

Arborist Report / Tree Inventory & Preservation Plan

(Last update: July 2023)

An Arborist Report and Tree Inventory & Preservation Plan are technical reports and plans that present detailed information on tree vegetation on and around the proposed development site. It determines the potential effects of the proposed development on existing trees and vegetation on and around the site and seeks to minimize injury and loss of trees and vegetation or propose restoration/replanting solutions to maintain and enhance the City's tree canopy.

Required by Legislation

Trees and woodlands throughout our community are an essential component of our urban infrastructure contributing to a high quality of life in Richmond Hill. All trees and woodlands, whether on public or private land, represent the urban forest. Collectively, they help make our community healthy and resilient in countless ways including cleaning the air and water, reducing flood risk, conserving energy, counteracting urban heat stress and increasing property value. Richmond Hill works to protect trees in our community's urban forest which are important for our quality of life today and for the future as per the direction in the City's <u>Official Plan</u> and the <u>Urban Forest Management Plan</u>. The City regulates the removal of trees greater than or equal to 20 centimetres diameter at breast height on private property through the City's Private <u>Tree Preservation By-law</u>. Development applications provide an Arborist Report and Tree Inventory and Preservation Plans prepared by an Arborist to remove/replace trees, which are reviewed by the Park and Natural Heritage Planning section as part of the development process.

Who should prepare this?

The studies must be completed by a Certified Arborist who is either:

- A full member of the Ontario Professional Foresters Association (OPFA)
- A full member of the American Society of Consulting Arborists (ASCA)
- A full member of the International Society of Arboriculture (ISA)
- A Landscape Architect certified by the Ontario Association of Landscape Architects (OALA)
- A Registered Professional Forester (RPF) as defined by the Professional Foresters Act S.0.
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- A person with other arboriculture, forestry or ecology qualifications as approved by the Commissioner of Planning and Building Services
- An Arborist qualified by the Ministry of Training Colleges and Universities, Apprenticeship and Client Services Branch

When is this required?

An Arborist Report / Tree Inventory & Preservation Plan may be required as part of the following applications:

- Official Plan Amendment
- Zoning By-law Amendment



- Draft Plan of Subdivision
- Draft Plan of Condominium
- Site Plan Control
- Consent Applications
- Minor Variances
- Site Alteration Permit

Why do we need this?

An Arborist Report / Tree Inventory & Preservation Plan are required to:

- Demonstrate conformity to any applicable by-laws or Official Plan policies;
- Provide a basis on which to assess the proposed application with regard to tree preservation/protection issues and the overall contribution to the urban forest canopy cover;
- Ensure replacement plantings are provided, which are required when a tree 20cm DBH or greater has been removed. The location of the replacement plantings must be shown on the plan in accordance with the ratios outlined in the chart below:

DBH of Tree to be Removed	# of Replacement Trees Required
0-19 cm	0
20-30 cm	1
31-40 cm	2
41-50 cm	3
51-100 cm	4
>100 cm	5

How should this be prepared?

Arborist Report

An Arborist Report should at a minimum contain:

Introduction

- Address of the property
- General site location of the subject property
- Project Name (if applicable)
- Applicant and owner's contact information
- Author name, title, qualifications, company name and appropriate stamp
- The assignment of the professional and his/her obligation throughout the entire project period
- Brief description of the proposed development
- Overview of the study area
- Purpose of the study
- Location and context map
- Date of preparation/submission/site visit



Proposal Description and Context

- A description of the proposal, development stats (such as number of units, site area) type of development proposed, height, parking areas, access points, location of amenity areas, proposed phasing
- A description of the existing on-site conditions as well as surrounding areas, roads, natural areas, buildings, parking areas
- A description of the proposed development during construction and post development that may have an impact on the trees including the area of development, and units, servicing, storm water management, roads, parkland areas, recreational uses, lighting, site remediation, grading and filling for the subject and adjacent lands
- Concept Plan for the development including building location, parking, access, amenity areas, grading and natural features and any natural hazards

Investigation/Evaluation

Vegetation Inventory

- A description of the site vegetation and condition at the time of inspection including the private property, municipal property and adjacent properties that may be impacted by the development
- Identification of any species at risk
- A photo log of the site showing site conditions
- Descriptions of the tree(s) identified on the Tree Inventory and Preservation Plan drawing (linked to the drawing and the corresponding tree identification numbers and tags) in a chart format as shown below including: species (common and botanical name), size (DBH), health (a general rating of poor, fair or good based on tree age, presence of disease, canopy structure, proportion of live wood, etc.), condition (a general rating of poor, fair or good based on the presence of cavities, decay, broken limbs/trunk, lean, root damage, form, etc.), hazard rating, ownership and recommendation to preserve, remove, transplant or injure

Tree ID#	Species Common Name	Species Botanical Name	Size (DBH)	Health	Condition Rating	Hazard Rating	Ownership	Recommendation
							Subject site	Remove
							City	Preserve
							Neighbour	Injure

Impacts and Mitigation Measures

- Trees proposed to be removed, retained or transplanted and the reason for each recommendation
- A discussion of the rationale for proposed tree removal and retention



- Information to address tree protection measures for all retained trees
- A detailed tree protection methodology section to address those particular conditions where the proposed development will impact on the health and structural integrity of the trees, which conform to, or are consistent with City Details and Specifications

Recommendations

- Recommendation as to whether each tree or grouping of trees identified on the drawing should be preserved, removed or transplanted and the reason for each recommendation
- Recommendations and methods for the containment and removal of any invasive species found
- Identification of any potential and imminent hazard tree(s)
- Proposed tree replacement and other recommendations include the size and species of replacement trees
- Recommendations for the maintenance and management of trees to be preserved (i.e. required pruning, fertilization or cable work)
- A cost valuation associated with trees to be removed and/or preserved may be required

<u>Tree Inventory and Preservation Plan (Drawings and Supporting Information)</u>

Large format plan visually displaying the information presented in the tree study and other relevant information within the report including

- The surveyed location of all the tree(s) on the subject property and within 6 metres of the subject property on adjacent properties
- Tree numbers
- An indication to as whether the tree(s) is/are recommended for preservation, transplant or removal
- Tree protection zone limits for all trees, which must be in accordance with the chart below:

Trunk Diameter DBH	Minimum Protection Distance Required*
<10 cm	1.8 m
11 – 40 cm	2.4 m
41 – 50 cm	3.0 m
51 – 60 cm	3.6 m
61 – 70 cm	4.2 m
71 – 80 cm	4.8 m
81 – 90 cm	5.4 m
91 – 100 cm	6.0 m

^{*} The TPZ is measured as a radius from the edge of the tree trunk and is dependent on DBH measured as the diameter of the trunk 1.4 meters above the ground.

- The location of tree protection fencing
- An outline of the proposed development including grading changes, structures and work areas/zones associated with the application
- Location of topsoil stockpiles, and the construction

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TERMS OF REFERENCE

- The City's detail(s) of tree protection barrier type (<u>Division K Planting (richmondhill.ca</u>))
- Storage and staging areas including the construction access route.
- The drip lines of vegetated areas as staked by the Conservation Authority in conjunction with municipal staff
- Qualified Tree Consultant's contact information
- Municipal address of the subject property
- Key map (approximate scale of 1: 10,000) in the top right corner of the drawing indicating the location of the site in relation to a larger area (at least one major intersection should be visible)
- Working scale of the drawing (i.e. metric scale between 1:200 and 1:1,000)
- Complete legend/key
- Date of preparation/submission/site visit
- The Site Servicing and Grading Plan that may accompany some applications must include the existing and proposed grades

What else should we know?

The scope of the Arborist Report / Tree Inventory and Preservation Plan will be confirmed as part of the pre-consultation process. No activity shall proceed on site until full evaluation of the existing vegetation and recommendations are determined and an approved plan for development has been processed or reached a satisfactory stage.

Applicants should be aware of the regional and local tree bylaws, policies, and guidelines listed in this document, which are invaluable to understanding content requirements in any Arborist Report and Tree Inventory and Preservation Plan.

Boundary trees shall be evaluated on a site-by-site basis and where injury or removal is proposed, written consent is required of the neighbouring boundary tree owner as per the *Ontario Forestry Act*.

Work undertaken near regulated areas of Conservation Authorities will require a permit.

What other resources are there?

Ontario Professional Planners Institute (OPPI) - Hire an RPP

https://ontarioplanners.ca/hire-an-rpp

International Society of Arboriculture

https://isaontario.com/

Find an Arborist (treesaregood.org)

Ontario Professional Foresters Association

https://opfa.ca/

Ontario Association of Landscape Architects

https://www.oala.ca/



Toronto Region Conservation Authority Permits

https://trca.ca/planning-permits/

City of Richmond Hill Tree Preservation Information

https://www.richmondhill.ca/en/find-or-learn-about/tree-preservation-information.aspx

Notes

If the proposed development is revised, the Arborist Report and Tree Inventory and Preservation Plan shall reflect the revisions by providing an updated report or letter from the author indicating the changes to recommendations and conclusions.

A peer review may be required. The cost of the peer review will be borne by the applicant.

The study requirements may vary depending on the nature of the proposal. This will be predetermined through the pre-consultation process and in consultation with any applicable external agencies.

If the submitted study is incomplete, is authored by an unqualified individual or does not contain adequate analysis, the application(s) will be considered incomplete and returned to the applicant.