



A GUIDE TO **PRIVATE TREE PROTECTION**



Table of Contents

Introduction	1
Why Protect Trees?	2
Federal, Provincial and Regional tree rules that property owners need to be aware of.....	3
Newmarket's Tree Protection Bylaws and Policies.....	3
Newmarket's Private Tree Protection Bylaw.....	4
Private Tree(s).....	5
Dead or dying tree(s).....	6
Hazardous Tree(s).....	6
Emergency Tree(s).....	6
What is required to remove the tree?.....	7
How to apply for a permit.....	7
How to measure the tree's diameter breast height (DBH).....	8
<i>Construction Projects and Creating a Tree Protection Zone (TPZ)</i>	<i>10</i>
Construction projects that may injure tree(s).....	10
Creating a Tree Protection Zone for your Construction Project.....	10
Don't forget to include the Root Zone as part of the Tree Protection Zone.....	10
How do I Identify the Tree Protection Zone (TPZ)?.....	12
Tree Protection Zone (TPZ) Fencing.....	12
<i>Appendices</i>	<i>20</i>
Appendix A: Sample Tree Protection Plan.....	20
Appendix B: Sample of a Tree Replanting Plan to be included with an Arborist Report.....	21

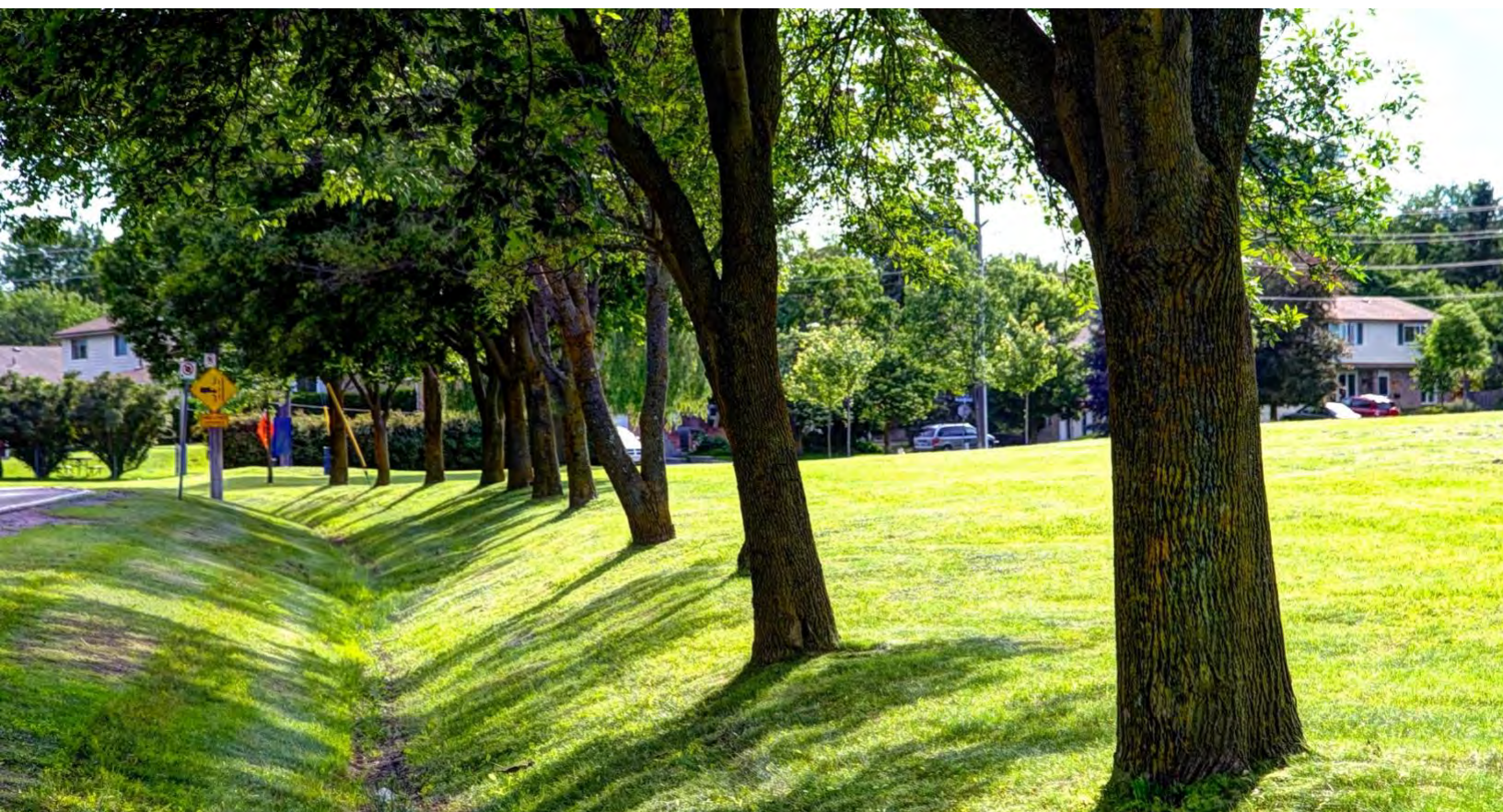
Introduction

Welcome to the Town of Newmarket's Private Tree Protection Guide. This guide is intended to assist property owners with gaining a better understanding of the Private Tree Protection Bylaw and when property owners need to apply for a permit to remove a tree on your property.

This guideline is meant to be a tool to present best practices and processes but does not replace the requirements outlined in the Private Tree Protection Bylaw. It is always recommended to have an ISA or MTCU certified Arborist to help with an assessment of your tree and to walk you through Newmarket's private tree permitting process.

For more information visit newmarket.ca/privatetreeremoval, call 905-895-5193 or email info@newmarket.ca

Note: This guide was created using the City of Burlington's Tree Guide as reference.



Why Protect Trees?

Trees are living breathing organisms that provide essential and quantifiable services to the residents of Newmarket. Trees in Newmarket help:

- Avoid more than 200,000 cubic meters of water runoff each year.
- Save energy in your home by offering shade in the summer and allowing light through in the winter.
- Remove 40 tonnes of air pollution per year and store 35,345 tonnes of carbon

The protection of trees also in line with Newmarket's commitment to protecting the environment and contributes to the goal of achieving a 35% tree canopy cover by 2051. See the diagram below for more benefits.



1. Provide wildlife habitat
2. Reduced erosion by intercepting rainfall
3. Purifies the air by sequestering carbon from the atmosphere
4. Increases the aesthetic of a community
5. Removes pollutants from the air
6. May increase property value
7. Shade from trees provides cooling of heat islands
8. Reduces energy costs through cooling in the summer and lowering the wind chill effect in the winter
9. Shade protects asphalt therefore prolonging its useful life.
10. Helps to improve mental health and wellness

Tree Protection Rules

Newmarket's urban forest is made up of both public and private trees on boulevards, residential properties, parks, farmlands, woodlots, and open spaces.

When considering the removal of a tree, you need to consider Federal and Provincial regulations that address its heritage value, preservation of endangered species as well as impacts on other species such as nesting birds.

The Town has developed various bylaws and policies to protect its trees. It is Newmarket's intention to take a full spectrum approach to tree protection with regulations, policies, and Bylaws to limit the removal of trees and promote the planting of new trees.

Federal, Provincial and Regional tree rules that property owners need to be aware of

- [Federal Migratory Birds Convention Act](#): To protect nests during the breeding season typically April 1st to August 15th.
- [Provincial Forestry Act](#): Discusses boundary (shared) trees along property lines.
- Ontario Heritage Act: Discusses designated specific trees or designated heritage properties and landscapes that are protected.
- [Provincial Endangered Species Act](#): which protects trees and tree habitat of species listed as Endangered or Threatened in Ontario; and
- [York Region Forest Conservation Bylaw](#): which applies to the destruction or injury of trees on private lands in woodlands of at least 1.0 hectares;

Newmarket's Tree Protection Bylaws and Policies

- [Public Tree Protection Bylaw](#)
 - Trees that are on land owned by the Town, including trees in boulevard between the curb and a private property line, are protected by the Public Tree Protection Bylaw.
- [Private Tree Protection Bylaw](#)
 - Trees on private property are protected by this Bylaw. Property owners are required to obtain a permit for removing trees on their property. See more below.
- [Woodlot Tree Bylaw](#)
 - Trees that are located in certain dense wooded areas in Newmarket are regulated by the [Woodlot Bylaw](#). The purpose of the Woodlot Bylaw is to protect small urban woodlots (between 0.2 hectares and 1.0 hectare in

area) on privately owned lands. Wooded areas greater than 1.0 hectares are regulated through the York region Forest Conservation Bylaw.

- **Tree Preservation, Protection, Replacement and Enhancement Policy**
 - Trees that are located in certain large wooded tracts may be regulated by the [York Region Forest Conservation Bylaw](#). The [Tree Policy](#) establishes the Town of Newmarket's policy for the preservation, protection, replacement and enhancement of significant trees on lands subject to a Planning Act Application

Newmarket's Private Tree Protection Bylaw

Mature trees are valuable assets to Newmarket and need to be protected. The Town would like to work with the property owner(s) to explore alternatives before removing a mature tree.

In 2021, a [Private Tree Protection Bylaw](#) was established in Newmarket to provide extra protection to private trees and work alongside the Town's other Tree Protection Bylaws and Policies. The Bylaw allows the Town to assess the need to remove a mature tree on private property and to mitigate the loss of canopy through tree replacement.

The Private Tree Protection Bylaw applies to trees with a diameter at breast height (DBH) of 20cm or greater on private property.

This Bylaw allows for the Town to issue a **Tree Removal Permit before a property owner can remove a tree for specific reasons, but not part of a development project.**

Tree removals that are part of a development project, such as a minor planning variance, will be reviewed as part of [Tree Preservation, Protection, Replacement and Enhancement Policy](#).

As noted in above, the Private Tree Bylaw does not apply to trees in woodlands of at least 0.2 ha in size (which are covered either by the Woodlot Tree Bylaw or the York Region Forest Conservation Bylaw).

Private Tree Removal & Requirements

In this section, you will find information on the process and requirements to remove tree(s) on private property, including when you need a permit and when you do not.

Private Tree(s)

A private tree is a tree that is equal to or greater than 20 centimetres (1.4 m) in diameter at breast height (DBH) or grade on private property. A private tree can also be designated heritage tree or a tree that is listed as an Endangered or Threatened tree species in Ontario. These trees require a permit from the Town of Newmarket to remove the tree.

If the private tree you are looking to remove or injure is done as part of a construction project, please review the construction project section below.

If a project on your property is expected to **injure** or remove a **private tree** on your neighbour's property, you must apply for a permit and have their signed consent to do so. This applies to either (a) that tree is shared with your neighbour and grows across the property line (i.e., a **boundary tree**) or (b) if it is not a shared tree but your project work will occur within the **Tree Protection Zone** (see figure 3a and 3b) of your neighbour's **regulated tree** and might **injure** their tree.

What is required to remove the tree?

- A completed Private Tree Removal Application Form
- Arborist Report
- A copy of plans or drawings of the property that show the location of the tree(s) to be removed and those being preserved. **See Appendix A on page 21 for more information.**
 - Tree replacement requirements apply. Please include the location of the tree(s) you plan to replant within your ariel sketch.
 - If you are opting to pay cash in lieu of re-planting a tree, a tree replacement plan is not required.
- Two photos of the tree showing the overall shape of the tree and landscape references for property identification.
- Applicable Fees
- Replanting Fees (if applicable)

Notes:

- If the application form is signed by an applicant or agent that is NOT the property owner, written authorization from the owner is required.
- If the tree being removed is located on the boundary of your property and your neighbour's property, a consent letter (also called a Declaration of Adjacent Property Owner) from your neighbour is required.

Dead or dying tree(s)

A dead or dying tree has no living tissue or is a tree where seventy (70) per cent or more of its crown is dead or a tree infected by a lethal pathogen. A permit is required to remove a dead or dying tree. No fees or replacement tree requirements

What is required to remove the tree?

- A completed Private Tree Removal Application Form
- A site plan of where the tree is located on the property
- Two photographs of each tree being removed with a clear reference of the property such as a building/structure to show where the tree is located. This will assist in the Town's assessment when conducting a site visit by Newmarket staff.

Hazardous Tree(s)

A hazardous tree is a tree that has become structurally weakened to the point where, there is a high risk for the tree to break or fall (either the entire tree or parts of the tree) but the tree will not likely break or fall immediately. Hazardous trees can be tricky to assess because they are structurally compromised to the point where they are likely to fail but not immediately. As a result, this assessment must be confirmed by an ISA or MTCU certified Arborist with a specialized Tree Risk Assessment Qualification (also known as TRAQ) using a Basic Risk Assessment form.

A permit is required to remove a hazardous tree. No fees or replacement tree requirements apply.

What is required to remove the tree?

- A completed Private Tree Removal Application Form
- A Basic Risk Assessment Form completed by an ISA or MTCU certified Arborist with specialized Tree Risk Assessment Qualification (TRAQ)

Note:

If a property owner wishes to remove one or more trees considered **hazardous**, then an Arborist Report or letter confirming the tree(s) condition is needed. The confirmation must be completed by an ISA or MTCU certified Arborist.

Emergency Tree(s)

Emergency trees are those that have become structurally weakened to the point where, there is a high risk for the tree to break or fall immediately. This situation often happens because of inclement weather, high winds or thunderstorms **that normally occur 48 hours before the tree has been structurally weakened.**

Critical damage to a tree includes but is not limited to, a broken top (stem), severe (unnatural) swaying of the tree, roots or root place is showing or lifting, damage over targets (walkway or property). Emergency trees will require emergency tree work.

What is required to remove the tree?

- Applicant to notify the Town of Newmarket via email at info@newmarket.ca. The review is treated as an urgent matter for quick email confirmation.
 - In the email, please include:
 - Address
 - Your Contact information
 - Location of tree(s)
 - Photos clearly showing the damage
 - No permits, fees or replacement tree requirements if approved by the Town of Newmarket

How to apply for a permit

Once you have determined what type of tree you are looking to remove, please follow the steps below:

1. Review the questionnaire located at the top of the Private Tree Removal Application form to ensure you require a permit.
2. Complete the [Private Property Tree Removal Tree Application Form](#)
3. Include the necessary accompanying documents required for the application. See the above section for what documents are required for your application.
4. All completed documents can be emailed to info@newmarket.ca. Your application will be reviewed within the appropriate timeframe for your application.



How to measure the tree's diameter breast height (DBH)

Follow the figures below for tips on how to measure tree **diameter at breast height**.

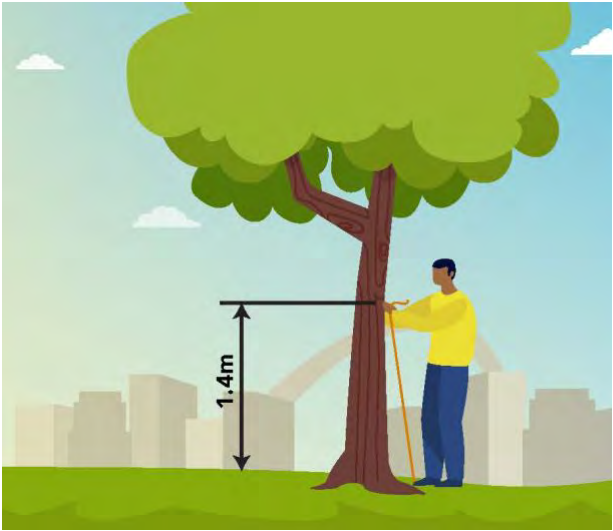


Figure 2a: How to locate breast height:

Measure 1.4m from the base of the tree trunk up.

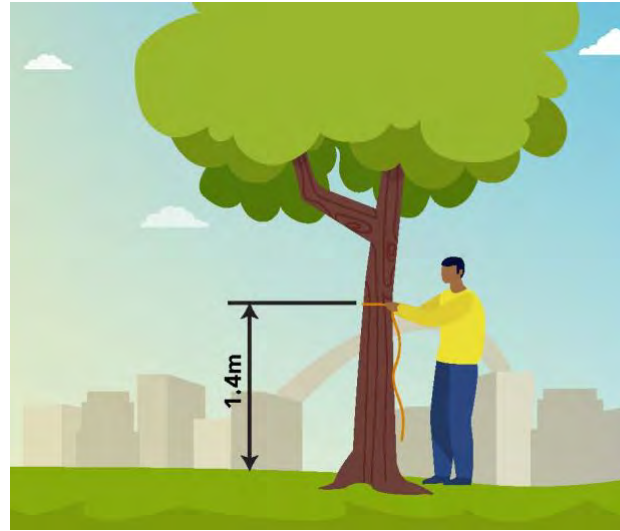


Figure 2b: How to measure the trunk diameter:

Measure the tree trunk's circumference (all the way around the tree) at breast height (1.4m). Use a string, tailors' tape, or rope. Once you have the tree's circumference, divide that number by 3.14 to get the diameter.

For example, If the circumference is 69cm, divide that by 3.14 to get 22 cm as the diameter at breast height (DBH)

Other ways to measure Diameter at Breast Height (DBH)

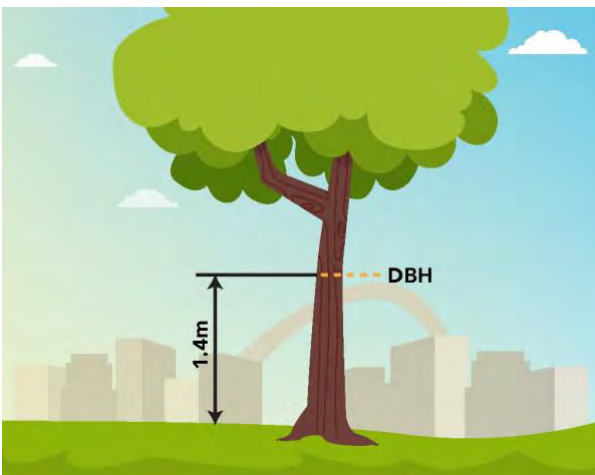


Figure 2c: Where to measure DBH when the tree grows straight.

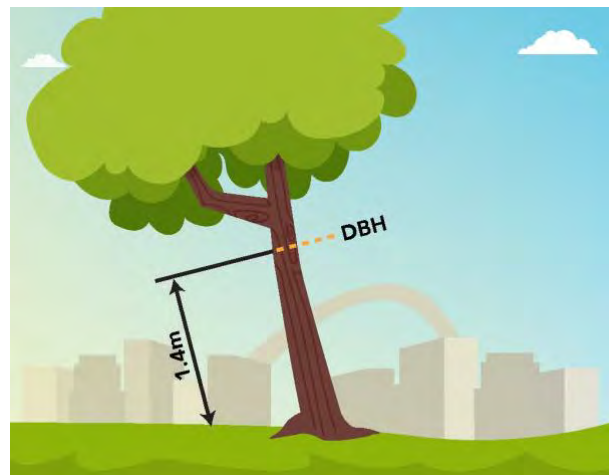


Figure 3c: Where to measure DBH when the tree is leaning.

Other ways to measure Diameter at Breast Height (DBH)

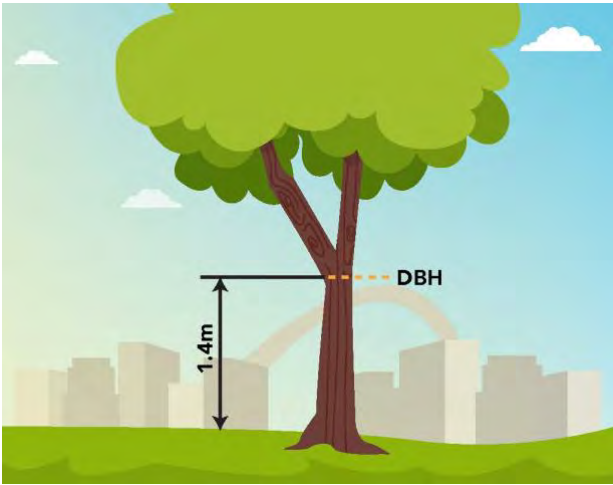


Figure 2e: Where to measure DBH when the tree forks at 1.4m.

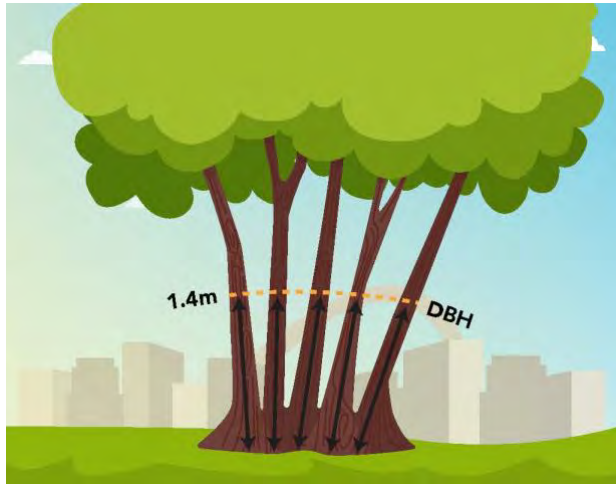


Figure 2f: Where to measure DBH when the tree has multiple stems.

Use formula: $\sqrt{(A^2 + B^2 + C^2 + D^2 + E^2)} = \text{DBH}$

Example:

If A=15, B=28, C=19, D=22, E=26
DBH = 50cm



Construction Projects and Creating a Tree Protection Zone (TPZ)

Construction projects that may injure tree(s)

When working on a construction project, is it important to **provide regulated trees protection within a Tree Protection Zone (TPZ)** so that you do not injure the tree.

Injury to a tree tends to occur when any construction activities happen close to the tree or over its roots without any protective measures in place. Typical construction activities that can **injure** trees, directly or indirectly, include:

- The movement and operation of small and large machinery.
- Trenching soil and subsoil excavation.
- Storage of fill, soil, building materials, equipment, and construction waste.
- Demolition, grading and building.

Tree **injury** can generally be avoided with above and below-ground protection as described on Figure 3a, 3b and Figure 4, and use of **good arboricultural practices** when pruning branches and roots. For more information please review the [Tree Preservation, Protection, Replacement and Enhancement Policy](#).

Before starting a construction project, consider:

- Can I do this project differently to protect the regulated trees?
- If a tree must be injured, or removed, how can I protect the remaining trees and replace the lost tree?

Creating a Tree Protection Zone for your Construction Project

The main way to protect a **regulated tree** from **injury** during construction is to make sure that:

1. A proper **Tree Protection Zone (TPZ)** is identified, and;
2. Tree protection fencing (also called vertical hoarding) is securely installed to protect this zone (see Figures 3a and 3b for more information).

The **TPZ** is a zone created around a tree to protect the tree trunk, branches, soil and roots from machines and equipment, and other construction-related disturbances. Where work is proposed inside this zone, a tree permit may be required.

Don't forget to include the Root Zone as part of the Tree Protection Zone

Roots and soil are critical to a tree's health and survival and can easily be **injured** during construction. When creating a **TPZ**, don't forget to take into consideration where the tree's roots lie. Soil compaction is the most common cause of below-ground **injury** to trees. Healthy soils have a structure with air pockets that gives space to the many organisms that keep the soil healthy.

Larger roots give trees structural support to help them survive windstorms, while fine roots absorb water and nutrients to sustain them. When weight is placed on the ground, it causes compaction, which squeezes the air spaces out of the soil. Once the soil is

compacted, it is hard for fine roots to get what the tree needs from the soil to remain healthy such as air and water (see Figure 4).

The **TPZ** may not protect all a tree's roots but is meant to protect the bulk of them. While extensive damage to a tree's rooting area may not result in an immediate response, it can contribute to serious decline over several years. It is also hard to undo the impact from compaction and it is much better to take measures to avoid or limit it in the first place.

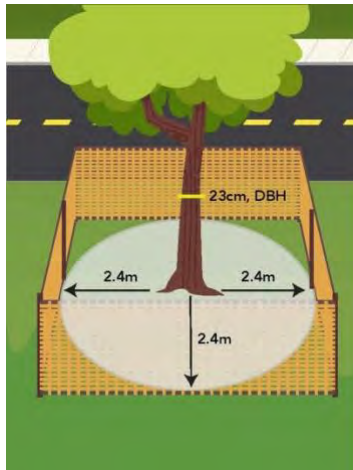


Figure 3a: Sample of a TPZ. Tree protection and fencing surrounds the entire TPZ area.

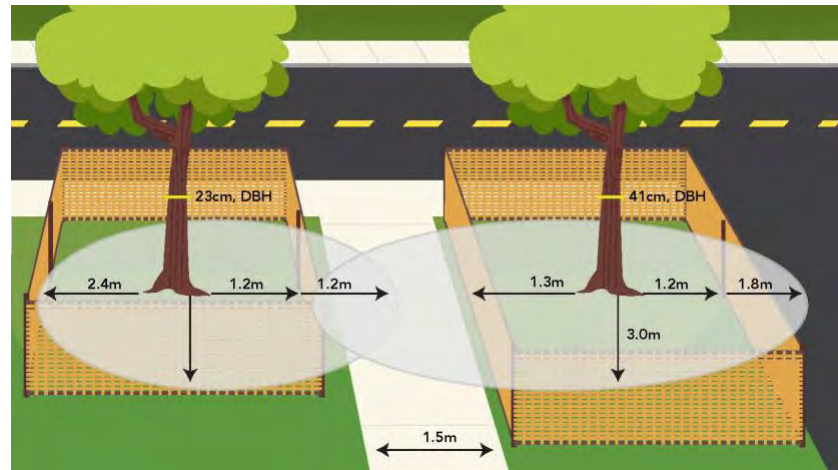


Figure 3b: Sample of a TPZ in a built-up landscape. Tree protection fencing extends up to existing pavement.

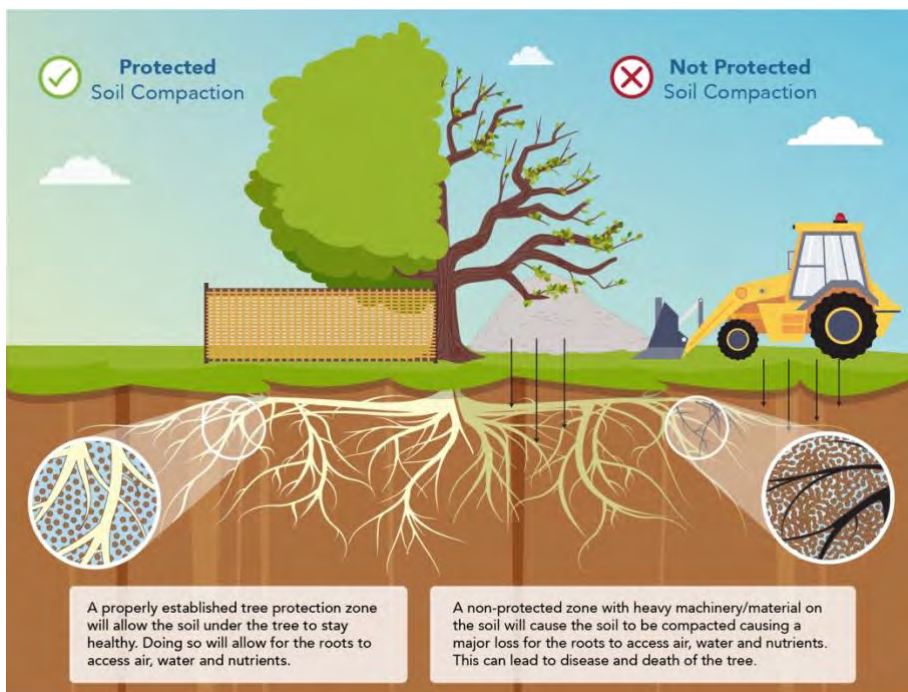


Figure 4: This diagram shows how the soil can cause injury to the tree. The leaves missing from the tree represent root loss due to lack of water and nutrients, the weight of the pile of materials and the weight of the tracker can all damage the tree's roots.

How do I Identify the Tree Protection Zone (TPZ)?

The **TPZ** is measured from outside the base of the tree trunk. The distance measured from the trunk varies depending on the tree’s diameter, as shown in Table 1 below. Generally, the zone required expands with the **DBH** of the tree, and ranges from 1.8 m from the trunk of a smaller tree to 6.0 m or larger for trees with a **DBH** of 100 cm or greater.

See table below for examples of how to calculate the minimum Tree Protection Zone.

Tree Trunk Diameter (DBH)	Minimum Tree Protection Zone (TPZ)
Less than 10 cm	1.8 m
11 to 40 cm	2.4 m
41 to 50 cm	3.0 m
51 to 60 cm	3.6 m
61 to 70 cm	4.2 m
71 to 80 cm	4.8 m
81 to 90 cm	5.4 m
91 to 100 cm	6.0 m
Greater than 100 cm	60 m + 10 cm per 1cm DBH

Tree Protection Zone (TPZ) Fencing

To prevent injury to a tree during construction, **TPZ** should have installed fencing (vertical hording) - for example, snow fencing fastened securely to stakes can make an effective tree protection fence. Doing so can decrease the risk of heaving machinery moving too close to the tree, or having fill or building supplies piled up against a tree trunk that can harm the tree and the roots.

Tree protection fencing can be outside of the identified **TPZ** on all sides of the tree (see Figure 3a). However, in practice, it does not make sense to include paved areas such as existing sidewalks, driveways, patios and/or decks. In these cases, the **TPZ** should exclude these areas (see Figure 3b).

The boundaries of the **TPZ** should be a “no go” zone for all construction activities. It is a reminder to those working on site to keep all equipment and supplies away from the tree and its main rooting area. Tree protection fencing must stay up throughout your project.

Ground protection (horizontal hoarding) is recommended. This includes laying a landscape fabric over the anticipated disturbance zone covered with a thick layer of mulch and plywood or steel plates laid on top. This will allow people and machinery to

move through this zone while limiting soil compaction. Other measures (such as use of hand tools, vertical hoarding closer to the tree trunk and air-spading with proper root pruning) may also be appropriate.

Figure 5: Example of a Tree Protection Zone (TPZ) with fencing around the area and specifications of not to do. Follow the corresponding numbers below to view the explanations.



1. If pruning is required, it must be done by an ISA or MTCU certified Arborist.
2. **No** dumping of materials.
3. Do not store equipment or materials within the TPZ.
4. Do not use the TPZ to store temporary filling materials.
5. Fencing must be maintained throughout the entire construction process.
6. No dumping of machines or materials within the TPZ.

Frequently Asked Questions

1. What do I need to apply for a Private Property Tree Removal Permit?

The submission requirements for each application depends on the reason why you are looking to remove the tree, and the nature of the proposed project. A complete application may include one or more of the following forms:

- A completed [Private Property Tree Removal Application](#)
- An Owner's Authorization Form (if the application is being applied for on behalf of the owner) – (template available on the application form)
- A consent letter from your neighbour (also called a Declaration of Adjacent Property Owner) if the tree sits between two property lines (template available on the application form)
- An Arborist Report with a Tree Protection Plan
- A Tree Replacement Plan unless you are opting to pay cash in lieu of replanting
- Associated Fees

This list provides generalized guidance as to when each item above is typically required, and what information it should contain. However, each application is unique, and Town may request additional information and/or request a site visit.

2. When do I need an Arborist Report?

When you are looking to remove a tree on private property and/or looking to injure a tree, an ISA or MTCU certified Arborist is required which will provide the following:

- An accurate sketch of the property clearly showing the location of all existing tree
- A table of the species, size (**DBH**) **measured at the base of the tree at 1.4m above ground** and ownership of all tree(s)
- Health and condition of the trees being removed
- Reason for removal, including a signed declaration outlining the tree is removed for construction or non-construction purposes
- Percentage of total property canopy cover being removed
- A Tree Replacement Plan
- Two clear supporting photos of the full tree for each tree being removed
- Arborist certification number

3. Do I need a permit for overhanging branches that I want to prune?

Basic tree maintenance, like pruning, can be done without a permit when using **good arboricultural practices**. If you are unsure, consult with an ISA or MTCU certified Arborist before maintaining private trees.

4. My neighbours tree hangs over my property. Is there anything I can do?

As a property owner, you have the right to prune branches that overhang onto your property if you do not compromise the overall integrity and health of the tree. For example, do not prune more than 25% in a single growing season. Prior

to pruning the tree, we recommend speaking with your neighbour to minimize neighbourly disputes where possible.

5. I need to remove a tree because I want to install a pool. What is required?

- a. A pool permit through the Building department
- b. A Private Tree Permit if the tree is greater than 20cm in DBH.

6. There too much shade in my backyard, can I remove trees to add sunlight?

If the tree is on your property, you can remove them by applying under the Standard Private tree permit application.

7. I want to install a fence between my neighbour and there is a tree in the way, what do I do next?

Have your neighbour sign a Declaration Form (available within the Private Tree Protection Application Form) stating that all parties have agreed to remove the tree and complete the Private Tree Removal Permit Application. There may be fees/replacement tree requirements as a condition of the permit.

If a project on your property might injure or remove a regulated tree that grows across the property line or is located on your neighbour's property you will need to provide a consent letter signed by them. The consent letter must contain:

An exception is made if the tree is dead/dying or hazardous, which no letter of consent is needed.

8. I have a tree that is declining in health, and I want to save it. What should I do?

Hire a certified tree professional with experience in plant health care. Have them to an assessment of the health of the tree and provide a treatment option.

9. A tree is growing close to my house, are the roots causing damage to my house's foundation?

Tree roots can add stress to the foundation of a house. However, unless there is a previous crack in the foundation, rolls will generally run along the foundation.

10. How do I determine if a tree is on my property?

There are different tools available to determine property boundaries. However, we recommend hiring a surveyor to obtain accurate property lines.

11. My neighbour's tree is dead and hazardous, who do I contact?

You can report a dead or hazardous tree to the Town of Newmarket by emailing info@newmarket.ca or calling 905-895-5193. The Town will send a Certified Arborist to assess the condition of the tree. If the Town deems the tree to be unsafe, the Town's Bylaws department will issue an order for the tree to be removed.

12. Does the property owner need to complete the Private Tree Removal Application or can the arborist, or construction company I hire complete the application?

A property owner can complete the permit application themselves or authorize someone to complete it on their behalf. If authorizing someone else, an owner Authorization Form need to be completed and submitted with the application.

13. What is a Tree Protection Plan?

A Tree Protection Plan is a two-dimensional metric scaled plan typically prepared by an ISA or MTCU certified Arborist that shows:

- Existing conditions including property lines, building footprints and other site elements (such as a driveway, pool, deck, patio and fence) including the front of the property to the street curb;
- Proposed conditions including any new structures or additions, a new pool, over dig for all excavations, a new paved surface such as new or widened driveway or deck and grade changes drawn to scale with dimensions
- A separate tree inventory table as needed or include the table on the plan. The tree inventory should include the unique identifier for the tree, size, species, ownership, condition for the trees, recommendations and any notes
- The location of each **TPZ** shown as a scaled circle around the tree with dimensions
- List of which trees are to be **injured**, removed or fully protected through the proposed project
- Proposed construction access routes and material storage areas and their dimensions
- The location and extent of tree protection measures to be installed (e.g., tree protection fencing and horizontal tree protection) with dimensions
- The distance measurement between trunk of tree and site of **injury**
- A label for all mitigative work around trees as necessary (e.g., exploratory air-spade and root prune)
- A scale bar and legend that provides labels for all information included on the drawing

It is important that all plans provided are drawn to scale and include all the relevant information. See the Tree Protection Plan examples below for more information.

14. What is a Tree Replacement Plan?

A Tree replacement Plan is a plan that shows the location of trees that you plan to replant. The location of these replacement trees should be uniquely identified on the detailed sketch or drawing. Locations of replacement tree(s) can be incorporated into the Tree Protection Map when submitting an application form.

When the Town permits the removal of one or more trees on private property, and the tree is not dead or dying, a plan for tree replacement is required.

See **Appendix A & B** for an example of a Tree Protection Plan and a Tree Replacement Plan.

15. How are tree replacements calculated as part of my application?

Compensation process for tree removal(s) due to non-construction purposes

To compensate for canopy loss because of removing a private tree due to **non-construction** purposes, you can either:

- Plant replacement tree on private property, or,
- Pay a replacement tree fee to allow for planting somewhere else in the Town (also called cash-in-lieu); or
- A combination of both

The total amount of replacement trees is based on a 1:1 ratio.

For example, if you are removing two 25 cm DBH trees, this requires two 60 mm caliper trees to be planted. If the current cash-in-lieu price is \$300 per tree, your total would be \$600. For construction applications, cash in lieu are slightly higher. If the price is \$450 per tree, your total would be \$900.

Compensation process for tree removal(s) due to construction purposes

To compensate for canopy loss because of removing a private tree due to **construction** purposes, you will use **the Aggregate Inch Method** where the aggregate DBH of trees removed is equal to or less than the DBH of trees planted for replacement (regardless of the number of trees).

[Please check the website for the most up to date fees and charges.](#)

If replacement trees are not planted within the time on the permit, the town will issue an order to have the tree planted or a payment cash in lieu. Addition fees may apply.

16. Where can replacement trees be planted?

Replacement trees can be planted on the lot where the trees were removed or on an alternate private property within the Town's Area Boundary (with a Letter of Consent from the alternate landowner if applicable).

The Private Tree Removal permit holder is responsible for planting and caring for the required replacement trees for the first two years. All replacement trees are regulated under the Private Tree Bylaw.

Definitions

The definitions for the terms below are based on the definitions in the Town's Private Tree Protection Bylaw. These definitions have been simplified for use in this guide. They do not replace or alter the meaning of the terms as set out in the [Private Tree Protection Bylaw](#).

Aggregate Inch Method means a method for calculating Tree replacement requirements whereby the aggregate DBH of Trees removed is equal to or less than the DBH of Trees planted in replacement, regardless of the number of individual Trees also known as the Aggregate Caliper Method.

Boundary Tree is a tree with any part of its trunk growing across the property line between two or more properties.

Diameter at Breast Height or DBH is a measurement around the tree's trunk (or trunks) that is taken at a height measured 1.4 m from the ground.

Dead means no living tissue in the tree, including no live buds or leaves; often small branches are brittle, and bark will begin to fall off.

Emergency tree work means work on a tree (such as pruning, cutting off a major limb or cutting down the entire tree) that is needed to (a) remove an immediate danger (such as a tree limb that is about to fall and could **injure** someone or damage property, such as a car or a house), or (b) allow for emergency repairs (such as repairs to a building).

Good arboricultural practice means the proper implementation of removal, renewal and maintenance activities known to be appropriate for individual trees in and around urban areas to minimize detrimental impacts on urban forest values, and includes pruning of trees to remove dead limbs, maintain structural stability and balance, or to encourage their natural form, provided that such pruning is limited to the appropriate removal of not more than one-third of the live branches or limbs of a tree, but does not include pruning to specifically increase light or space.

Heritage Tree means a Tree designated under Part IV of the Ontario Heritage Act, 1990 or Trees recognized as Heritage Trees by the Ontario Heritage Tree Program of Trees Ontario.

Injure/Injury means to harm or Destroy a Tree by an action that causes physical, biological or chemical damage or death to a Tree, but does not include pruning or removing branches for maintenance purposes which is done in accordance with Good Arboricultural Practice.

Common examples include cutting branches or roots in a way that is not consistent with good practice, failing to provide the required **Tree Protection Zone (TPZ)** (see Section 2), and working or storing materials in the **TPZ** which can cause damage to the trees root.

Qualified Tree Professional means a professional who has the appropriate certifications, qualifications and expertise related to trees. In Newmarket a **qualified tree professional** is one of the following: Registered Consulting Arborist with the American Society of Consulting Arborists, Board Certified Master Arborist or Arborist Municipal Specialist with the International Society of Arboriculture (ISA), Registered Professional Forester, ISA Certified Arborist and/or ISA Qualified Tree Risk Assessor. A **qualified tree professional** is required to prepare your Arborist Report.

Replacement Tree Planting Plan means a plan illustrating the location of Trees to be replanted.

Regulated Tree means trees within the Town of Newmarket that are regulated by Provincial, Federal, Regional and/or Municipal Bylaws and Policies.

Tree Protection Plan means a report and/or drawing that details the steps that will be taken to preserve Trees to ensure their safety and long-term viability.

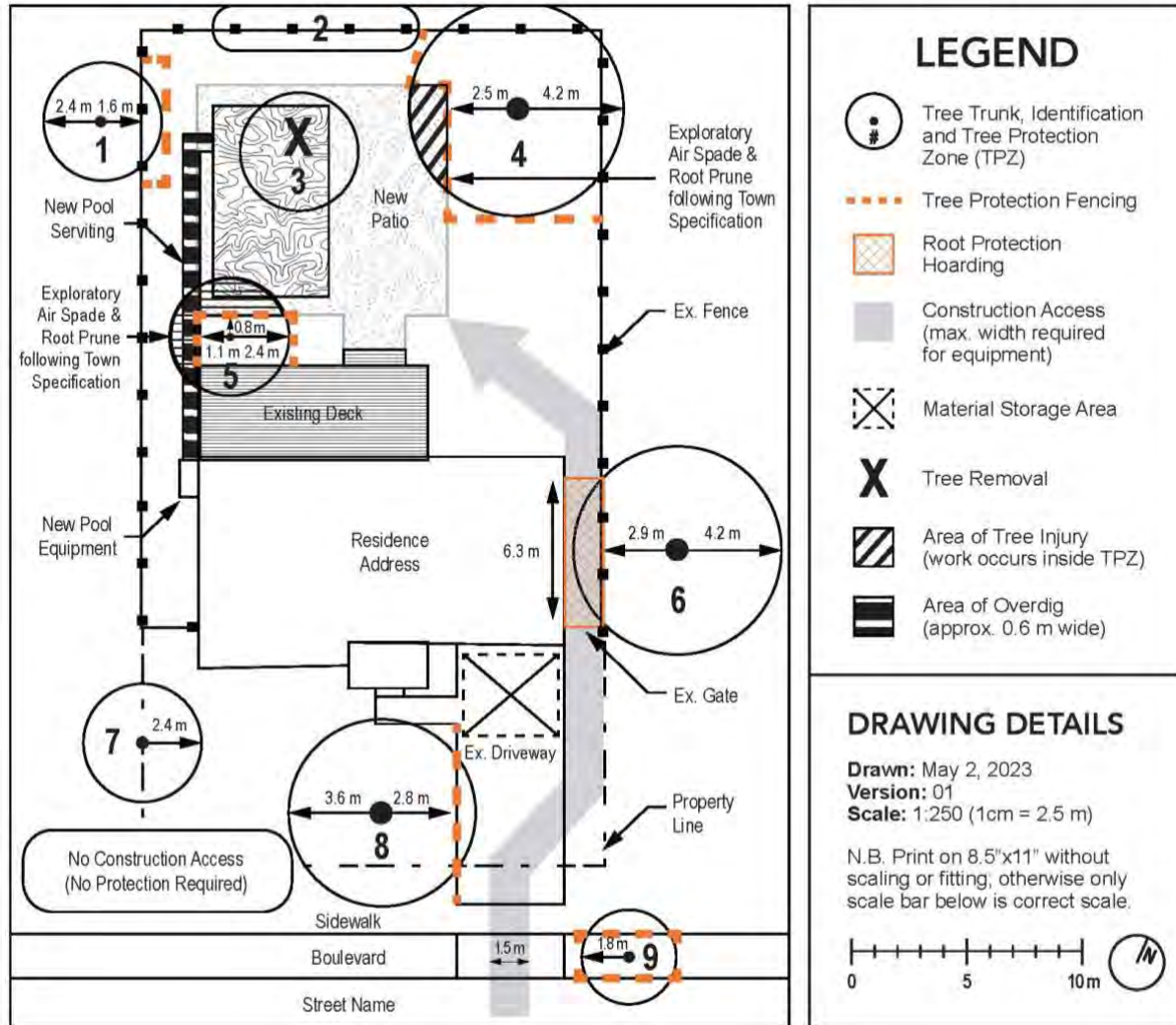
Tree Protection Zone (TPZ) is a zone created around a tree to protect the tree trunk, branches, soil and roots from machines and equipment, and other construction-related disturbances.



For more information, specifications and a full list of definitions, please view the Private Tree Protection Bylaw.

Appendices

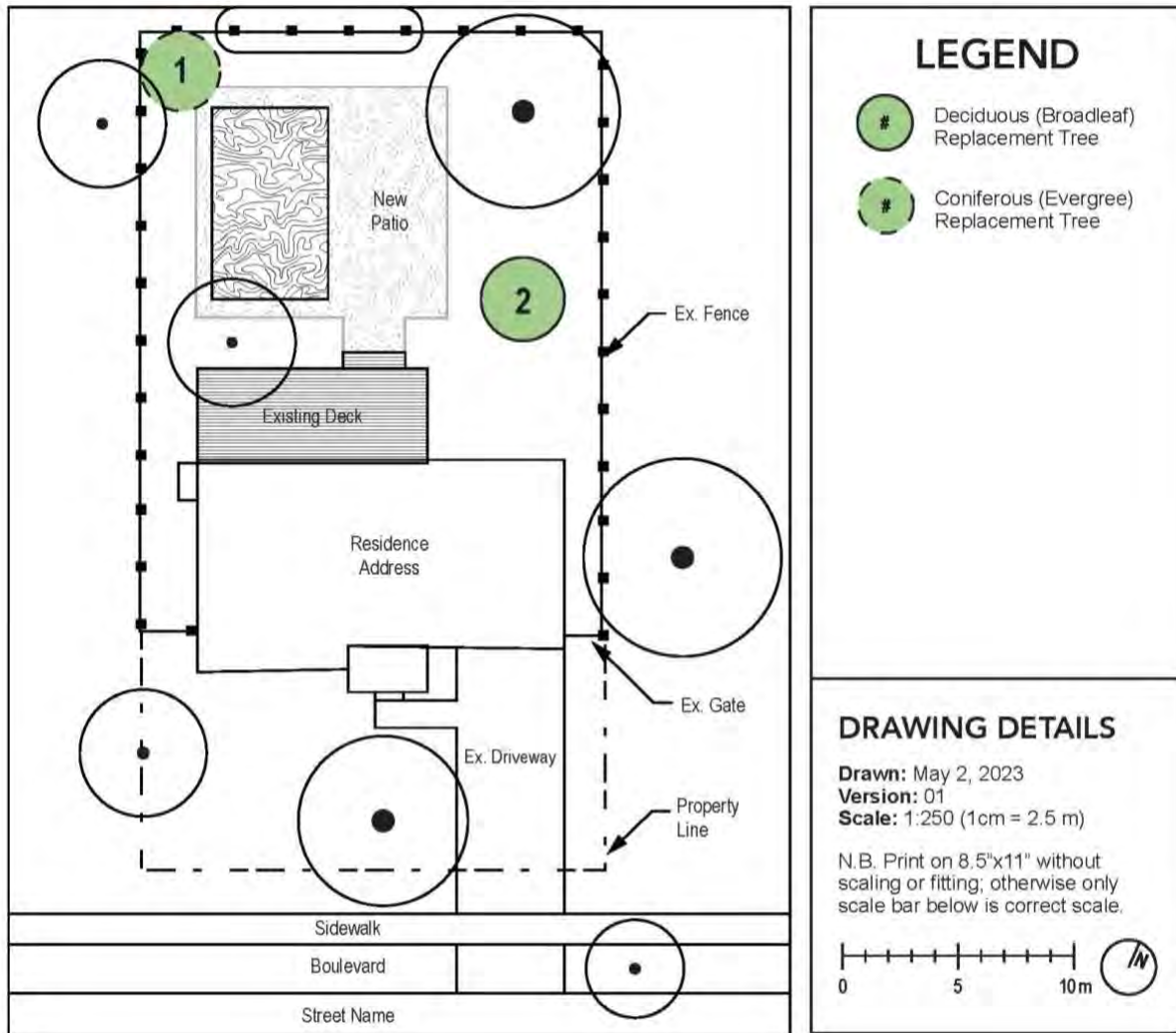
Appendix A: Sample Tree Protection Plan



Tree Inventory Table

Tree #	Tree Species	Tree DBH	Tree TPZ (IN)	Tree Health	Tree Structure	Tree Ownership	Recommendations (See Arborist Report)	Notes (see arborist report for details)
1	White Cedar	25	2.4	Good	Good	Neighbour	Protect	
2	White Cedar	<20	N/A	Good	Good	Boundary	No Action Required	9 stems none regulated
3	Sugar Maple	20	2.4	Good	Good	Subject Property	Remove	Within footprint of pool
4	Black Maple	65	4.2	Good	Fair	Subject Property	Injure and Protect	Root prune following Town Specifications
5	White Birch	21	2.4	Fair	Good	Subject Property	Injure and Protect	
6	White Birch	60	4.2	Good	Fair	Neighbour	Protect	
7	Sugar Maple	20	2.4	Good	Good	Boundary	No Action Required	
8	Tulip Tree	51	3.6	Fair	Fair	Subject Property	Protect	3 stems
9	Yellowwood	10	1.8	Fair	Fair	Town	Protect	

Appendix B: Sample of a Tree Replanting Plan to be included with an Arborist Report



Tree Replanting Table

Tree #	Tree Species	Tree Size
1	Eastern Hemlock	125cm tall
2	Hackberry	30mm caliper

Tree Replanting Calculation (to be read in conjunction with the Tree Protection Plan)

Trunk Diameter (DBH) of removed tree	Compensation Ratio	Number of Trees Removed	Number of Trees to be Replaced
20-35cm	2:1	1 (Tree #3 in Pool)	2
36-74cm	3:1	0	0
>=75cm	4:1	0	0