Arborist Report, Tree Protection Plan & Tree Replacement Plan



Arborist Report

Arborist reports submitted to the City of North Vancouver are required to have a basic format. The purpose of the arborist report is to convey current tree inventory details on a particular site and recommendations made for tree management or removals.

All arborist reports must be type written and be sufficiently clear in the details presented to the City for review. Outlined below is a guideline to assist in providing a concise and comprehensive arborist report for submission.

A completed arborist report will state specific information related to the consulting arborist and property site in question. This information must be seen on the report for it to be reviewed by the City. Generally, this information is placed in the introduction of the report and includes:

- □ The civic address of the site
- □ Arborist name and company information (including contact information)
- □ Arborist credentials, ISA certification number, and tree risk assessor qualification
- □ Valid City of North Vancouver business license
- □ Proof of professional liability insurance
- □ Property owner name and contact information
- Date and time of site visit
- □ Site description and conditions at time of site visit
- □ Date of the arborist report submission
- □ Arborist inspection scope of work
- □ Brief description of proposed works on the site (if applicable)

Specific information is required for all trees located on the property and adjacent to the site. This detailed information, along with any recommendations is required in either a table or similar format.

Current Tree Inventory (in a table format and in plan)

Including but not limited to the following items:

- □ Location and circumference of trees including numbering of all trees on the site.
- □ Location and circumference including numbering of all neighbouring properties trees within 4m of property line, or trees that have a crown encroaching on the property.
- □ Location and circumference including numbering of trees on adjacent City property.
- □ Tree genus and species (including both scientific and common names).
- □ Trunk diameter at breast height (DBH) and estimated tree height.
- □ Site history and current condition.
- □ Tree condition assessment, including:
 - Tree health evaluation.
 - Any prior tree works.
 - Any observed tree damage or issues.
 - Tree risk rating and identification of targets (if tree is considered to be a risk).
- □ Tree structure and dripline measurements.
- □ Critical root zone area (CRZ).

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 $\hfill\square$ Any observed wildlife uses, including active birds nests.

Impact Assessment and Mitigation Measures

- □ Assess the potential impact by the proposed development on the health of the existing trees and potential hazards to them during construction.
- Arborist recommendations for tree management or removals (additional details on tree management and removals below). All neighbouring trees need to be protected. Arborist to comment on required necessary design changes to ensure viability of trees.
 Any recommendations by the arborist in the tree inventory table related to tree management or removals must include the reasoning for the recommendation. Focus should be on tree retention options over proposing tree removal wherever appropriate.
- □ Arborist recommendations for tree management or removals on the site must include:
 - Identification of tree(s) to be retained on-site, including the following:
 - Recommendations for tree retention.
 - Reasoning for the tree retention recommendation.
 - Methods required to retain the tree(s).
 - Potential or probable impacts to retained trees.
 - Any requirements for arborist supervision on-site.
 - Any maintenance requirements during development.
 - Identification of all proposed trees for removal, including the following:
 - Recommendations for removal.
 - Reasoning for the tree removal recommendation.
 - Options for possible tree retention over tree removals.

Photographs

All submitted arborist reports must be accompanied with current photographs of the trees on the site. All images must be clear, in colour format and labeled with relevant information. Photographs are required for all the trees on the property, along with any adjacent trees to the site that might be impacted. This includes but is not limited to the following:

- □ One or more images of the entire site.
- \Box Image(s) of each tree on the site.
- □ Closer images of any relevant tree issues.
- □ All photographs labeled with tree numbers, descriptions and information.

Tree Protection Plan

All arborist reports related to proposed development on a particular site will also require a tree protection plan. Guidelines for the requirements in a tree protection plan are detailed separately.

□ Tree protection plan (mandatory for development sites).

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Level of Inspection

Arborist reports are required to include the level of inspection and any limitations with the inspection processes. The report must be signed by the consulting arborist stating the information contained in the report is accurate.

- $\hfill\square$ Level of tree inspection.
- □ Any limitations encountered during the inspection.
- □ Signature of the arborist confirming the report.

Tree Protection Plan

All arborist reports related to development on a property site must include a tree protection plan. The purpose of the tree protection plan is to convey all possible impacts on the current tree inventory from any proposed site changes. This detailed plan must be submitted with the arborist report for review by the City. Outlined below is a guideline to assist in providing a comprehensive tree protection plan for submission.

All submitted tree protection plans to include a site plan with detailed information specific to the trees on the property and possible impacts or changes from the development and be based on a tree survey.

Tree Survey A tree survey, completed by a registered BCLS surveyor should be used as the base for the Tree Protection Plan. The survey needs to include the following:

□ The location and diameter at breast height (DBH) of all trees, for any specimen >= 20cm DBH on site, on adjacent lots or city lands within 4m of the property line and would require a tree protection barriers. Provide north arrow, scale, and surveyor company.

Site Plan

Site plan identifying details that will impact the current tree inventory, including;

- □ Location and numerical identification of all onsite and adjacent trees, including both adjacent private and City-owned trees that might be impacted through development.
- □ Accurate dripline diameters for each tree location.
- □ Property lines.
- □ Existing and/or proposed building footprint(s). Ensure to show the most current architectural drawings including the extent of any parkade and excavation proposed.
- □ Any proposed access points to the site.
- □ Underground and aboveground utilities including any underground utility changes on site.
- □ Existing and/or proposed hardscape, such as;
 - Retaining walls
 - Driveways
 - Parking pads
 - Patios
 - Walkways

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- Existing grades and proposed finished grades
- Legend and scale

All trees to be retained or proposed for removal must be denoted on the site plan with further relevant information in a table format on each tree.

Identification of Trees to be Retained

Identification of tree(s) to be retained on-site, including;

- □ Tree identification numbers.
- □ Tree genus and species (Including both botanical and common tree names).
- □ Tree diameter at breast height (DBH) and critical root zone areas (CRZ) and estimated tree height.
- □ Any mitigation methods required for tree retention, such as:
 - Tree protection areas identified.
 - Location and dimensions for tree protection fencing.
 - Location of informational signs posted on the tree protection fencing.

Identification of Trees to be Removed

Identification of all proposed trees for removal, including:

- □ Tree identification numbers.
- □ Tree genus and species (Including both botanical and common tree names).
- □ Tree diameter at breast height (DBH) and critical root zone areas (CRZ) and estimated tree height.
- □ Tree transplanting details on-site (if required).

Tree Replacement Plan

Identification of all proposed replacement trees on proposed site plan. See site plan requirements listed above under tree retention plan. Refer to <u>Tree Bylaw No.8888</u> for tree replacement requirements. Generally, these requirements include:

- □ Hazard tree replacement 1:1, min. 1 coniferous tree.
- □ General removal 3:1 tree replacement, min. 1 coniferous tree.
- □ Tree identification numbers for all trees.
- □ Tree genus and species (including both botanical and common tree names).
- □ Caliper size (min. 5cm), or height for coniferous trees (min. 3m).
- □ Show all existing trees. Ensure proposed replacement trees are not in conflict with existing trees.
- □ Trees must be located 1m off property lines and minimum 3m from dwellings. Select suitable species for tight spaces.
- □ Include all overhead and underground utilities and ensure trees are not in conflict minimum 1.5m clearance from water lines and other underground utilities.

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- □ Spacing, stock and planting must conform to the latest edition of the Canadian Landscape Standards.
- □ Select trees that are drought tolerant unless they are irrigated or the site is naturally moist in the summer. Refer to climate adaptive tree species guide.
- □ Ensure proper spacing from overhead and underground utilities, buildings, hardscape surfaces, as well as overhangs.

Next Steps

The City will review submitted arborist reports, tree protection and tree replacement plans. If the submission does not meet requirements or does not have sufficient details, the City will return comments to the applicant for any revisions to the submitted arborist report, tree protection plan, and tree replacement plan.

After changes are made, a revised submission will then need to be resubmitted for review and approval. No works shall commence on the site until approval has been given, a tree removal permit has been issued, all recommended tree protection measures are in place, and the site has been inspected and approved by the City.