

City of Charlottetown
Tree Protection Bylaw
Bylaw #2019-TP-01

BE IT ENACTED by the Council of the City of Charlottetown as follows:

1. Title

1.1. This Bylaw shall be known as, and may be cited as, the “Tree Protection Bylaw”.

2. Purpose

2.1. The purpose of this Bylaw is to:

- a) recognize the importance of trees as green infrastructure and to protect trees on City-Owned Property in the City of Charlottetown;
- b) protect privately owned and City-Owned Heritage Trees within the City;
- c) prohibit the removal of, or damage to, Protected Trees;
- d) regulate and establish requirements for preservation, protection, maintenance, removal and replacement of Protected Trees;
- e) put in place inspection and enforcement provisions, including penalties for damaging or removing a Public Tree or Protected Tree without written permission.

3. Authority

3.1. Section 180(k) of the *Municipal Government Act*, R.S.P.E.I. 1988, M-12.1., provides that a municipality may pass bylaws respecting tree preservation and protection, and the development and implementation of maintenance standards for trees and other vegetation, subject to the *Environmental Protection Act*, R.S.P.E.I. 1988, E-9., the *Pesticides Control Act*, R.S.P.E.I. 1988, P-4, and any other applicable enactment.

4. Application

4.1. This Bylaw applies to:

- (a) all trees located on or abutting City-Owned Property in the City of Charlottetown;
- (b) Heritage Trees and Protected Trees on City-Owned Property and private property in the City of Charlottetown;
- (c) diseased, Infested or Hazardous trees on City-Owned Property and private property in the City of Charlottetown; and
- (d) development and construction activities, including those pursuant to the City’s Zoning and Development Bylaw.

4.2. Nothing in this Bylaw precludes or relieves a person of complying with any federal, provincial or local government enactments that may apply to the protection or removal of trees.

5. Definitions

5.1. In this bylaw:

- a) “Abutter” means the owner, lessee, or occupier of any premises or lot in the City which abuts a street or any other City-Owned Property, and includes premises or a lot which has been registered as a condominium under the *Condominium Act Regulations*, EC10/78, including the condominium corporation which manages the premises or lot.
- b) “Certified Arborist” means a person who is certified by the International Society of Arboriculture.
- c) “City” means the City of Charlottetown.
- d) “City Arborist” means a person retained or designated by the City as the City’s Arborist.
- e) “City-Owned Property” means all properties owned by the City of Charlottetown including, but not limited to, rights-of-way, leases, parks and green spaces, and woodlands.
- f) “Damage” means any action that will cause a tree to decline or die.
- g) “Diameter at Breast Height or DBH” means the diameter of the stem of a tree measured at 1.37 meters (or 4.5 feet) above the natural grade at the base of the tree, except where there are multiple trunks, in which case DBH means the sum of the diameter of the trunks measured 1.37 meters (or 4.5 feet) above the natural grade.
- h) “Diseased Tree” means any tree with an abnormal growth or dysfunction.
- i) “Drip Line” is the area on the ground that corresponds with the outermost circumference of a tree canopy where water drips from and onto the ground.
- j) “Forestry Technician” means a person with forestry experience and education which enables them to preserve and safeguard the urban forest.
- k) “Grade” means increasing or decreasing the natural level of the soil around the trunk of a tree. Raising the grade reduces the tree’s access to air, water and nutrients. Reducing the grade exposes and causes damage to tree roots in the TPZ. Grade changes lead to root mortality, decline in vigor and frequently, death of the tree.
- l) “Hazardous ” means a tree with a defect sufficient to increase the likelihood that all or part of the tree will fail, resulting in risk of personal injury or property damage. Whether a tree is hazardous will be determined by a Certified Arborist or Certified Tree Risk Assessor as designated by the International Society of Arborists or a Forestry Technician.
- m) “Heritage Tree” means a Protected Tree within the City that has historical or cultural value to the City and/or has a DBH of greater than 100 cm.

- n) "Infested Tree" means a tree that is infested with an insect pest.
- o) "Large Caliper Tree" means a balled and burlapped tree with no less than a 50mm trunk diameter measured approximately 30 cm above the ground. See Appendix 2.
- p) "Natural Causes" means causes including disease, insect pests, climatic, hydrological or geotechnical conditions, structural defects or aging, which cause a tree to become hazardous.
- q) "Owner" means the registered owner of a lot upon which a tree is located, or their authorized agent.
- r) "Park" means any green space, woodland or recreational facility owned by the City.
- s) "Protected Tree" means a tree, hedge or shrub of any size located on City-Owned Property or a Heritage Tree located within the City. Invasive species, as listed in Appendix 3, are not considered protected.
- t) "Pruning" means selective cutting or removal of living or dead branches of a tree according to the standards set out by the International Society of Arboriculture and which is consistent with promoting the health and growth of the tree.
- u) "Public Tree" means any tree in a Park, along a highway, and on any other land owned, leased or otherwise vested in or controlled by the City.
- v) "Remove" means to cut down a tree and/or remove it from its present location.
- w) "Small Tree" means a tree that is no more than four feet tall and/or is in a five gallon pot.
- x) "Structural Root, Buttress Root or Anchoring Root" means a large, woody tree root that anchors the tree and supports the trunk and crown of the tree.
- y) "Tree" is a woody perennial plant with one or more substantially erect trunks or stems and a root system.
- z) "Tree and Root Protection Zone or TPZ" means the area around the trunk of the tree contained within a circle which has a radius of X meters, where $X = (DBH(cm) \times 15)/100$ (or 1.25 feet for every inch of DBH), or one meter beyond the drip line, whichever is greater. Also defined as the area within the Tree Protection Barrier.
- aa) "Tree Risk Assessment" means a report prepared by the City Arborist, or designate, that documents the characteristics, condition and possible hazards of the tree and includes a photograph. The report includes a recommendation to retain or remove the tree and any required maintenance.
- bb) "Tree Maintenance" means the application of arboricultural techniques to maintain a tree.

- cc) "Tree Protection Barrier" means a sturdy, continuous protection barrier or fence that is at least one meter in height and is installed around the TPZ, or one meter beyond the Drip Line, whichever is greater.
- dd) "Topping" means indiscriminate cutting off of branches at the top of a tree which may result in weak unstable limbs that are prone to breakage and tree decay resulting in increased maintenance requirements, possible hazards, or the death of the tree.
- ee) "Tunneling" means boring a hole under the root system of a tree causing minimum disturbance to accommodate underground installations.
- ff) "Utility" includes the facilities for energy and communications, the provision of those facilities and the persons responsible for the provision and maintenance, whether the facilities are publicly or privately owned.
- gg) "Written Permission" means signed letter or email correspondence.

6. Interpretation

- 6.1. This Bylaw relates to the protection, assessment, maintenance, removal and disposal of trees within the City of Charlottetown.
- 6.2. This Bylaw is administered under the authority of the City Arborist in consultation with the Managers of Public Works, Parks and Recreation, Water and Sewer Utility, Sustainability and Planning Departments.
- 6.3. Tree ownership will be determined by the City's Forestry Technician or designate using field markers and land survey information. Trees that are on a property line and have 50% or more of the base of the tree on City property will be considered a City-owned and managed tree. Trees that are on a property line and have greater than 50% of the base of the tree on private property will be considered a private tree.

7. Tree Maintenance

- 7.1. City Tree-Crew staff have the following duties and powers:
 - a) to inspect, protect and carry out maintenance on Public Trees;
 - b) to enter upon any lands in the City, including privately owned lands, for the purpose of assessing trees for risk and for disease or insect infestations that may affect the health of the trees;
 - c) to enter upon any lands in the City, including privately owned lands, to carry out pruning or tree removal operations for the protection of the public, City-Owned Property or the health of the trees, subject to Section 14;
 - d) to plant trees on any City-Owned Property;
 - e) to plant trees on private property, in consultation with the property Owner, where the City right-of-way is not sufficient to sustain a tree. Trees planted on private property will be maintained by the City for one year. After one year, the tree care and maintenance becomes the responsibility of the property Owner.

- 7.2. Notice will be served to the property owner three days in advance of any work (tree planting, removals or pruning) taking place on private property, with the exception of emergency situations.

8. Restrictions

- 8.1. No person shall alter or remove a Public Tree without obtaining written permission from the City in accordance with section 19 of this Bylaw.
- 8.2. Trees planted on private and City-Owned Property must meet the criteria laid out in Appendix 4 – Criteria for Vacant Tree and Shrub Planting Sites.
- 8.3. No person shall carry out, cause or permit the following:
- a) take down, remove, top, prune, spray, fertilize or otherwise disturb a Public Tree;
 - b) deposit, place or store on City-Owned Property, any material that may impede the free passage of water, air or other nutrients to the roots of a Public Tree;
 - c) excavate or disturb the soil within the Tree Protection Zone (TPZ) of a Public Tree, as identified in Section 10 and Appendix 1;
 - d) cut, damage or undermine the roots of a Public Tree within the TPZ;
 - e) cut a Public Tree's structural or anchoring roots;
 - f) change the grade or drainage around a Public Tree within in the TPZ, or otherwise interfere with the Public Tree's access to water, air or nutrients;
 - g) operate a truck, backhoe, excavator, other heavy equipment or otherwise cause soil compaction over the roots within the TPZ of a Public Tree;
 - h) mark, break, remove bark or branches from or deface a Public Tree;
 - i) dent, gouge or damage the trunk of a Public Tree;
 - j) fasten any sign, bill, notice, wire, rope, nail, zip tie or any other potentially restrictive or damaging material to or around a Public Tree;
 - k) attach anything to or lean anything up against a Public Tree which may cause damage to the trunk or any part of the Public Tree;
 - l) cause or allow any gas, liquid or solid harmful to trees to come in contact with a Public Tree or the roots of a Public Tree;
 - m) damage a Public Tree by fire;
 - n) remove or interfere with a barrier designed to protect a Public Tree;
 - o) permit an electrical current to come in to contact with a Public Tree;
 - p) cut, remove or damage a Public Tree on a steep slope, within a buffer zone or woodland; and/or
 - q) plant a tree or shrub on City-Owned Property.

9. Articles and Decorative Lights

- 9.1. Articles hung or installed in Public Trees, including lights, shall be done in a way such that there is no harm to the Public Tree:
- a) no pruning can be done for the installation;
 - b) in accordance with sections 8.3(j) and (k), articles should be draped loosely over branches, no zip ties, wires or other fasteners can be used to fasten the articles to the Public Tree;
 - c) articles must be installed on branches that are one inch in diameter or more to prevent breakage;
 - d) articles cannot be installed or removed between March 1st and May 30th to prevent damage to leaf buds;
 - e) articles must be inspected annually; and
 - f) written permission from the City Arborist is required before installation of any articles in Public Trees.

10. Tree and Root Protection Zone (TPZ) – Construction

- 10.1. Where work or activities are taking place (on private land or City-Owned Property) that could damage the roots, trunk or branches of a Public Tree, a Tree Protection Barrier will be placed around the TPZ of the Public Tree, by the individual/organization doing the work. Where such work is taking place:
- a) a site plan must be submitted to the City prior to construction starting;
 - b) the TPZ is calculated as the area around the trunk of the tree contained within a circle which has a radius of X meters, where $X = (DBH \times 15) / 100$ (or 1.25 feet for every inch of DBH), or one meter beyond the drip line, whichever is greater. TPZ distances are measured as a radius from the center of the trunk at ground level, as per Appendix 1;
 - c) a Tree Protection Barrier shall be installed around the TPZ that is no less than 1 meter high, is made out of chain link or orange safety fencing and has metal or wood stakes securing it every 2.5 m, as per Appendix 1;
 - d) a minimum of two signs will be placed on the fencing stating that this is a Tree Protection Zone, as per Appendix 1. Signs are available to borrow from the City of Charlottetown;
 - e) the Tree Protection Barrier must be inspected and approved by the City Arborist or designate;
 - f) the Tree Protection Barrier may not impede the sight lines of any roadway or driveway;
 - g) all equipment and construction material must be kept outside of the Tree Protection Barrier;
 - h) any grade changes must be made outside of the TPZ or the drip line plus one meter, whichever is greater;

- i) no portion of the Tree Protection Barrier can be affixed to the Public Tree;
- j) the Tree Protection Barrier will remain in place throughout the construction project;
- k) trenching shall not take place within the TPZ;
- l) if underground installations must take place in the TPZ, they must be installed by tunneling. Tunnels must not be less than one meter below grade;
- m) no roots greater than 2.5 cm in diameter can be cut;
- n) exposed tree roots must be covered with a suitable material and kept damp. Prolonged exposure of roots must be kept to a minimum.

10.2 In some cases, work in the TPZ is unavoidable. In these situations, the TPZ must be discussed with the City Arborist or designate. It may be necessary to implement other tree protection measures such as horizontal root protection, mulching of root zone or excavation of soil around roots using water, air or hand-digging.

11. Heritage Trees

11.1. Private or Public Trees that are one of the following five species – American elm, red oak, red maple, sugar maple, linden spp. – and which have historical or cultural significance and/or are trees with a DBH of 100cm or more are protected as Heritage Trees.

11.2. No person shall, without the written permission of the City, carry out, cause or permit the following:

- a) removal of a Heritage Tree without a full Tree Risk Assessment and written permission from the City;
- b) cause any type of damage, as per this Bylaw, to a Protected Tree.

11.3. The owner of a Protected Tree may, under the advisement of the City Arborist or City approved Certified Arborist, carry out pruning that is beneficial to the Protected Tree.

12. Pruning

12.1. All pruning cuts on Public Trees and Heritage Trees must be made by qualified individuals in accordance with International Society of Arborists (ISA) standards and may be inspected by the City Arborist or designate.

12.2. All pruning cuts made by City staff on private trees, in accordance with section 14.4, must meet the standards laid out in Subsection 12.1.

13. Invasive Species

13.1. City staff have the authority to enter upon any lands in the City, including privately owned lands, to assess, prune or remove a Diseased Tree, Hazardous Tree, or Infested Tree that is detrimental to the health of the tree or other trees.

13.2. Tree maintenance activities for diseased or infested trees must follow the protocols laid out in the City's Insect and Disease Management Programs.

- 13.3. No pruning or removal of elm or ash trees will take place between March 30th and October 30th unless deemed an emergency by the City Arborist or designate.
- 13.4. Invasive tree and shrub species shall not be planted. Refer to Appendix 3 of this Bylaw and/or the P.E.I. Invasive Species Council's Invasive Plant List (<http://peiinvasives.ca/report>). If there is any discrepancy between Appendix 3 of this Bylaw, and the P.E.I. Invasive Species Council's invasive plant list, the latter shall prevail.
- 13.5. No person shall remove wood from tree removal sites or sites designated for the disposal of insect infested or diseased wood without the written permission of the City Arborist. Notices will be posted at these sites and any persons removing wood from these sites will be subject to fines as per Subsection 22.2 of this Bylaw.

14. Removal or Pruning of Hazardous Trees on Private Property

- 14.1. The owner of a tree which abuts an adjacent public right of way or City-Owned Property, and which, in the opinion of the City Arborist, poses a hazard or a danger to public property or persons on public property, shall, when so ordered in writing by the City Arborist and within the time designated by the City Arborist, abate such hazard or danger to the satisfaction of the City Arborist.
- 14.2. Where the Abutter has failed to comply with Subsection 14.1, the City Arborist may serve a notice in writing upon the Abutter requiring the trimming or removal of the tree. If the Abutter fails to abide by the City Arborist's notice within the time frame stipulated on the notice, the City may cause the same to be done at the expense of the Abutter, and the cost may be recovered from the Abutter by the City.
- 14.3. City staff may enter any lands within the City, including privately owned land, and undertake the work referred to in Subsection 14.1, if the Abutter does not undertake or complete the work, as in Subsection 14.1. Work done by City staff or a City contractor will be at the expense of the Abutter.
- 14.4. The City Arborist or designate may authorize the pruning of any privately owned trees which abut City-Owned Property, that extend out over a right-of-way, impede foot traffic or sight lines, or otherwise create an unsafe condition or hazard.
- 14.5. Notice will be served to the Abutter three days in advance of work referred to in this section taking place.

15. Parks, Green Spaces, Woodland Trees and Buffer Zone Trees

- 15.1. Persons doing any work in a Park or accessing a property through a Park shall carry out such work or access in accordance with this Bylaw.
- 15.2. The removal of healthy trees is not permitted, as per Subsection 19.1(a). Any individual, organization, business, or other party, who injures, destroys or removes a Public Tree in a Park without the prior written permission of the City may be subject to providing payment to the City as per Section 22 – Contravention of Bylaw.
- 15.3. Tree maintenance work must follow the Provincial *Environmental Protection Act*, R.S.P.E.I. 1988, E-9, when working near a watercourse, wetland or buffer zone.

- 15.4. The City Arborist or designate may authorize the pruning of any trees located on private property that have branches that extend over a Park, including the pruning of branches that are hazardous or create an unsafe condition.

16. Planning and Developments

- 16.1. This Tree Protection Bylaw is independent of the development process pursuant to the City of Charlottetown Zoning & Development Bylaw. However, development and construction activities must comply with this Bylaw's requirements.
- 16.2. Tree retention on lots and developments within the City is encouraged and shall count towards the required landscaping per the Zoning & Development Bylaw.
- 16.3. Heritage Trees are protected, and work around Heritage Trees must follow the restrictions laid out in Sections 8 and 10 of this Bylaw.
- 16.4. A minimum of one Large Caliper Tree (as per Appendix 2) per 10m of site frontage shall be provided by the Developer or property owner for every new building or development. The location of the tree planting sites will comply with the criteria in Appendix 4 of this Bylaw and the City's Planning Department's permitting process.
- 16.5. A variety of sizes and species of both deciduous and coniferous plants should be provided to ensure year round interest, diversity of species and aesthetic appeal. See Appendix 3 of this Bylaw for invasive plant species that are not allowed.
- 16.6. The City Arborist may approve the removal of trees and shrubs to allow for access to underground services and/or utilities. Landscaping plants must be reinstated once the utility and/or service work is complete. See Appendix 2 of this Bylaw for tree planting information.
- 16.7. Tree Risk Assessments must be done by the City Arborist or designate when building permit applications are submitted.

17. Supervision of Utilities and Contractors

- 17.1. Where a Utility or a contractor alters a Public Tree, the City Arborist may assign an inspector to supervise the work, the cost of which shall be borne by the Utility or the contractor.
- 17.2. The City Arborist may require that a Utility or contractor do such things as are necessary to ensure the health and safety of Public Trees affected by any works carried out by the Utility or contractor, even where not required by the Utility's or contractor's own standards.
- 17.3. The City Arborist may grant the approval for any work that is required under any other Bylaw to proceed even though the work may impact Public Trees.
- 17.4. A private or public Utility may carry out tree maintenance for the purpose of safety or to maintain the operation of the Utility's service and infrastructure. All pruning cuts must be made by qualified individuals in accordance with the International Society of

Arborists (ISA) standards. The utility must seek written permission from the City to remove a tree.

18. Inspections

18.1. The City Arborist or designate may enter any property, including privately owned property, at reasonable times, to inspect a Public Tree or Heritage Tree or to carry out a Tree Risk Assessment for any purpose under this Bylaw.

18.2. No person shall prevent or obstruct entry authorized under this Bylaw.

19. Request to Alter or Remove a Public Tree

19.1. A request to alter or remove a Public Tree may be submitted to the City.

a) Written Permission to alter or remove healthy Public Trees will not be granted except under extreme circumstances. Each case will be reviewed by the City Arborist or designate.

19.2 If permission is granted to remove a healthy Public Tree per Section 19.1(a):

- a) measures must be taken to ensure the safety of the public and infrastructure [during the removal of the healthy tree]. Cleanup and disposal of wood must take place promptly;
- b) a fee, based on the size of the trees being removed, will be paid to the City by the person making the request, or compensation plantings completed, in accordance with the following schedule:

| Tree Removal Fee | Replanting compensation (on public lands) |
|-------------------------------------|---|
| >100 cm diameter= Protected | N/A |
| 65 – 100 cm = \$2000/tree | 3:1 (3 planted for every 1 removed) |
| 31 – 64 cm = \$1000/tree | 2:1 (2 planted for every 1 removed) |
| 15 - 30 cm = \$1000/tree | 1:1 (1 planted for every 1 removed) |
| 3 or more trees < 15cm = \$1000/lot | 2 trees per lot |

- c) the cost of the tree removal, stump grinding and lawn reinstatement will be the responsibility of the person making the request.
- d) The only trees that can be removed are trees that have been approved for removal by the City.
- e) If the person seeking to remove trees wishes to replant trees rather than pay the fee for tree removal in b) above, the City will determine the locations for the replanting of trees. If no suitable locations for replanting are available, the person must pay the fee as per paragraph b) above.
- f) If trees approved to be removed by the City include trees of more than 15 centimetres in diameter and trees of less than 15 centimetres in diameter, the person will only be required to pay the applicable fee or conduct the replanting of trees for the removal of the trees larger than 15 centimetres.

20. Approvals and Exemptions

20.1. The City may do any of the following:

- a) refuse a request to remove or prune a Public Tree;
- b) approve a request to remove or alter a Public Tree, subject to conditions;
- c) approve a request to remove or prune a Public Tree, without conditions;
- d) approve activities prohibited under this Bylaw, as reviewed on a case by case basis.

20.2. The City may approve maintenance work that impacts Public Trees when carried out under the authority of the City. City work that will alter Public Trees must be approved by the City Arborist or designate.

21. Stop Work Order

21.1. Where the City Arborist determines that there is a failure to comply with any provision of this Bylaw, the City Arborist may give the applicant, violator, contractor responsible for the work, or the owner of the property on whose behalf the work is being done, an order in writing to stop said work and/or directing compliance with such provision, and may require the order to be carried out forthwith or within such reasonable time as the City Arborist requires.

22. Contravention of Bylaw

22.1. A person who contravenes a provision of this Bylaw is subject to the penalties imposed by this Bylaw.

A person, who removes, cuts down, alters or otherwise damages a Public Tree without the City's prior written permission is subject to a fine of:

- a) \$3000.00 for the first offence;
- b) \$4000.00 for a second offence and all subsequent offences.

22.2. A person, who removes insect infested or diseased wood from a tree removal site or a site designated for the disposal of such wood, contrary to Section 13.5, without the prior written permission of the City and where notice of such site is posted, is subject to a fine of \$1000.00.

23. Tree Reserve Fund

23.1. Funds collected from fines, pursuant to Section 22 of this Bylaw, and requests to remove Public Trees, pursuant to Section 19 of this Bylaw, will be directed to a Tree Reserve Fund.

23.2. Where landscaping work, as per Zoning & Development By-law PH-ZD.2-000, has not been completed, the Development Deposit shall be forfeited and directed to a Tree Reserve Fund.

23.3. Tree Reserve Funds will be used to plant trees on City-Owned Property to improve the City's urban forest canopy.

23.4. Planting locations will be chosen by the City Arborist or their designate.

24. Emergency Removal

24.1. A person may cut down or prune a tree that would otherwise be prohibited under this Bylaw where:

- a) there has been severe damage to the tree from Natural Causes;
- b) the tree is imminently dangerous to the public or to property;
- c) the City Arborist or designate has been contacted and has given verbal or written permission to cut down or prune the tree.
- d) Utility companies need to prune or remove trees to restore existing power to a building.

25. Use of Wood

25.1. In compliance with the City’s sustainable practices, and with the permission of the City Arborist, effort should be made to use the wood from any trees that are removed (by, or on behalf, of the City) pursuant to this Bylaw. These uses must not contravene the protocols laid out in the City’s Insect and Disease Management Programs.

26. Repeal of Existing Bylaw

26.1. On adoption, this bylaw replaces the Tree Maintenance Bylaw.

27. Effective Date

27.1. This Tree Protection Bylaw, Bylaw# 2019-TP-01, shall be effective on the date of approval and adoption below.

First Reading:

This Tree Protection Bylaw, Bylaw #2019-TP-01, was read a first time and approved by a majority of members present at the Council meeting held on the _____ day of _____, 2019.

Second Reading:

This Tree Protection Bylaw, Bylaw #2019-TP-01, was read a second time and approved by a majority of members present at the Council meeting held on the _____ day of _____, 2019.

Approval and Adoption by Council:

This Tree Protection Bylaw, Bylaw #2019-TP-01, was adopted by a majority of Council members present at the Council meeting held on the _____ day of _____, 2019.

Witness the corporate seal of the City of Charlottetown

Mayor

Chief Administrative Officer

This Tree Protection Bylaw, Bylaw #2019-TP-1 adopted by the Council of the City of Charlottetown on the _____ day of _____, 2019 is certified to be a true copy.

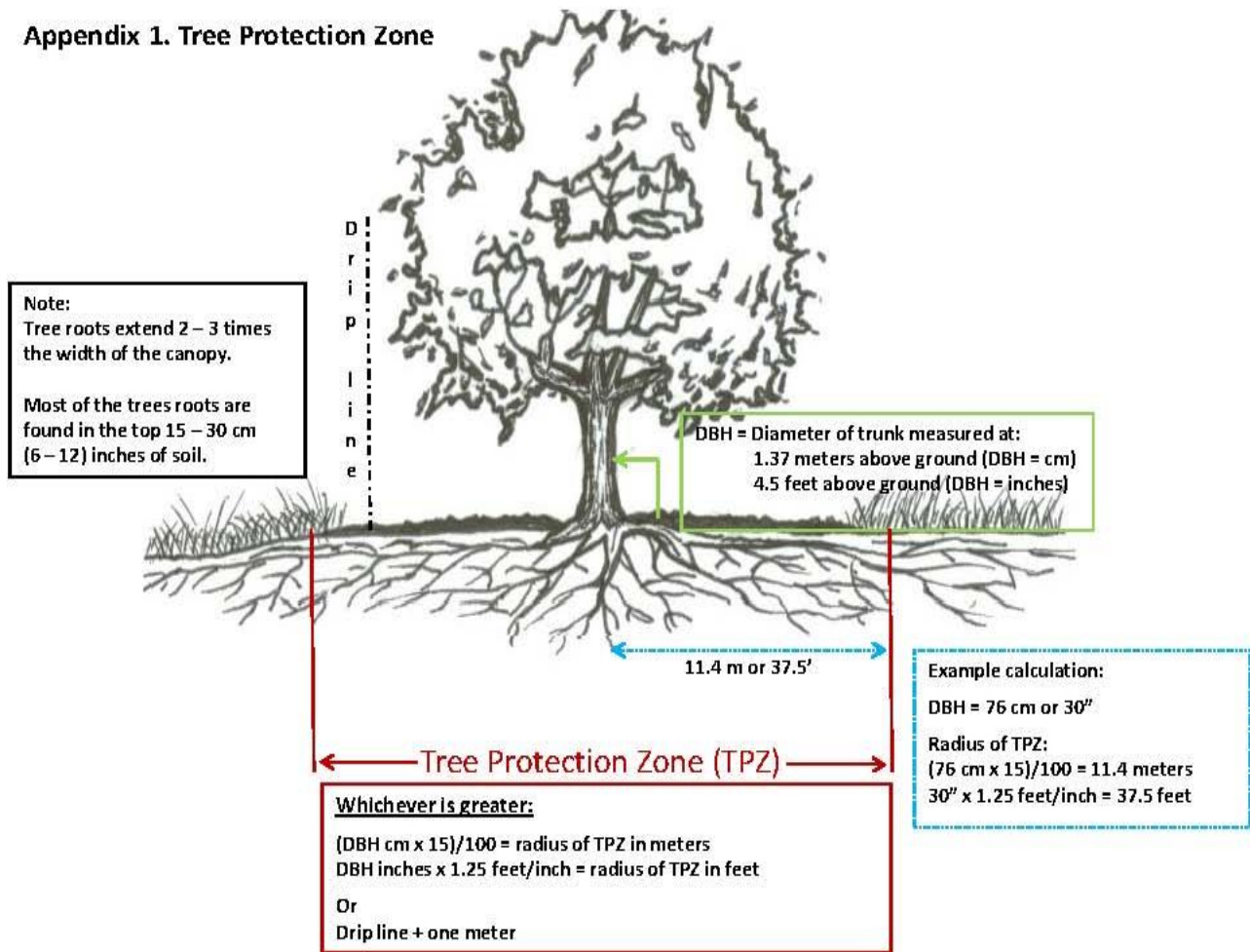
Chief Administrative Officer

Date

"This document is an office consolidation of this Bylaw amending bylaw adopted 07-Jun-2021. It is intended for information and reference purposes only. This document is not the official version of the Bylaw. Where accuracy is critical, please consult official sources. If you find any errors or omissions in this consolidation, please contact the Records Management Clerk

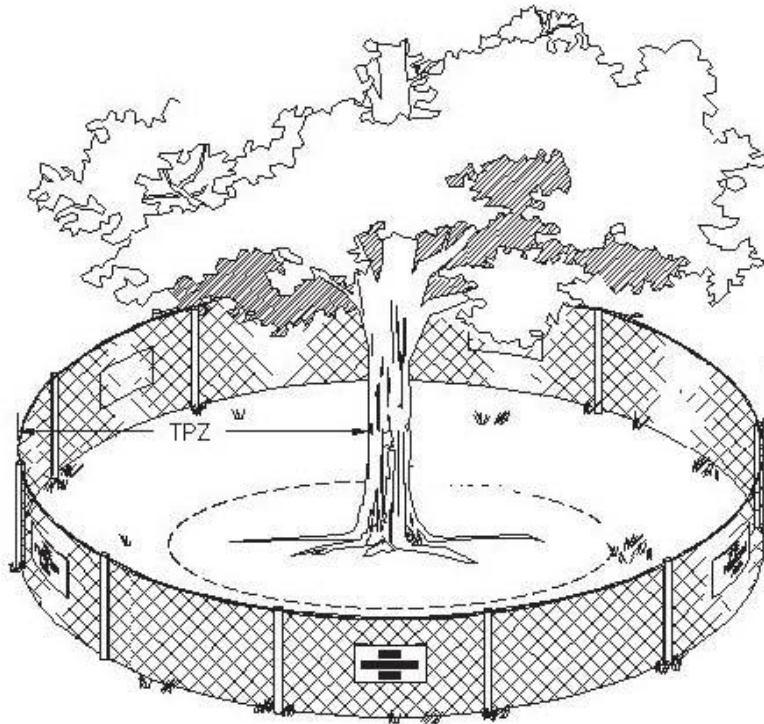
APPENDIX 1

Appendix 1. Tree Protection Zone



APPENDIX 1

Tree Protection Zone (TPZ) Fencing



Fencing will be placed at the boundary of the TPZ.

Fencing must be one meter high and secured to metal or wood stakes every 2.5 m.

Signage must be placed on fencing, indicating that this is a protected area.

APPENDIX 1

Tree Protection Zone (TPZ) Signage



APPENDIX 2

Tree Planting Information

- Tree planting locations should be assessed for proper growing conditions.
- Tree species should be researched to determine their suitability for the planting site conditions (plant hardiness zone, growing conditions, size at maturity, susceptibility to insect pests and diseases, maintenance, growth habit, invasive tendencies or other possible issues).
- Native species generally thrive and have fewer insect and disease issues because they are growing in their native range.
- There is a wide variety of non-native trees and shrubs available. Avoid invasive species.
- See Appendix 4 for planting distances from utilities, underground services, City infrastructure, private approaches, etc.
- Shrubs and trees that need to be removed for access to underground services must be replaced as soon as possible.

Large Statured Trees

Caliper size (trunk diameter measured approximately 30 cm above the ground) no less than 55mm or a root ball size of 70cm.

Small Statured Trees

Caliper size (trunk diameter measured approximately 30 cm above the ground) no less than 45mm or 10 gallon pot.

APPENDIX 3

Invasive Species – Woody Plants

These plants have been identified by the PEI Invasive Species Council as invasive and should not be purchased, planted or swapped. <http://peiinvasives.ca/>

Species List:

Norway maple, *Acer platanoides* – There are many varieties of Norway maple available. Any tree with *platanoides* in the latin name is a Norway maple. ‘Crimson king’ maples are a Norway maple.

Manitoba maple, *Acer negundo*

Sycamore maple, *Acer pseudoplatanus*

Scots (Scotch) pine, *Pinus sylvestris*

Silver (White) poplar, *Populus alba*

European mountain ash, *Sorbus aucuparia*

Sycamore maple, *Acer pseudoplatanus*

White fringe tree, *Chionanthus virginicus*, is also a host to emerald ash borer (EAB). Avoid planting to help combat EAB.

Glossy buckthorn, *Frangula alnus*, *Rhamnus frangula*

Common buckthorn, *Rhamnus cathartica*

Blackthorn, *Prunus spinosa*

Scotch broom, *Cytisus scoparius*, *Sarothamnus scoparius*

Salt cedar (Tamarisk), *Tamarix spp.*

Oriental bittersweet, *Celastrus orbiculatus*

Virginia creeper, *Parthenocissus quinquefolia*, *Parthenocissus vitacea*

Multiflora rose, *Rosa multiflora*

Species of Note

Ribes spp. (currents and gooseberries) can be the secondary host for white pine blister rust which is a devastating disease for white pine trees.

Berberis spp. (barberry) can be an alternate host for stem rust of wheat.

APPENDIX 3

American elms, *Ulmus americana*, are susceptible to Dutch elm disease (DED). Cultivars and hybrids have been developed that are resistant to DED and are good alternatives to native elm trees.

All true ash trees are susceptible to emerald ash borer (EAB). EAB has been found in Nova Scotia and New Brunswick. There are two ash species native to Prince Edward Island – white ash, *Fraxinus americana* and black ash, *Fraxinus nigra*. Choose alternate species to plant. If planting native ash trees, also plant a variety of other species to increase biodiversity.

APPENDIX 4

Criteria for Vacant Tree and Shrub Planting Sites

New planting sites for large statured trees must meet the following criteria:

- ✓ The spacing for planting sites along city streets and sidewalks should be 8-10m apart.
- ✓ Volume of soil available to the tree should be 1000 cubic feet or 30 cubic meters.
- ✓ Large statured trees cannot be placed underneath existing utility transmission lines.
- ✓ Plantings should not impede sight lines or create a visibility hazard.
- ✓ On major arterial streets planting sites will be setback the recommended distance of 4m from the curb. When this cannot be achieved planting sites may be positioned up to a minimum setback of 2m on smaller streets. Smaller statured tree species should be used where the minimum setback is less than 4m.
- ✓ Plantings should be near the City property line. If room allows, trees can be planted on public property but must follow the setbacks outlined below:

Setback for trees:

Streets, lanes and sidewalks – 2m unless approved by the City Arborist or designate.

Fire hydrants - 3m

Electrical boxes on ground – 2m

Sewer/water grates – 2m

Surface utility equipment – 3m

Underground services – 3m

Private approaches – 3m

Light poles and poles with transformer boxes in residential areas - 6m

Bus stops - 8m from the approach direction

Stop signs - 8m

Light poles and poles with transformer boxes on arterial roads - 10m

Signal regulated street intersections - 10m

Setback for Shrubs:

Surface utility equipment – 0.5m

Streets, lanes and sidewalks – 1m