

Glossary of Tree Terms

Alteration

Changes in elevation of 100 mm or greater from existing grade that result from the placement or dumping of fill, the removal of topsoil, or any other action that alters the grade

Aggregate Caliper

A method for assessing tree removal compensation planting where the combined caliper (diameter) of trees to be planted must meet or exceed the diameter of the removed tree(s)

Appraised Value

The monetary value of a tree or woodland as determined through application of an approved tree appraisal methodology determined at the discretion of the Town of Whitby in accordance with the Town of Whitby Tree Protection Requirements for New Developments.

Arboriculture

The cultivation, management and study of trees, shrubs, vines and other perennial woody plants in landscape settings for the enjoyment, protection and benefit of human beings

Arborist

A graduate of an accredited college/university program with a diploma or degree in Urban Forestry, Arboriculture, or equivalent, who is certified by the International Society of Arboriculture (ISA) or the Ontario Training and Adjustment Board and/or is a Qualified OPFA Member and/or has comparable qualifications and is approved by the Town

Arborist Report

A report prepared by an Arborist or other qualified professional providing details on the species, size and health of a Tree

Bracing

Installation of steel rods or bolts through the stems or limbs, to reduce twisting or splitting of the wood

Basal Area

The area of the cross-section of a trunk of a tree, including the bark, measured at the diameter breast height measured as square metres per hectare, and where there are multiple trunks, the total area of the cross-sections of the multiple trunks of a tree including the bark measured at the diameter breast height

Base Diameter

The measurement of the diameter of the trunk of a tree from outside the bark at the existing grade adjacent to its base, or where there are multiple stems, the total of the diameters of the three largest stems at the existing grade adjacent to its base

Boundary Tree

“Every tree whose trunk is growing on the boundary between adjoining lands is the common property of the owners of adjoining lands”, as defined by the Forestry Act, R.S.O. 1990. This condition is determined through the interpretation of property lines from information provided (survey, maps or plans provided by the owner). Refer to [Boundary Trees](#) for more information.

Cabling

Installation of steel cables, attached to lag screw or bolts placed in tree limbs, to provide additional support or to limit movement and stress of limbs

Caliper

The diameter of a tree trunk measured at a height of 1.4 metres from the ground. Caliper is the determining measurement when it exceeds 40 mm

Canopy cover

A measurement of the extent of vegetated foliage viewed from above, usually expressed as a percentage of total land area

For more information, contact

Planning and Development
905.430.4306
planning@whitby.ca



Co-dominant

A condition that occurs when two or more stems of similar diameter are emerging from the same location on the trunk. Co-dominant unions are typically weak, with a higher risk of failure, and are commonly found on poorly maintained trees or certain tree species

Condition of a Tree

Assessment of tree condition considering health, structure and form and/or with reference to the Physical Deterioration (Condition) Rating Criteria. Refer to Figure 8, [Tree Appraisal Techniques and Submission Requirements](#).

Compaction

The compression of soil that causes a reduction of pore space and an increase in the density of the soil. Tree roots cannot grow in compacted soil

Compensation

The provision of tree(s) for the purpose of replacing trees that have been damaged and/or removed from a property, or the provision of a monetary payment for the authorized and/or unauthorized damage or removal of tree(s) and/or vegetation

Construction

The building, installation and maintenance of a structure, infrastructure, utility or roadway

Critical Root Zone

An area beyond the Tree Protection Zone where works are permitted but may still damage important roots unless proper root-sensitive procedures are implemented. Encroachment or damage to the critical root zone will put the tree at risk of failure

Crown

Branches, twigs, buds, leaves, flowers and fruit directly above where the branching from the trunk begins

For more information, contact

Planning and Development
905.430.4306
planning@whitby.ca



Dead, Dying or Diseased Tree

A tree with no living tissue; a tree where 70% or more of the crown is dead, or a tree infected by a lethal pathogen, as certified by a Qualified Tree Expert

Decay

Progressive deterioration of organic tissues, usually caused by fungal or bacterial organisms, resulting in loss of cell structure, strength and function. In wood, decay includes the loss of structural strength

Destruction

The harm, ruin or removal of a tree by cutting, burning, girdling of the tree or tree roots including interfering with water supply, application of chemicals, compaction and/or re-grading within the drip-line of the tree, or any other means of neglect, accident or design that results in irreversible injury and leads to removal of the tree, but not including pruning for maintenance purposes

Development

The creation of a new lot, a change in land use, or the construction of buildings and structures requiring approval under the Planning Act, including various forms of intensification, infill development and redevelopment

Diameter at Breast Height (DBH)

The measurement of the diameter of the trunk of a tree from outside the bark 1.4 metres above existing grade adjacent to its base, or where there are multiple stems, the total of the diameters of the three largest stems 1.4 metres above existing grade adjacent to its base. Inventories may include the DBH of each stem/trunk for trees with multiple stems/trunks

Diameter

Circumference divided by 3.14 (pi)

Drip Line

An imaginary line directly beneath the outermost branches of an individual tree or the edge of the tree canopy forming the perimeter of the woodland

For more information, contact

Planning and Development
905.430.4306
planning@whitby.ca



Dying

A tree infected by a lethal pathogen or where 70% or more of its crown is dead

Edge Management Area

An area identified adjacent to a natural heritage feature or other area intended to be protected that provides a separation between the protected feature and the adjacent development in order to mitigate the negative impacts to the natural heritage feature and its ecological function

Emergency Work

Any work necessary to protect life or property, including utility repairs and structural repairs to buildings

Enhanced Rooting Environment Techniques

Specific engineering solutions designed to provide adequate sub-surface growing conditions for tree roots while fulfilling the engineering requirements of the site

Family

For plants, the highest classification used to include plants with particular distinguishing characteristics

Fill

Earth, sand, gravel, rubble, rubbish, garbage or any other material used to alter existing grades

Genus

The taxonomic group of plants containing one or more species, such as Acer (maple)

Girdling Roots

Tree roots growing in a circling orientation versus spreading away from the trunk; these may deprive a tree of water and nutrients by choking off internal transport vessels

For more information, contact

Planning and Development
905.430.4306
planning@whitby.ca



Good Forestry Practices

The proper implementation of harvest, renewal and maintenance activities known to be appropriate for the forest and environmental conditions under which they are applied and in accordance with Provincial Silvicultural Guidelines as outlined the most current version of the Forest Operations and Silviculture Manual under the authority of the Crown Forest Sustainability Act, S. O. 1994. These activities shall minimize detriments to forest values including significant ecosystems, important fish and wildlife habitat, soil and water quality and quantity, forest productivity and health, including the aesthetics and recreational opportunities of the landscape

Hazard Tree

A tree that is destabilized or structurally compromised and poses a potential safety concern to property or life, but is not an immediate threat as assessed by a qualified Arborist or Registered Professional Forester

Hedgerow

Trees left standing or planted along the edge of a former or existing agricultural field or laneway to create a physical and/or visual amenity, and typically including trees remaining along former fence lines

Heritage Tree

A tree designated under Part IV of the [Ontario Heritage Act, R.S.O. 1990, c. O. 18](#), and/or a tree that Council has formally designated as being unique and of importance to the Town in terms of distinctive form, size, age and/or historical significance and/or any tree identified as a heritage attribute of a designated property, and/or within a Heritage Conservation District designated under Part V of the Ontario Heritage Act; or a tree recognized as a Heritage Tree through the Heritage Tree Program operated through Forests Ontario and the OUFC. Refer to [Heritage Trees](#) for more information.

High Quality Vegetation

Trees, groups of trees and shrubs that is desirable in terms of health, condition, form, species, age, heritage value, aesthetic value, cultural significance, rare or uncommon species or value for wildlife

For more information, contact

Planning and Development
905.430.4306
planning@whitby.ca



Hoarding

Temporary fencing around a tree, group of trees, or woodland which physically separates and protects them from construction activities

Injury

Lasting damage to a tree that is likely to have the effect of inhibiting or terminating growth, not including pruning or removing branches for maintenance purposes, provided that any such pruning or branch removal is limited to the removal as appropriate, of not more than 1/3 of the live branches or limbs of a tree. Injuries may include:

- failure to protect a tree entirely or in part, and in accordance with the Town's Tree Protection Requirements for New Development or an approved Tree Preservation Plan
- broken branches destroying more than 33% of the crown
- exposure, severing or compaction of more than 25% of the root area
- the breaking off of any tree
- noticeable tipping of any tree
- any act that will harm a tree's health in any way

Invasive Plant Species

Any plant species listed or considered a non-native invasive species that has been introduced to an environment where it is not native and has become a nuisance through rapid spread and increased numbers, often to the detriment of native species. More information is available at <https://www.ontario.ca/page/invasive-species-ontario>.

Landscape Architect

A registered Landscape Architect in good standing with the Ontario Association of Landscape Architects (O.A.L.A.)

Landscape Plan

A set of drawings showing all proposed landscape works and details that is signed and stamped by a qualified Landscape Architect

For more information, contact

Planning and Development
905.430.4306
planning@whitby.ca



Lot

A parcel of land with specific boundaries that is capable of legal transfer

Maintenance

The care and maintenance of trees in accordance with good arboricultural standards, including planting, inspection, pruning, cabling and bracing, treatments for insect and disease problems, watering and fertilization

Mitigation

Measures undertaken to limit the adverse impact of natural hazards, environmental degradation and technological / construction hazards; often used to mean compensation for damage done

Monitoring

Regular measurement and/or evaluation of an area, ecosystem, habitat, community, species, etc. to identify changes in abundance and/or quality, usually in response to a management action or a predicted impact (i.e. development)

Mulch beds

Continuous expanses of materials such as wood chips spread on the surface of the soil at the base of trees and tree groupings to protect the soil and plant roots from the effects of raindrops, soil crusting, freezing and evaporation and to regulate soil moisture, microbiome and temperature, reduce competition from weeds and reduce soil compaction and erosion

Native Species

A species indigenous to a region, having evolved there as part of an ecosystem over a long period of time

For more information, contact

Planning and Development
905.430.4306
planning@whitby.ca



(Key) Natural Heritage Feature

A per Section 3.2.4 of the provincial Greenbelt Plan (2005) significant features, including wetlands, coastal wetlands, fish habitat, woodlands, valleylands, habitats of endangered species, threatened species and special concern species, Significant Areas of Natural and Scientific Interest (ANSIs), significant valleylands, significant woodlands, significant wildlife habitat, sand barrens, savannahs and tallgrass prairies and alvars that are important for their environmental and social values as legacy of the natural landscapes of an area

Naturalized

Non-native species established (intentionally or unintentionally) in a region and able to reproduce successfully and live along native species in the wild

Proponent / Applicant / Owner

The registered owner of a Lot, their respective successors or their duly Authorized Agent, or any individual, corporation, partnership, association, firm, trust or other entity including anyone acting on behalf or under the authority of such entity

Pest

Any animal, insect pest, or tree diseased as declared under Section 3 of The Pest Control Act

Private Tree

A tree that has the main stem wholly on private property. Refer to Figure 1, below, at the definition of “Public Tree”

Proper Arboricultural Practices

The proper implementation of removal, renewal and maintenance activities known to be appropriate for individual trees in and around urban areas, that minimize detrimental impacts on urban forest values, including 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, and does not include pruning to specifically increase light or space

For more information, contact

Planning and Development
905.430.4306
planning@whitby.ca



Provincially Rare Species

A species with a subnational (provincial) rank of S1 to S3

Pruning

Selective removal, as appropriate, of woody plant parts of any size but not more than 1/3 of the live branches or limbs of a tree, and in accordance with Good Arboriculture Practice

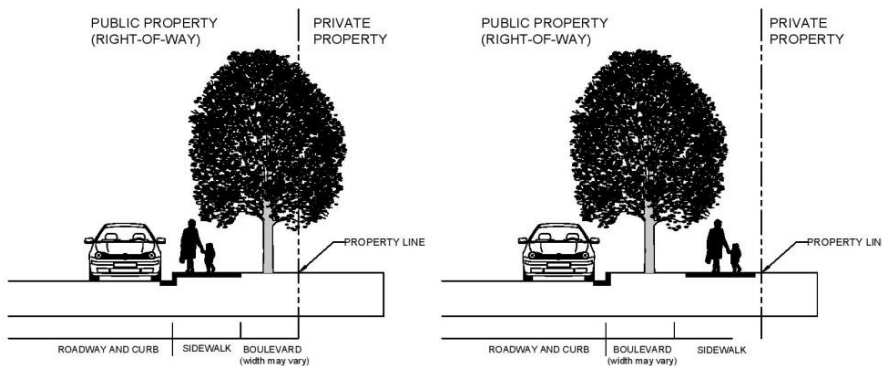
Public Property

Any property owned by the Corporation of the Town of Whitby

Public Tree

A tree that has the main stem wholly on public property. Refer to Figure 1, below

Figure 1: Public Trees



Qualified Tree Expert / Arborist

A specialist or expert in the care and maintenance of trees that is a graduate of an accredited college or university with a diploma in Urban Forestry, Arboriculture or the equivalent and certified by either the Ontario Training and Adjustment Board or the ISA, OR, currently accepted as a Consulting Arborist with the American Society of Consulting Arborists OR a Qualified OPFA Member, or a person with other similar qualifications as a competent practitioner of the art and science of arboriculture as approved by the Commissioner of Planning and Development

For more information, contact

Planning and Development
905.430.4306
planning@whitby.ca



Qualified Professional

An Arborist, Landscape Architect or Qualified OPFA Member who is qualified to complete the activity required, subject to the respective scope of practice and individual competency requirements of their discipline

Qualified OPFA Member

A Registered Professional Forester (RPF) or Associate Member of the Ontario Professional Foresters Association under the Professional Foresters Act 2000, c. 18, as amended, to practice professional forestry unless a suspension, term, condition or limitation of certification applies which would restrict the Member from carrying out responsibilities under this By-law

Regulated Tree

Trees that fall within the jurisdiction of any municipal, regional, provincial or federal policy area, by-law and/or permit process, or are associated with an agreement related to construction and/or site development. A regulated tree can be located on municipal/public or private property

Relocation

A tree sufficiently small enough that it can be dug up by a tree spade or by hand and moved to another location for re-planting

Removal

Complete tree removal by cutting to the ground, or extraction due to various circumstances or conditions. Disposal of the removed tree as well as any requirements for stump grinding or removal shall be as directed by the Arborist and with the approval of the Town where required

Replacement Value

An appraisal method described by the Council of Tree and Landscape Appraisers for replacing trees with nursery or field-grown stock, based on the cost of replacement with the same or comparable species of the same size in the same place, subject to depreciation for various factors

For more information, contact

Planning and Development
905.430.4306
planning@whitby.ca



Region

The Region of Durham and its employees and agents acting on the Region's behalf

Risk Assessment

The process of evaluating the likelihood that part or all of a tree will fail and cause damage and/or injury. Risk assessment considers three factors: potential for tree failure, the environment that may contribute to failure and something that would be damaged by failure (a target). Refer to [Tree Risk Assessment](#) for more information

Root Pruning

Selective and targeted removal of tree roots prior to construction to minimize the potential for damage associated with soil excavation, in order to minimize loss to significant structural and feeder roots, while preventing interference with necessary works that may otherwise result in further root damage

Root Zone

The area and volume of soil around the tree in which the root system is normally found; this area may extend to three or more times the branch spread of the tree and predominantly within the top twelve inches of soil

Shared Tree

A tree with a portion of the root structure or the canopy crossing the boundary between adjoining lands; the roots and the canopy portions of a "shared" tree are not protected by the Forestry Act in the same way as the trunk of a "boundary" tree is protected. Refer to Figure 1, Glossary "Public Tree"

Significant Tree

Tree that is meaningful or important for a variety of reasons, including but not limited to location in a designated heritage district, species, size, ecological value, location, historical or social importance

For more information, contact

Planning and Development
905.430.4306
planning@whitby.ca



Silviculture

The theory and practice of forest establishment, composition, growth and quality to achieve forest management objectives

Site Alteration

The placement of fill, grading, and/or excavation that changes the landform and natural vegetative characteristics of a site

Species

The main category of taxonomic classification into which living organisms are subdivided, comprising a group of similar individuals having a number of correlated characteristics

Species at Risk

A species designated by either the Committee on the Status of Endangered Wildlife in Canada or the Ontario Ministry of Natural Resources as being Extinct, Extirpated, Endangered, Threatened or Special Concern

In Ontario, any native species in danger of extinction or of disappearing from the province; species classified as “at risk” are added to the Species at Risk in Ontario (SARO) List; these species can also be designated at the federal level

Sensitive Excavation

Excavation methods such as hydraulic or pneumatic-assisted excavation to uncover roots prior to large-scale excavation, in order to enable effective root pruning

Stress

The adverse alteration of tree health by abiotic or biotic factors

Structural Integrity

Related to defects in a tree’s structure (i.e. lean, co-dominant trunks, etc.)

For more information, contact

Planning and Development
905.430.4306
planning@whitby.ca



Standards

The minimum requirements established for the protection and preservation of trees

Standard Proctor Density

The maximum dry density of a soil determined in accordance with Ontario Provincial Standards

Street Trees

Municipally owned trees typically found within the road right-of-way along roadsides and in boulevards and front yards

Town

The Corporation of the Town of Whitby, in the Region of Durham, and its employees and agents acting on the Corporation's behalf

Tree

Any species of self-supporting woody perennial plant that has reached or will reach a height of at least 4.5 metres (15 feet) at physiological maturity; "Tree" refers to all parts of the tree including the roots, crown (branches and leaves) and stem (trunk)

Tree Inventory

A list of trees on the property and within 6.0 metres of the boundary of the property, including information regarding location, species, condition and size

Tree Enhancement / Management Strategy

A long-term strategy recommending tree plantings and/or woodlot management practices in addition to the minimum requirements of the tree preservation and protection plan

For more information, contact

Planning and Development
905.430.4306
planning@whitby.ca



Tree Protection Agreement

An agreement made pursuant to a development agreement, site plan agreement or subdivision agreement between the Town and a Person, or Permission by the Town, including but not limited to a building permit or cultural heritage permit that identifies all trees on a lot that are to be preserved and sets out any other measures that the Town deems appropriate

Tree Protection Zone (TPZ) and /or Vegetation Protection Zone (VPZ)

A defined area within which certain activities are prohibited or restricted to prevent or minimize potential injury to designated trees or vegetated areas, especially during construction or development

Tree Removal Permit

A permit required by the Town to Injure, Destroy or otherwise remove (a) Regulated tree(s).

Vigor

Overall health; the capacity to grow and resist physiological stress

Visual Tree Assessment

A method of evaluating structural defects and stability in trees

Whip

A young tree without branches

Woodlot

Defined in paragraph (“ff”) of the [Town of Whitby Tree Protection By-Law 4640-00](#), meaning an area of 0.2 hectares or more having not fewer than 200 trees of any size or at least 50 trees measuring more than 20 cm DBH, excluding a cultivated orchard or actively managed and harvested tree farm

For more information, contact

Planning and Development
905.430.4306
planning@whitby.ca



Woodlot or Forest Management Plan

Defined in paragraph (“gg”) of the [Town of Whitby Tree Protection By-Law 4640-00](#), means a plan for a woodlot prepared according to guidelines set by the Ministry of Natural Resources which set out objectives and management practices to ensure the sustainability of the woodlot and approved by a forestry consultant



For more information, contact

Planning and Development
905.430.4306
planning@whitby.ca

