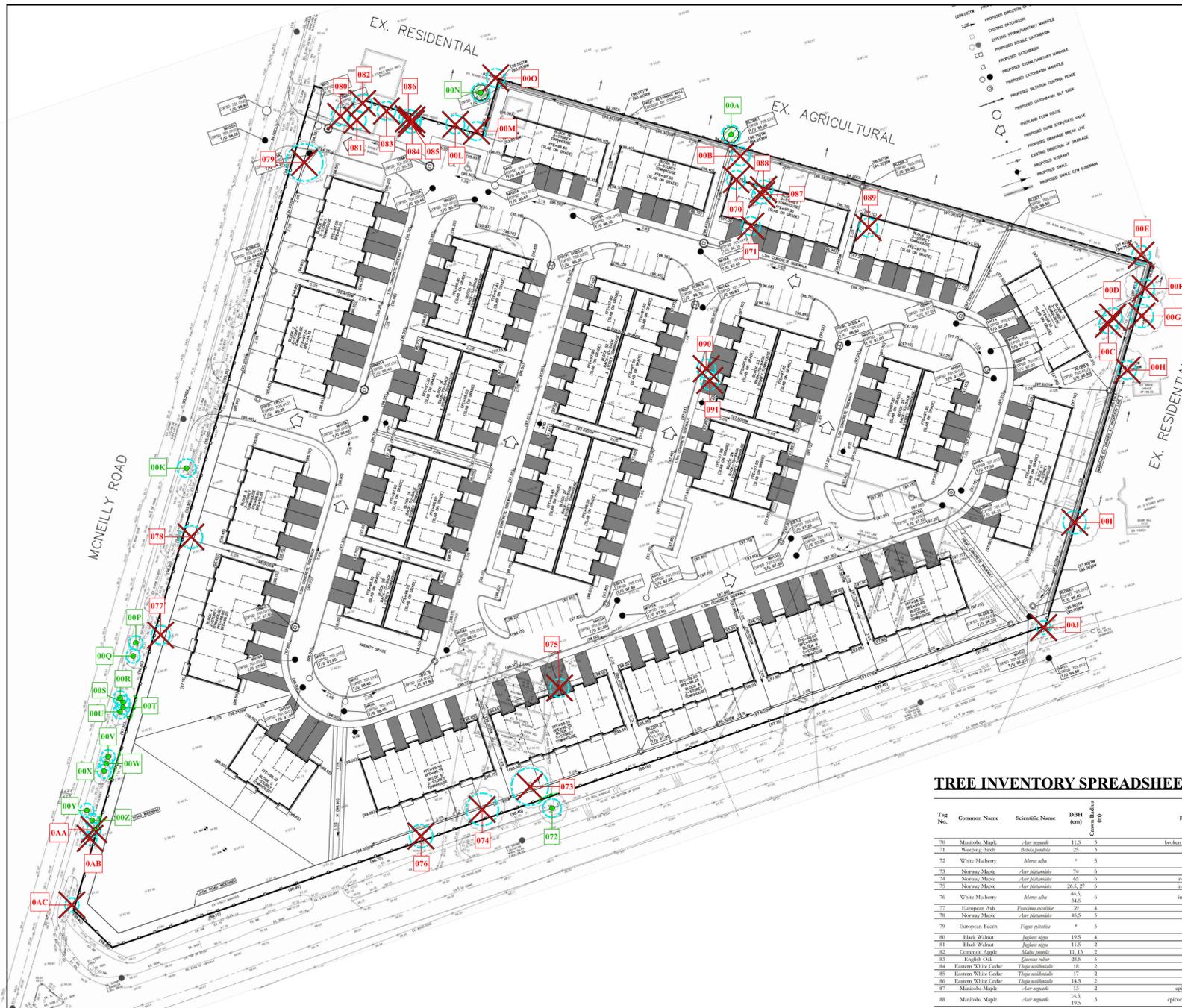
**requirement is waived by City Forestry due to the small size and/or poor condition of public trees to be removed.**

## **5 CONCLUSIONS**

A total of 51 trees were inventoried and assessed at 1035 Highway 8 and 220 McNeilly Road in Stoney Creek. Of these, a total of 36 assessed trees (including both private and apparent public trees) require removal to support the proposed development plan, which involves the construction of a new residential community consisting of townhouse blocks. Several additional trees (including shared/boundary and neighbouring trees) require removal as a result of significant anticipated root impacts associated with grading to the property boundaries and installation of a retaining wall along the eastern and northern property boundaries.

Provided that the technical recommendations offered herein are implemented in full, Terrastory is satisfied that anticipated and potential tree impacts will be adequately addressed and that the application meets relevant tree protection policies outlined in the City's *Tree Protection Guidelines* (revised October 2010) and *Design and Preservation Standards for Public Property* (July 2021). As part of the application review process, all technical recommendations offered herein should be incorporated into any necessary planning approvals that facilitate implementation of the proposed development plan.

It is emphasized that all development plans prepared at this application stage (e.g., subdivision, OPA, ZBA) are understood to be conceptual and preliminary. Revisions to the limit of grading along the property boundaries, including the location of the retaining wall, may allow for additional tree retention (particularly for shared/boundary and neighbouring trees) and should be considered at detailed design.



**TREE REMOVAL, PRESERVATION, AND REPLACEMENT NOTES:**

**GENERAL:**

1. CONSTRUCTION ACTIVITIES WILL TREAT ALL TREES RECOMMENDED FOR RETENTION SHOWN HEREIN AS CONSTRAINTS.

**TREE REMOVAL:**

2. ALL NECESSARY TREE REMOVALS WILL BE COMPLETED OUTSIDE THE PRIMARY BIRD NESTING AND BAT ACTIVITY PERIODS (I.E., TO BE COMPLETED BETWEEN OCTOBER 1 AND MARCH 31). IF LIMITED TREE REMOVAL IS REQUIRED DURING THIS PERIOD, A SURVEY WILL BE CONDUCTED BY A QUALIFIED ECOLOGIST WITHIN TWO (2) DAYS OF THE COMMENCEMENT OF TREE REMOVAL ACTIVITIES TO DETERMINE HABITAT SUITABILITY AND/OR CONFIRM THE PRESENCE/ABSENCE OF NESTING BIRDS AND ROOSTING BATS.

3. SHOULD A NESTING BIRD OR ROOSTING BAT BE IDENTIFIED, A MITIGATION PLAN MUST BE DEVELOPED (WHICH MAY INCLUDE DISCUSSIONS WITH RELEVANT AGENCIES) TO ADDRESS REGULATORY REQUIREMENTS.

**TREE PROTECTION BARRIER:**

4. TREE PROTECTION FENCE (SEE DETAIL) WILL BE INSTALLED PRIOR TO THE COMMENCEMENT OF SITE PREPARATION AND OTHER CONSTRUCTION ACTIVITIES. NO DEVELOPMENT, SITE ALTERATION (E.G., GRADING, EXCAVATION, SOIL STOCKPILING, ETC.), MACHINERY MOVEMENT, OR STORAGE OF EQUIPMENT OR MATERIALS WILL OCCUR WITHIN ANY AREA ISOLATED BY TREE PROTECTION FENCE.

5. A QUALIFIED ARBORIST WILL INSPECT THE TREE PROTECTION FENCE FOLLOWING INSTALLATION AND PRIOR TO THE COMMENCEMENT OF SITE PREPARATION OR OTHER CONSTRUCTION ACTIVITIES.

6. TREE PROTECTION FENCE WILL REMAIN IN PLACE AND BE IN GOOD CONDITION DURING IMPLEMENTATION OF THE PROPOSED DEVELOPMENT PLAN. TREE PROTECTION FENCE WILL NOT BE REMOVED UNTIL ALL SITE DISTURBANCES ASSOCIATED WITH THE PROPOSED DEVELOPMENT PLAN HAVE CONCLUDED.

**VERIFICATION OF TREE PROTECTION LETTER:**

7. A VERIFICATION OF TREE PROTECTION LETTER IS TO BE PROVIDED TO THE DIRECTOR OF PLANNING BY A QUALIFIED ARBORIST TO CONFIRM THAT ALL TREE PROTECTION MEASURES AS SHOWN HEREIN HAVE BEEN APPROPRIATELY INSTALLED.

**PRUNING:**

8. ALL NECESSARY PRUNING OF BRANCHES AND/OR ROOTS SHALL BE CONDUCTED BY A QUALIFIED ARBORIST AND SHALL BE IN ACCORDANCE WITH GOOD ARBORICULTURAL STANDARDS AND PRACTICES.

**SHARED/BOUNDARY OR NEIGHBOURING TREES:**

9. THE APPLICANT MUST SECURE APPROVAL TO REMOVE ALL SHARED/BOUNDARY OR NEIGHBOURING TREES FROM RELEVANT PROPERTY OWNERS PRIOR TO CONSTRUCTION.

**TREE REPLACEMENT (PUBLIC AND PRIVATE TREES):**

10. A MINIMUM OF THIRTY-TWO (32) PRIVATE TREE REPLACEMENTS (I.E., 1:1 REPLACEMENT RATIO) ARE TO BE INSTALLED. IF INSUFFICIENT SPACE IS AVAILABLE TO ACCOMMODATE THIRTY-TWO (32) TREE REPLACEMENTS, CASH-IN-LIEU IS TO BE APPLIED AT STANDARD CITY RATES.

11. THE REPRODUCTION METHOD OF THE TRUNK FORMULA METHOD (TFM) PER THE GUIDE TO PLANT APPRAISAL (10TH EDITION) WILL BE APPLIED TO ESTIMATE LOSS OF CANOPY VALUE ASSOCIATED WITH REMOVAL OF PUBLIC TREES (IF ANY), UNLESS THIS REQUIREMENT IS WAIVED BY CITY FORESTRY DUE TO THE SMALL SIZE AND/OR POOR CONDITION OF PUBLIC TREES TO BE REMOVED.

**KEY MAP**



**Legend**

- Tree Inventory
  - Tree to be Retained
  - Tree to be Removed
  - Crown of Private Tree to be Retained
  - Minimum Tree Protection Zone
- Tree Protection Measures Recommended
  - Tree Protection Fence

**TREE INVENTORY SPREADSHEET:**

Tag No.	Common Name	Scientific Name	DBH (cm)	Canopy Height (m)	Risk Features, Decline Indicators, and Growth Constraints	Health Condition	Structural Condition	Ownership <sup>1</sup>	Tree Preservation Recommendation <sup>2</sup>
70	Manitoba Maple	<i>Acer spicatum</i>	11.5	3	broken leader, trunk wound, epicormic shoots, wounds on scaffold branches	poor	poor	Applicant	2.4
71	Weeping Birch	<i>Betula pendula</i>	28	3	broken/dead branches (10%), trunk wound, buttress wounds, pruning cuts, epicormic shoots, growing into hydro pole	poor	poor	Applicant	2.4
72	White Mulberry	<i>Morus alba</i>	5	5	*Multi-stemmed DBH: 15, 11, 20	poor	poor	City	2.4
73	Norway Maple	<i>Acer platanoides</i>	74	6	substantial large pruning cuts (old), dead scaffold branches (x2)	poor	poor	Applicant	4.8
74	Norway Maple	<i>Acer platanoides</i>	65	6	included bark, pruning cuts, girdling roots, dead scaffold branches	fair/poor	fair/poor	Applicant	4.2
75	Norway Maple	<i>Acer platanoides</i>	26.5	6	included bark, pruning cuts, epicormic shoots, wounds on branches	fair/poor	fair/poor	Applicant	2.4
76	White Mulberry	<i>Morus alba</i>	44.5	6	included bark, pruning cuts, constrained by overhead phone lines	poor	poor	Applicant	3
77	European Ash	<i>Fraxinus excelsior</i>	39	4	included bark, dead/broken branches (5%), drooping bark	fair/poor	fair/poor	Applicant	2.4
78	Norway Maple	<i>Acer platanoides</i>	45.5	5	included bark, pruning cuts, decay in scaffold branches	fair	fair	Applicant	3
79	European Beech	<i>Fagus sylvatica</i>	5	5	included bark, pruning cuts, *Multi-stemmed DBH: 33, 76, 27	fair	fair	Applicant	4.8
80	Black Walnut	<i>Juglans nigra</i>	19.5	4	growing into adjacent tree and dwelling wall	good	good	Applicant	2.4
81	Black Walnut	<i>Juglans nigra</i>	11.5	2	pruning cuts, included bark, epicormic shoots	good	good	Applicant	2.4
82	Common Apple	<i>Malus domestica</i>	11.5	2	pruning cuts, included bark, epicormic shoots	poor	poor	Applicant	2.4
83	English Oak	<i>Quercus robur</i>	28.5	5	pruning cuts	good	good	Applicant	2.4
84	Eastern White Cedar	<i>Thuja occidentalis</i>	18	2	pruning cuts	good	good	Applicant	2.4
85	Eastern White Cedar	<i>Thuja occidentalis</i>	17	2	pruning cuts	good	good	Applicant	2.4
86	Eastern White Cedar	<i>Thuja occidentalis</i>	14.5	2	pruning cuts	good	good	Applicant	2.4
87	Manitoba Maple	<i>Acer spicatum</i>	13	2	epicormic shoots, trunk wounds (x3), broken/dead branches (10%)	poor	poor	Applicant	2.4
88	Manitoba Maple	<i>Acer spicatum</i>	19.5	3	epicormic shoots, broken/dead branches (10%), broken scaffold branches	poor	poor	Applicant	2.4
89	White Mulberry	<i>Morus alba</i>	13	4	large trunk wound, included bark, buttress and root injuries	poor	poor	Applicant	2.4
90	Weeping Birch	<i>Betula pendula</i>	14	2	epicormic shoots, buttress wound, trunk wound, broken branches, extensive damage to trunk, buttress and buttresses	poor	poor	Applicant	2.4
91	Weeping Birch	<i>Betula pendula</i>	15	1	pruning cuts	poor	poor	Applicant	2.4
00A	Cherry species	<i>Prunus sp.</i>	20-30	2	broken scaffold limbs	fair	fair	228 McNeilly Road	2.4
00B	Manitoba Maple	<i>Acer spicatum</i>	10-15	2	epicormic shoots, included bark	fair	fair	Applicant	2.4
00C	Black Walnut	<i>Juglans nigra</i>	20-30	5	pruning cuts, broken/dead branches (10%)	good	good	Applicant	2.4
00D	Cherry species	<i>Prunus sp.</i>	5	5	pruning cuts	fair	fair	Applicant	2.4
00E	Cherry species	<i>Prunus sp.</i>	20-30	5	*Multi-stemmed DBH: 10-20, 10-20, 10-20, 10-20	fair	fair	Applicant	2.4
00F	Cherry species	<i>Prunus sp.</i>	20-30	5	pruning cuts	fair	fair	228 McNeilly Road	2.4
00G	Cherry species	<i>Prunus sp.</i>	10-20	3	pruning cuts, epicormic shoots	fair	fair	1059 Highway 8	2.4
00H	Silver Maple	<i>Acer saccharinum</i>	7	6	pruning cuts, trunk in trunk, epicormic shoots	fair	fair	1059 Highway 8	3
00I	Silver Maple	<i>Acer saccharinum</i>	40-50	6	included bark, wounds on trunk, broken branch	fair	fair	1059 Highway 8	2.4
00J	Silver Maple	<i>Acer saccharinum</i>	40-50	6	*Multi-stemmed DBH: 10-20, 10-20, 10-20, 10-20, 10-20	fair	fair	1059 Highway 8	2.4
00K	Manitoba Maple	<i>Acer spicatum</i>	5-10	2	included bark, wounds on trunk, broken/dead branches (10%)	good	good	City (pre-owned)	1.8
00L	Siberian Elm	<i>Ulmus pumilus</i>	12.5	2	epicormic shoots, wounds on buttress and trunk, broken/dead branches (10%)	poor	poor	City	2.4
00M	Norway Maple	<i>Acer platanoides</i>	10-20	2	could not assess trunk/buttress due to fence	good	good	224 McNeilly Road	2.4
00N	Weeping Birch	<i>Betula pendula</i>	10-20	3	could not assess trunk/buttress due to fence	good	good	224 McNeilly Road	2.4
00O	Silver Fir	<i>Abies balsamea</i>	10-20	2	could not assess trunk/buttress due to fence	good	good	224 McNeilly Road	2.4
00P	Manitoba Maple	<i>Acer spicatum</i>	30-40	4	could not assess trunk/buttress due to fence	poor	poor	224 and/or 228 McNeilly Road	2.4
00Q	Siberian Elm	<i>Ulmus pumilus</i>	5	1	regenerating as a multi-stemmed plant	poor	poor	City	1.8
00R	Siberian Elm	<i>Ulmus pumilus</i>	5	1	*Multi-stemmed DBH: 3, 5, 5, 5	poor	poor	City	1.8
00S	Siberian Elm	<i>Ulmus pumilus</i>	4	1	regenerating as a multi-stemmed plant	poor	poor	City	1.8
00T	Siberian Elm	<i>Ulmus pumilus</i>	5	1	regenerating as a multi-stemmed plant	poor	poor	City	1.8
00U	Siberian Elm	<i>Ulmus pumilus</i>	2-3	1	regenerating as a multi-stemmed plant from cut stem	poor	poor	City	1.8
00V	Siberian Elm	<i>Ulmus pumilus</i>	4-4	1	regenerating as a multi-stemmed plant from cut stem	poor	poor	City	1.8
00W	Siberian Elm	<i>Ulmus pumilus</i>	5	1	regenerating as a multi-stemmed plant	poor	poor	City	1.8
00X	Siberian Elm	<i>Ulmus pumilus</i>	5	1	*Multi-stemmed DBH: 3, 3, 3, 3, 3	poor	poor	City	1.8
00Y	Siberian Elm	<i>Ulmus pumilus</i>	5	1	regenerating as a multi-stemmed plant from cut stem	poor	poor	City	1.8
00Z	Siberian Elm	<i>Ulmus pumilus</i>	5	1	regenerating as a multi-stemmed plant	poor	poor	City	1.8
00A	Siberian Elm	<i>Ulmus pumilus</i>	5	1	regenerating as a multi-stemmed plant	poor	poor	City (pre-owned)	1.8
00B	Siberian Elm	<i>Ulmus pumilus</i>	5	1	*Multi-stemmed DBH: 3, 3, 3, 3, 3	poor	poor	City (pre-owned)	1.8
00C	Cherry species	<i>Prunus sp.</i>	5	2	girdled (removed) as base, broken scaffold branches	poor	poor	City (pre-owned)	1.8

**GENERAL NOTES:**

- Tree inventory completed by ISA-certified Arborist J. Consiglio on 14 Mar. 2022.
- The tree health and structural assessment was undertaken consistent with accepted arboricultural techniques. None of the assessed trees were cored, probed, or climbed, nor were their roots exposed for detailed assessment.
- Notwithstanding the determinations of tree health and structural integrity made herein (e.g., good, fair, poor), it must be recognized that all trees (in good health or otherwise) have the potential for failure given adverse weather, damage due to mechanical injury, or other factors that cause stress.
- Notwithstanding any recommendations concerning tree preservation or removal made herein, this plan does not supersede or exonerate any civil or common law property rights as they pertain to shared/boundary trees or trees occurring on adjacent properties. This plan does not confirm tree ownership nor authorize the client to encroach or enter onto adjacent properties to destroy or injure trees situated on adjacent properties without the owner's consent.
- Verify all drawing dimensions.
- Numeric scale is for a 24x36 inch print. Do not scale.
- Contractor to report any discrepancies, errors, or omissions to the project Arborist before proceeding.

**TERRASTORY**  
environmental consulting inc.  
www.terrastoryenv.com info@terrastoryenviro.com 905.745.5398  
Specialists in Natural Heritage, Tree Protection, and Environmental Policy

ISA  
JESSICA CONSIGLIO  
ARBORIST  
ICRN-1949A

**Location:**  
220 McNeilly Road & 1035 Highway 8,  
City of Hamilton

**Project No.:** 21052  
**Date:** 2022-05-04  
**By:** TK **Checked:** JC  
**Orthophotograph Date:** n/a

**Figure 1:**  
**Tree Protection & Management Plan**

**Tree Protection Zone**

All trees situated on City property are protected under provisions of City by-laws. In order to protect trees within or near a construction site you must consider the following:

Use the chart below to determine the Tree Protection Zone.

Delimitate or fence off the Tree Protection Zone by means appropriate to the project, e.g. caution tape for short duration, snow fencing or plywood hoarding for longer.

Avoid excavating within or near the Tree Protection Zone.

Within the Tree Protection Zone of a tree please remember:

- do not alter any alteration or disturbance to existing grade;
- do not change grade by adding fill, excavating or scraping;
- do not store construction materials, soil, waste material or dispose of liquid material;
- if no other options for storing of excavated material is available, place soil on a tarp and avoid the base of the tree as much as possible;
- avoid the movement or parking of vehicles or equipment within the Tree Protection Zone.

**Tree Protection Zone Chart**

Trunk Diameter (inches measured)	Protection Distance (inches measured)
< 10 cm	1.8 m
11 - 40 cm	2.4 m
41 - 50 cm	3.0 m
51 - 60 cm	3.6 m
61 - 70 cm	4.2 m
71 - 80 cm	4.8 m
81 - 90 cm	5.4 m
91 - 100 cm	6.0 m

Note: Most roots of a tree are located within 60 cm of the surface and can extend 2 to 3 times the diameter.

Any area beyond the curb of a road allowance can be excluded from the Tree Protection Zone.

Any area beyond a sidewalk or driveway must be included within the Tree Protection Zone.

**TEMPORARY TREE PROTECTION FENCING (POST SECTION AND ELEVATION, NTS)**

**SITE PLAN GUIDELINES**  
Hamilton  
October 2003

## **Appendix 1. Tree Inventory and Condition Assessment**

Tag No.	Common Name	Scientific Name	DBH (cm)	Crown Radius (m)	Risk Features, Decline Indicators, and Growth Constraints	Health Condition <sup>1</sup>	Structural Condition <sup>1</sup>	Ownership <sup>2</sup>	Min. TPZ (m)	Tree Preservation Recommendation <sup>3</sup>
70	Manitoba Maple	<i>Acer negundo</i>	11.5	3	broken leader, trunk wound, epicormic shoots, wounds on scaffold branches	poor	poor	Applicant	2.4	<b>Remove</b> - conflicts with envelope of townhouse block
71	Weeping Birch	<i>Betula pendula</i>	25	3	broken/dead branches (10%), trunk wound, buttress wounds	poor	poor	Applicant	2.4	<b>Remove</b> - conflicts with envelope of townhouse block
72	White Mulberry	<i>Morus alba</i>	*	5	pruning cuts, epicormic shoots, growing into hydro pole *Multi-stemmed DBH: 19.5,14.5, 13, 11, 20	poor	poor	City	2.4	Retain - beyond development limit
73	Norway Maple	<i>Acer platanoides</i>	74	6	unhealed large pruning cuts (x4), dead scaffold branches (x2)	poor	poor	Applicant	4.8	<b>Remove</b> - conflicts with grading and areas of site alteration
74	Norway Maple	<i>Acer platanoides</i>	65	6	included bark, pruning cuts, girdling roots, dead scaffold branches	fair/poor	fair/poor	Applicant	4.2	<b>Remove</b> - conflicts with grading and areas of site alteration
75	Norway Maple	<i>Acer platanoides</i>	26.5, 27	6	included bark, pruning cuts, epicormic shoots, seams on branches	fair/poor	fair/poor	Applicant	2.4	<b>Remove</b> - conflicts with driveway installation
76	White Mulberry	<i>Morus alba</i>	44.5, 34.5	6	included bark, pruning cuts, constrained by overhead phone lines	poor	poor	Applicant	3	<b>Remove</b> - conflicts with grading and areas of site alteration
77	European Ash	<i>Fraxinus excelsior</i>	39	4	included bark, dead/broken branches (5%), sloughing bark	fair/poor	fair/poor	Applicant	2.4	<b>Remove</b> - conflicts with grading and areas of site alteration
78	Norway Maple	<i>Acer platanoides</i>	45.5	5	decay in scaffold branches	fair	fair	Applicant	3	<b>Remove</b> - conflicts with grading and areas of site alteration
79	European Beech	<i>Fagus sylvatica</i>	*	5	included bark, pruning cuts, *Multi-stemmed DBH: 33, 76, 27	fair	fair	Applicant	4.8	<b>Remove</b> - conflicts with grading and areas of site alteration
80	Black Walnut	<i>Juglans nigra</i>	19.5	4	growing into adjacent tree and dwelling wall	good	good	Applicant	2.4	<b>Remove</b> - conflicts with grading and areas of site alteration
81	Black Walnut	<i>Juglans nigra</i>	11.5	2	Adjacent dwelling	good	good	Applicant	2.4	<b>Remove</b> - conflicts with grading and areas of site alteration
82	Common Apple	<i>Malus pumila</i>	11, 13	2	pruning cuts, included bark, epicormic shoots	poor	poor	Applicant	2.4	<b>Remove</b> - conflicts with grading and areas of site alteration
83	English Oak	<i>Quercus robur</i>	28.5	5	pruning cuts	good	good	Applicant	2.4	<b>Remove</b> - conflicts with grading and areas of site alteration
84	Eastern White Cedar	<i>Thuja occidentalis</i>	18	2	pruning cuts	good	good	Applicant	2.4	<b>Remove</b> - conflicts with grading and areas of site alteration
85	Eastern White Cedar	<i>Thuja occidentalis</i>	17	2	pruning cuts	good	good	Applicant	2.4	<b>Remove</b> - conflicts with grading and areas of site alteration
86	Eastern White Cedar	<i>Thuja occidentalis</i>	14.5	2	pruning cuts	good	good	Applicant	2.4	<b>Remove</b> - conflicts with grading and areas of site alteration
87	Manitoba Maple	<i>Acer negundo</i>	13	2	epicormic shoots, trunk wounds (x3), broken/dead branches (10%)	poor	poor	Applicant	2.4	<b>Remove</b> - conflicts with envelope of townhouse block
88	Manitoba Maple	<i>Acer negundo</i>	14.5, 19.5	3	epicormic shoots, broken/dead branches (10%), broken scaffold branches	poor	poor	Applicant	2.4	<b>Remove</b> - conflicts with envelope of townhouse block
89	White Mulberry	<i>Morus alba</i>	13	4	large trunk wound, included bark, buttress and root injuries	poor	poor	Applicant	2.4	<b>Remove</b> - conflicts with envelope of townhouse block

Tag No.	Common Name	Scientific Name	DBH (cm)	Crown Radius (m)	Risk Features, Decline Indicators, and Growth Constraints	Health Condition <sup>1</sup>	Structural Condition <sup>1</sup>	Ownership <sup>2</sup>	Min. TPZ (m)	Tree Preservation Recommendation <sup>3</sup>
90	Sugar Maple	<i>Acer saccharum</i>	14	2	epicormic shoots, buttress wound, trunk wound, broken branches	poor	poor	Applicant	2.4	<b>Remove</b> - conflicts with driveway installation
91	Weeping Birch	<i>Betula pendula</i>	15	1	extensive damage to trunk, buttress and branches	poor	poor	Applicant	2.4	<b>Remove</b> - conflicts with driveway installation
00A	Cherry species	<i>Prunus</i> sp.	20-30	2	broken scaffold limbs	fair	fair	228 McNeilly Road	2.4	Retain - beyond development limit
00B	Manitoba Maple	<i>Acer negundo</i>	10-15	2	epicormic shoots, included bark	fair	fair	Applicant	2.4	<b>Remove</b> - conflicts with grading and areas of site alteration
00C	Black Walnut	<i>Juglans nigra</i>	20-30	5	pruning cuts, broken/dead branches (5%)	good	good	Applicant	2.4	<b>Remove</b> - conflicts with grading and areas of site alteration
00D	Cherry species	<i>Prunus</i> sp.	*	5	pruning cuts *Multi-stemmed DBH: 10-20, 10-20, 10-20, 10-20.	fair	fair	Applicant	2.4	<b>Remove</b> - conflicts with grading and areas of site alteration
00E	Cherry species	<i>Prunus</i> sp.	20-30	5	pruning cuts	fair	fair	228 McNeilly Road	2.4	<b>Remove</b> - significant root injury/loss due to retaining wall installation within the minimum TPZ
00F	Cherry species	<i>Prunus</i> sp.	10-20, 10-20	3	pruning cuts, epicormic shoots	fair	fair	Shared with 1059 Highway 8	2.4	<b>Remove</b> - significant root injury/loss due to retaining wall installation within the minimum TPZ
00G	Cherry species	<i>Prunus</i> sp.	41-50	6	pruning cuts, crack in trunk, epicormic shoots	fair	fair	1059 Highway 8	3	<b>Remove</b> - significant root injury/loss due to retaining wall installation within the minimum TPZ
00H	Silver Maple	<i>Acer saccharinum</i>	*	6	included bark, wounds on trunk, broken branch *Multi-stemmed DBH: 10-20, 10-20, 10-20, 10-20, 10-20	fair	fair	1059 Highway 8	2.4	<b>Remove</b> - significant root injury/loss due to retaining wall installation within the minimum TPZ
00I	Silver Maple	<i>Acer saccharinum</i>	40-50, 40-50	6	included bark, broken/dead branches (5%)	fair	fair	Shared with 1059 Highway 8	3	<b>Remove</b> - significant root injury/loss due to retaining wall installation within the minimum TPZ
00J	Manitoba Maple	<i>Acer negundo</i>	5-10	2		good	good	City (presumed)	1.8	<b>Remove</b> - significant root injury/loss due to silt fence installation within the minimum TPZ
00K	Siberian Elm	<i>Ulmus pumila</i>	12.5	2	epicormic shoots, wounds on buttress and trunk, broken/dead branches (10%)	poor	poor	City	2.4	Retain - beyond development limit
00L	Norway Maple	<i>Acer platanoides</i>	10-20	2	could not assess trunk/buttress due to fence	good	good	224 McNeilly Road	2.4	<b>Remove</b> - significant root injury/loss due to silt fence installation within the minimum TPZ
00M	Weeping Birch	<i>Betula pendula</i>	10-20	3	could not assess trunk/buttress due to fence	good	good	224 McNeilly Road	2.4	<b>Remove</b> - significant root injury/loss due to silt fence installation within the minimum TPZ
00N	Silver Fir	<i>Abies concolor</i>	10-20	2	could not assess trunk/buttress due to fence	good	good	224 McNeilly Road	2.4	Retain - beyond development limit
00O	Manitoba Maple	<i>Acer negundo</i>	30-40	4		poor	poor	224 and/or 228 McNeilly Road	2.4	<b>Remove</b> - significant root injury/loss due to retaining wall installation within the minimum TPZ

Tag No.	Common Name	Scientific Name	DBH (cm)	Crown Radius (m)	Risk Features, Decline Indicators, and Growth Constraints	Health Condition <sup>1</sup>	Structural Condition <sup>1</sup>	Ownership <sup>2</sup>	Min. TPZ (m)	Tree Preservation Recommendation <sup>3</sup>
00P	Siberian Elm	<i>Ulmus pumila</i>	*	1	regenerating as a multi-stemmed plant *Multi-stemmed DBH: 5 cm x 10	poor	poor	City	1.8	Retain - beyond development limit
00Q	Siberian Elm	<i>Ulmus pumila</i>	*	1	regenerating as a multi-stemmed plant *Multi-stemmed DBH: 5, 5, 5, 5.	poor	poor	City	1.8	Retain - beyond development limit
00R	Siberian Elm	<i>Ulmus pumila</i>	4	1	regenerating from cut trunk	poor	poor	City	1.8	Retain - beyond development limit
00S	Siberian Elm	<i>Ulmus pumila</i>	*	1	regenerating as a multi-stemmed plant *Multi-stemmed DBH: 2, 2, 2, 2, 2.	poor	poor	City	1.8	Retain - beyond development limit
00T	Siberian Elm	<i>Ulmus pumila</i>	2, 2	1	regenerating as a multi-stemmed plant from cut stem	poor	poor	City	1.8	Retain - beyond development limit
00U	Siberian Elm	<i>Ulmus pumila</i>	4, 4	1	regenerating as a multi-stemmed plant from cut stem	poor	poor	City	1.8	Retain - beyond development limit
00V	Siberian Elm	<i>Ulmus pumila</i>	*	1	regenerating as a multi-stemmed plant *Multi-stemmed DBH: 2 cm x 9	poor	poor	City	1.8	Retain - beyond development limit
00W	Siberian Elm	<i>Ulmus pumila</i>	*	1	regenerating as a multi-stemmed plant *Multi-stemmed DBH: 3, 3, 3, 3, 3, 3.	poor	poor	City	1.8	Retain - beyond development limit
00X	Siberian Elm	<i>Ulmus pumila</i>	3, 3	1	regenerating as a multi-stemmed plant from cut stem	poor	poor	City	1.8	Retain - beyond development limit
00Y	Siberian Elm	<i>Ulmus pumila</i>	*	1	regenerating as a multi-stemmed plant *Multi-stemmed DBH: < 1cm x 6	poor	poor	City	1.8	Retain - beyond development limit
00Z	Siberian Elm	<i>Ulmus pumila</i>	*	1	regenerating as a multi-stemmed plant *Multi-stemmed DBH: < 1 cm x 8	poor	poor	City	1.8	Retain - beyond development limit
0AA	Siberian Elm	<i>Ulmus pumila</i>	*	1	regenerating as a multi-stemmed plant *Multi-stemmed DBH: < 1 cm x 5)	poor	poor	City (presumed)	1.8	<b>Remove</b> - significant root injury/loss due to silt fence installation within the minimum TPZ
0AB	Siberian Elm	<i>Ulmus pumila</i>	*	1	regenerating as a multi-stemmed plant *Multi-stemmed DBH: < 1 cm x 10	poor	poor	City (presumed)	1.8	<b>Remove</b> - significant root injury/loss due to silt fence installation within the minimum TPZ
0AC	Cherry species	<i>Prunus</i> sp.	5	2	girdled (chewed) at base, broken scaffold branches	poor	poor	City (presumed)	1.8	<b>Remove</b> - significant root injury/loss due to silt fence installation within the minimum TPZ

<sup>1</sup> - Notwithstanding the determinations of tree health and structural integrity made herein (e.g., good, fair, poor), it must be recognized that all trees (in good health or otherwise) have the potential for failure given adverse weather, damage due to mechanical injury, or other factors that cause stress.

<sup>2</sup> - All determinations of tree ownership are approximate and have been made in the absence of on-site property boundary markers or other direction from a licensed surveyor.

<sup>3</sup> - Notwithstanding any recommendations concerning tree preservation or removal made herein, this report does not supersede or expunge any civil or common law property rights as they pertain to shared/boundary trees or trees occurring on adjacent properties. It is expected that the Applicant will seek approval to injure/remove any and all shared/boundary or neighbouring trees from relevant owners.

## **Appendix 2. Representative Photographs**



**Photo 1.** (14 March 2022).



**Photo 2.** (14 March 2022).



**Photo 3.** (14 March 2022).



**Photo 4.** (14 March 2022).

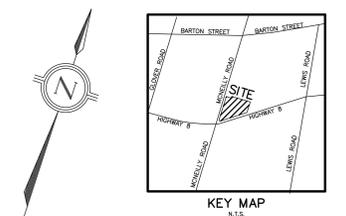


**Photo 5.** (14 March 2022).



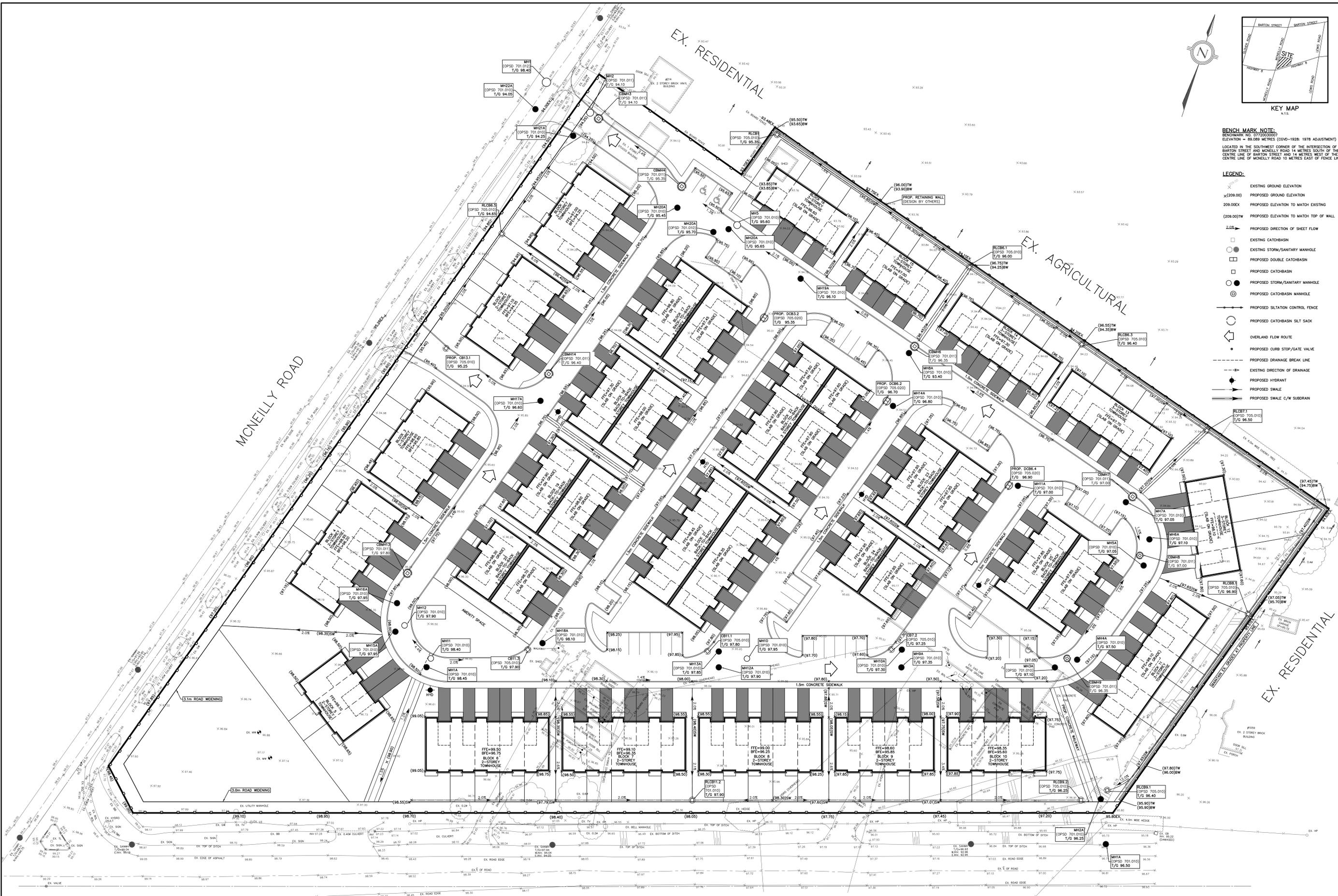
**Photo 6.** (14 March 2022).

## **Appendix 3. Grading/ Servicing Plans**



**BENCH MARK NOTE:**  
BENCHMARK NO. 0720030007  
ELEVATION = 89.089 METRES (CGVD-1928: 1978 ADJUSTMENT)  
LOCATED IN THE SOUTHWEST CORNER OF THE INTERSECTION OF BARTON STREET AND MCNEILLY ROAD 14 METRES SOUTH OF THE CENTRE LINE OF BARTON STREET AND 14 METRES WEST OF THE CENTRE LINE OF MCNEILLY ROAD TO METRES EAST OF FENCE LINE

- LEGEND:**
- EXISTING GROUND ELEVATION
  - x(209.00) PROPOSED GROUND ELEVATION
  - 209.00EX PROPOSED ELEVATION TO MATCH EXISTING
  - (209.00)TW PROPOSED ELEVATION TO MATCH TOP OF WALL
  - 2.0% PROPOSED DIRECTION OF SHEET FLOW
  - EXISTING CATCHBASIN
  - EXISTING STORM/SANITARY MANHOLE
  - PROPOSED DOUBLE CATCHBASIN
  - PROPOSED CATCHBASIN
  - PROPOSED STORM/SANITARY MANHOLE
  - ⊙ PROPOSED CATCHBASIN MANHOLE
  - PROPOSED SILTATION CONTROL FENCE
  - PROPOSED CATCHBASIN SILT SACK
  - ⤴ OVERLAND FLOW ROUTE
  - PROPOSED CURB STOP/GATE VALVE
  - - - PROPOSED DRAINAGE BREAK LINE
  - EXISTING DIRECTION OF DRAINAGE
  - PROPOSED HYDRANT
  - PROPOSED SWALE
  - PROPOSED SWALE C/W SUBDRAIN



HIGHWAY NO. 8

**NOTES TO CONTRACTOR:**

- CONTRACTOR AND SUBCONTRACTORS SHALL NOT SCALE FROM THIS DRAWING.
- ANY INCONSISTENCIES AND DISCREPANCIES FOUND ON THE DRAWINGS MUST BE REPORTED TO THE ENGINEER FOR CLARIFICATION BEFORE COMMENCING THE WORK.
- FIELD SURVEY DATA MUST BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL BEFORE COMMENCING THE WORK.
- ELEVATIONS AND REPORT ALL FINDINGS TO THE ENGINEER. ONCE CONSTRUCTION HAS COMMENCED, THE CONTRACTOR ACCEPTS RESPONSIBILITY FOR THE ACCURACY OF THE DATA AND THE POSITIONING OF POLE LINES, CONDUITS, WATERWAYS, SEWERS AND OTHER UNDERGROUND AND ABOVE-GROUND UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE DRAWINGS. WHERE SHOWN ON THE DRAWING, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.
- ALL DIMENSIONS SHOWN ARE THE PROPERTY OF THE ENGINEER AND SHALL NOT BE REPRODUCED, COPIED, OR REVERSED WITHOUT THE WRITTEN CONSENT OF S. LEWELLYN & ASSOCIATES LIMITED.

REVISIONS				
NO.	DATE	BY	REVISIONS	DATE
DESIGN	BH	CHK'D	SN	DATE
DRAWN	BH	CHK'D	SN	Apr.05/22

**APPROVALS**

STAMP	
-------	--

S. LEWELLYN & ASSOCIATES LIMITED  
CONSULTING ENGINEERS  
3228 South Service Road, Suite #105 East Wap. Burlington, ON, L7N 3H8  
Tel: (905) 631-6970  
Website: www.slaw.com  
Email: info@slaw.com

**CLIENT:** DEMARCHE HOMES INC.  
278 BARTON STREET,  
STONEY CREEK, ON L2K 6K6

**PROJECT NAME:** MCNEILLY & HIGHWAY 8  
220 MCNEILLY ROAD & 1035 HIGHWAY 8,  
HAMILTON, ON

**TITLE:** PRELIMINARY GRADING AND EROSION CONTROL PLAN

**PROJECT No.:** 17055 **DRAWING No.:** C101

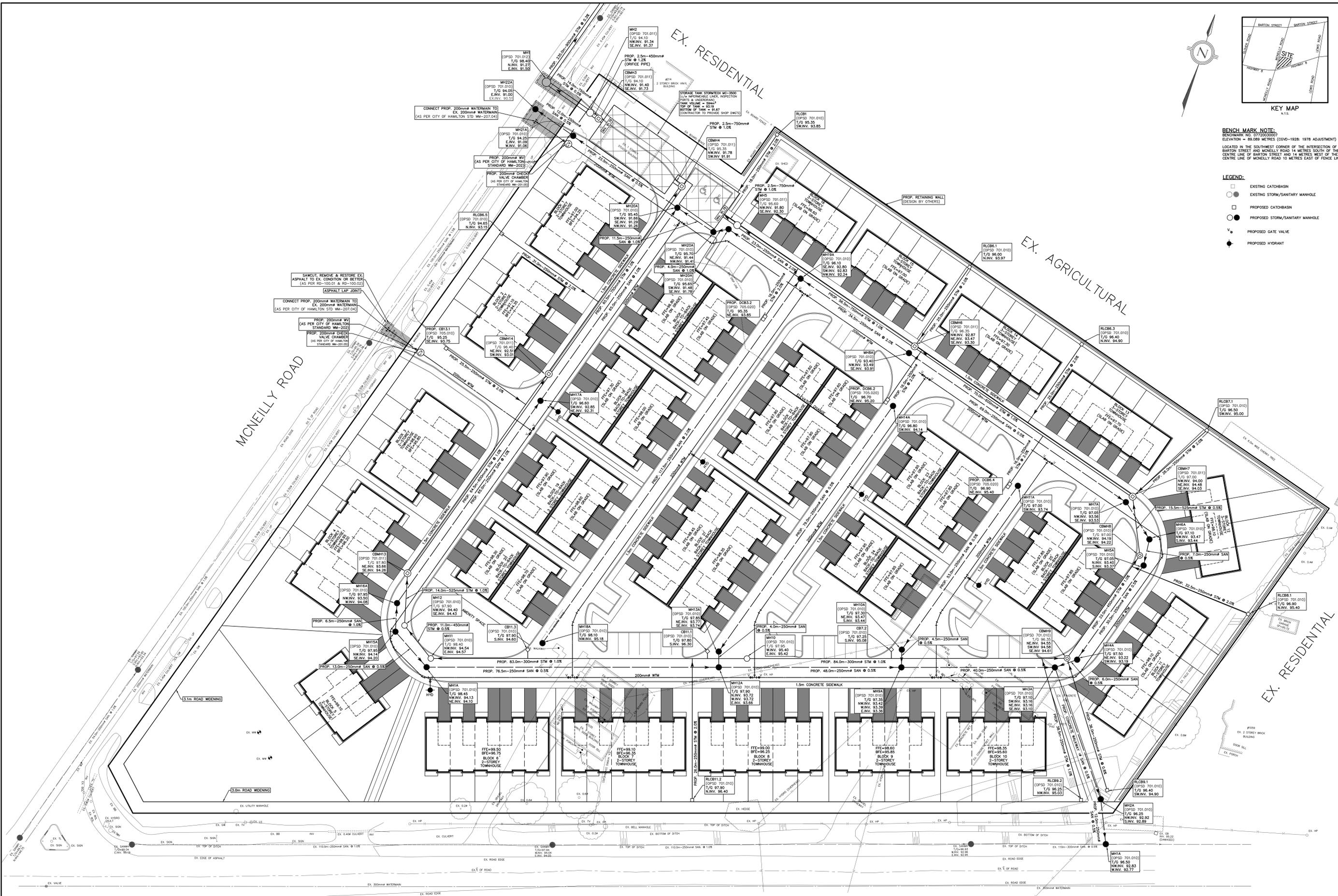
**SCALE:** 1:300



KEY MAP  
N.T.S.

**BENCH MARK NOTE:**  
BENCHMARK NO. 0720030097  
ELEVATION = 89.089 METRES (CGVD-1928: 1978 ADJUSTMENT)  
LOCATED IN THE SOUTHWEST CORNER OF THE INTERSECTION OF  
BARTON STREET AND MCNEILLY ROAD 14 METRES SOUTH OF THE  
CENTRE LINE OF BARTON STREET AND 14 METRES WEST OF THE  
CENTRE LINE OF MCNEILLY ROAD TO METRES EAST OF FENCE LINE

- LEGEND:**
- EXISTING CATCHBASIN
  - EXISTING STORM/SANITARY MANHOLE
  - PROPOSED CATCHBASIN
  - PROPOSED STORM/SANITARY MANHOLE
  - ⊕ PROPOSED GATE VALVE
  - ⊕ PROPOSED HYDRANT



HIGHWAY NO. 8

**NOTES TO CONTRACTOR:**

- CONTRACTOR AND SUBCONTRACTORS SHALL NOT SCALE FROM THIS DRAWING.
- ANY INCONSISTENCIES AND OMISSIONS FOUND ON THE DRAWINGS MUST BE REPORTED TO THE ENGINEER FOR CLARIFICATION BEFORE COMMENCING THE WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES AND AUTHORITIES.
- THE POSITIONS OF POLE LINES, CONDUITS, WATERMANS, SEWERS AND OTHER UNDERGROUND AND OVERHEAD UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE DRAWINGS. WHERE SHOWN ON THE DRAWING, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.
- ALL DRAWINGS SHOW THE PROPERTY OF THE ENGINEER AND SHALL NOT BE REPRODUCED, COPIED, OR REUSED WITHOUT THE WRITTEN CONSENT OF S. LLEWELLYN & ASSOCIATES LIMITED.

REVISIONS				
NO.	DATE	BY	REVISIONS	DATE
1	Apr. 05/22	SJD	CHK'D	SL
2		SJD	CHK'D	SL

**APPROVALS**

\_\_\_\_\_  
DATE: \_\_\_\_\_

\_\_\_\_\_  
DATE: \_\_\_\_\_

**CLIENT:** DEMARCHI HOMES INC.  
278 BARTON STREET,  
STONEY CREEK, ON L8E 2K6

**PROJECT NAME:** MCNEILLY & HIGHWAY 8  
220 MCNEILLY ROAD & 1035 HIGHWAY 8,  
HAMILTON, ON

**TITLE:** PRELIMINARY SITE SERVICING PLAN

**PROJECT No.:** 17055

**DRAWING No.:** C102

**SCALE:** 1:300

**DATE:** Apr. 05/22

**DESIGNER:** SJD

**CHECKER:** CHK'D

**DRAWN:** SJD

**DATE:** Apr. 05/22