





LAND ACKNOWLEDGEMENT

We carry out our business on the ancestral and unceded homelands of the kwikwəλam (Kwikwetlem), səlilwətał (Tsleil-Waututh), xwməθkwəyam (Musqueam), Skwxw ú7mesh (Squamish), qicə y (Katzie), q'wa:ń λ'əń (Kwantlen), qiqeyt (Qayqayt), and Stó:lō (Sto:lo) Peoples, and extend appreciation for the opportunity to work on this territory.

We are grateful to these Coast Salish Nations for their stewardship and protection, past and present, of the land, water, and air that we all rely on.

PROJECT ACKNOWLEDGEMENTS

The City worked with Diamond Head Consulting Ltd. (DHC) to prepare the Tree Planting Master Plan. DHC acknowledges the participation and support of Port Moody staff in preparing this document.

Project team: Amelia Needoba, Nguyet-Anh Nguyen, Marco Sanelli, Elliot Bellis, Shane Hunt.

Report Citation: City of Port Moody. 2025. Tree Planting Master Plan.

This document is property of the City of Port Moody, copyright 2025.

LIST OF MAPS

Map 2-1.	Planting program focus areas	10
Map 2-2.	Port Moody's tree equity score	11
Map 2-3.	Planting priorities by street	12
Map 3-1.	Street boulevard and park edge tree planting priorities	14
Map 3-2.	Street boulevard and park edge planting opportunities	15
Map 3-3.	10-year street boulevard and park edge planting schedule	16
Map 3-4.	Neighbourhood boulevard planting priorities	18
— Мар 3-5.	Neighbourhood boulevard planting opportunities	19
—— Мар 4-1.	Planting priorities in high-density development areas	23

City of Port Moody

Introduction Program Focus Areas and Planting Priorities 10 Year Planting Plans Planting Guidance for High-Density Development General Planting Pla

1. INTRODUCTION

The City of Port Moody's Urban Forest Management Strategy (2023) provides direction to increase canopy cover in urban areas from 28% to 31% by 2050. The City will plant trees to enhance ecosystems, increase canopy cover, and achieve stable and equitable tree canopy cover over time to meet its canopy cover goals.

This **Tree Planting Master Plan** (the Planting Plan) identifies tree planting opportunities and guides the tree planting program in City road rights-of-way over the next 10 years, to 2035.

This Planting Plan will:

- Define program focus areas based on the drivers of tree planting (i.e., City initiated, resident initiated, development initiated);
- Prioritize planting opportunities based on factors such as population density, land surface temperature, tree equity, existing canopy cover, and trail connectivity;
- Provide a 10-year planting plan for City rights-of-ways;
- Provide a summary of anticipated canopy gain, costs and benefits;
- Provide general planting guidelines for site selection and analysis, plant design, species selection, stock selection, planting techniques, site preparation, community engagement and stewardship, and monitoring and technology.

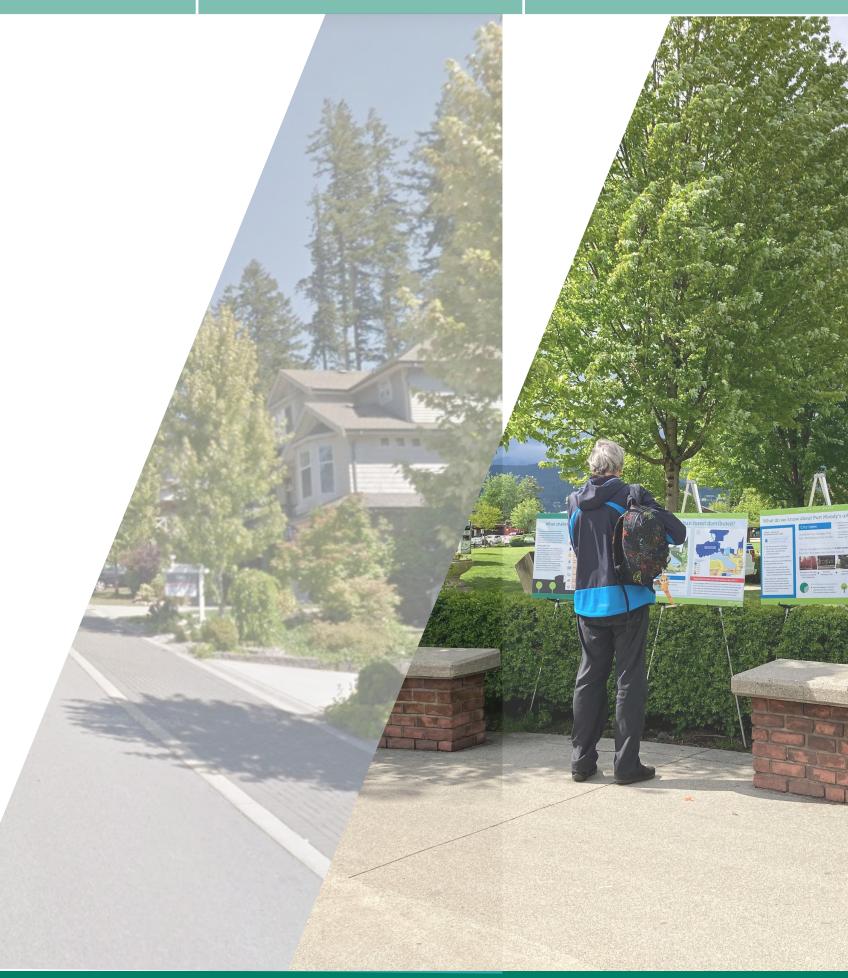
HOW TO USE THIS DOCUMENT

The **Planting Plan** outlines the strategies for what, where, how, and when trees should be planted within the City's road rights-of-way. It serves as a clear guide for staff, consultants, developers, and the public, for how the City intends to implement its vision and priorities for expanding the urban forest along streets over the next ten years.

The **Planting Plan** includes five major sections and two appendices including:

- 1. Introduction
- 2. Program focus areas and planting priorities
- **3.** 10-year planting plans
- **4.** Planting guidance for high-density development areas
- **5.** General planting plan for street and neighbourhood boulevards

Appendix 1. Species Palette

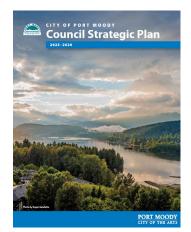


POLICY CONTEXT

Several City policies provide guidance that informs this Planting Plan, including the:

- Council Strategic Plan;
- Official Community Plan;
- Urban Forest Management Strategy;
- Master Transportation Plan;
- Chines Integrates Stormwater Management Plan;
- Specifications and Standards for Landscaping on City Lands;
- Climate Action Plan.

This section briefly describes the relevance of each policy document to this Planting Plan.

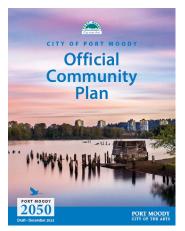


Council Strategic Plan

The Planting Plan is informed by higher-level City policies. The City of Port Moody's Council Strategic Plan (2023-2026) envisions embracing nature and the arts to create the most liveable city in the world. Ensuring a resilient natural environment is one of its four strategic priority areas. It sets three strategic goals to be actioned by City staff:

- 1. Protect, integrate and enhance our natural assets;
- 2. Advance climate change mitigation and adaptation;
- 3. Enhance and expand parkland and open spaces.

Goal 1 includes commitments to strengthen the City's urban forest and expand its green infrastructure. As part of this, the City is developing this Planting Plan to support staff in providing clear guidance for tree planting for updates to the zoning bylaw and other relevant policies.



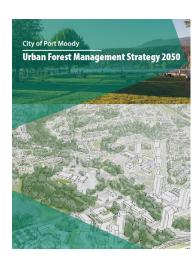
Draft Official Community Plan

Port Moody's draft Official Community Plan (OCP) contains 17 policy statements relevant to the City's urban forest program, including expanding the urban forest through new tree planting in streets and parklands. The City's Climate Action Plan also acknowledges the role of the urban forest in creating a safe, sustainable community.

Community Vision:

Port Moody, City of the Arts, is a unique, safe, vibrant waterfront city of strong neighbourhoods; a complete community that is sustainable and values its natural environment and heritage character as well as:

- Protecting, remediating and enhancing the community's environmentally sensitive resources, recreation areas and heritage assets for public use and enjoyment;
- Encouraging developments that respect the community, are functional, universally accessible, exhibit good urban design and are environmentally sound;
- Seeking a balance between environmental, economic, social and cultural sustainability in all decision-making.



Urban Forest Management Strategy

The <u>Urban Forest Management Strategy</u> (UFMS) provides a framework for implementing the City's canopy cover target through five goals, including planting. The UFMS assessed the City's planting program for several criteria and identified areas of improvement, mainly to increase equity in planting program delivery.

The Planting Plan is the direct result of Action 18: "Develop a 10-year urban tree planting program to prioritize areas on public land with low tree equity and declining service value, supported by an inventory of 'vacant' boulevard planting sites that considers conflicts with utilities and planned capital works." Several other UFMS actions, listed in **Table 1-1**, will be advanced by the Planting Plan.

Table 1-1. Associated strategies and actions relevant to tree planting from Port Moody's UFMS.

Strategy	Action	Timeline	Cost ¹	Responsibility ²
Strategy 4 Improve tree planting	Action 12 – Incorporating interim tree standards in the Subdivision Servicing Bylaw.	Y1-Y3	\$\$	E&P, Eng
environments to support tree survival	Action 13 - Ensuring new applications for green infrastructure are inventoried in GIS and include visible marker.	Y1-Y3	\$	E&P, Eng
and health.	Action 14 – Update engineering standards and specifications to desired minimum boulevard planting strip widths of 2 meters, or 1.8 meters with irrigation.	Y1-Y3	\$\$	E&P, Eng
	Action 15 – Develop public realm design standards for structural soil, soil cells, etc.	Y1-Y3	\$\$\$	E&P, Eng, P
Strategy 5 Plant trees to enhance ecosystems	Action 18 – Develop a 10-year urban tree planting program to prioritize areas on public land with low tree equity and declining service value.	Y1-Y3	\$\$	E&P
and maintain stable and equitable tree	Action 19 – Develop a 'partnership tree' program 19 – Develop a 'partnership tree' program.	Y1-Y3	\$\$\$	E&P
canopy cover over time.	Action 20 – Partner with School District 43 and other community organizations to plant trees and address maintenance.	Y1-Y3	\$\$	E&P
	Action 22 – Develop capital program to retrofit green infrastructure and tree canopy into low tree equity blocks.	Y5-Y10	\$\$\$\$	E&P, ENG
Strategy 6 Improve the quality and suitability of trees	Action 23 – Consider Metro Vancouver Urban Forest Climate Adaptation Initiative materials when making species selection decisions for urban trees.	Y1-Y3	\$	E&P
being planted for the site and climate requirements.	Action 24 – Develop street and park tree species selection guidelines.	Y3-Y5	\$\$	E&P

^{1 \$} Staff time or already in budget, \$\$ <\$20,000, \$\$\$, \$20,000-\$100,000, \$\$\$\$ >\$100,000

² E&P - Environment and Parks, Eng - Engineering, P - Planning

Introduction

OTHER RELEVANT POLICIES

- The City's **TransPort Moody** also encourages the provision of attractive green streetscapes that encourage pedestrian activity (Action B.1).
- The Chines Integrated Stormwater Management Plan (2016) identified the importance of street trees in vegetated medians and boulevards of arterial road rights-of-way for stormwater management.
- The City's **Landscaping on City Lands Specifications and Standards** provide technical standards for landscaping on City land including boulevards, greenways, and parks. The technical standards are referenced in the Planting Plan wherever relevant and are included in the Landscaping on City Lands Specifications and Standards for Planting Design Criteria.
- The **Climate Action Plan** identifies the Natural Environment as a focus area for mitigating and adapting to climate change, wherein tree planting is an important initiative. The plan highlights natural co-benefits that are typically provided by trees such as air purification, carbon-sequestration and reducing the urban heat island effect.

1.1 GUIDING PRINCIPLES

The following principles guide decisions on what, how and where trees should be planted in Port Moody's streets and along park edges:

- 1. Select the **right tree for the right place**, balancing competing requirements between below and above ground utility infrastructure and green infrastructure;
- 2. Ensure compatibility with underground and overhead utilities³;
- Select the **largest tree suitable** for the site to maximize canopy cover potential;

- Enhance community character and aesthetics;
- 7. Mitigate and adapt to climate change by increasing **urban forest resilience** and by leveraging its capacity to intercept stormwater, sequester carbon and cool urban areas;
- 9. Collaborate with **interested parties** to identify and **mitigate conflicts** with infrastructure and community values;
- 10. Distribute **canopy cover**, and the associated ecosystem services, **equitably** across the population;
- 11. Protect Port Moody's unique **cultural identities** and its **heritage**;
- 12. Enhance the **beauty**, **diversity** and **uniqueness** of neighbourhoods;
- 13. Enhance **pedestrian comfort**, accessibility, community health and safety;
- 14. Apply **best management practices** and **innovation** in tree planting.

Prioritize the **quality of tree health** and canopy outcomes over the quantity of trees planted; Enhance **natural habitat areas**, biodiversity and connectivity; Provide reliable, effective and efficient service:

New planting sites will be reviewed by Engineering on a project-by-project basis to ensure they will not conflict with future infrastructure, transportation or development projects.



PROGRAM FOCUS AREAS AND PLANTING PRIORITIES

2.1 PLANTING PROGRAM FOCUS AREAS

The planting plan recommends three distinct areas for planting, including street boulevards and park edges, neighbourhood boulevards, and high-density development, including (**Figure 2-1** and **Map 2-1**):

- 1 Street boulevards and park edges Planting strips along city boulevards and park edges that will be planted as part of the City's annual tree planting program.
- 2 Neighbourhood boulevards Planting along city boulevards in residential areas that will be planted through the 'Adopt a Tree program' (a partnership between the City and adjacent resident). Residents will request a tree be planted by the City along their frontage, and residents will help water the new city tree.
- **High-density development** New streetscapes in high-density developments must include street trees. This document provides guidelines to inform the design of tree plantings in new streetscapes and in 'urban forest nodes'⁴.

Figure 2-1. Planting program focus areas in Port Moody.

7 | City of Port Moody

HIGH DENSITY DEVELOPMENT STREET BOULEVARDS AND PARK EDGES **NEIGHBOURHOOD BOULEVARDS**

Urban forest nodes are a concept for an in-ground planting location that will support 'legacy trees' (trees that could reach their genetic potential and live/be retained beyond the life expectancy of engineered infrastructure; ideally >100 years). Legacy tree species should be long-lived and have high biodiversity and/or cultural value as large, mature trees (e.g., western redcedar, Douglas-fir, sequoia, scarlet oak, American elm etc.).

Program Focus Areas and Planting Priorities

2.1 PLANTING PROGRAM FOCUS AREAS (CONTINUED)

Street Boulevards and Park Edges

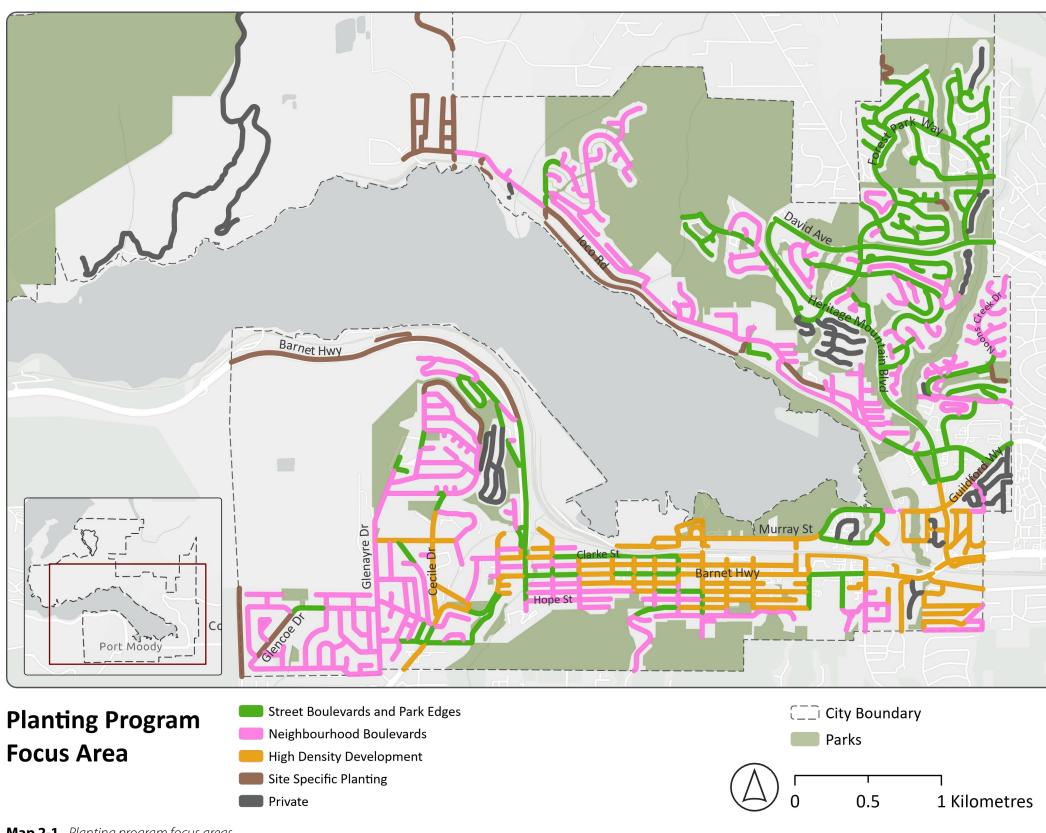


Neighbourhood Boulevards



High Density Development





Map 2-1. Planting program focus areas.

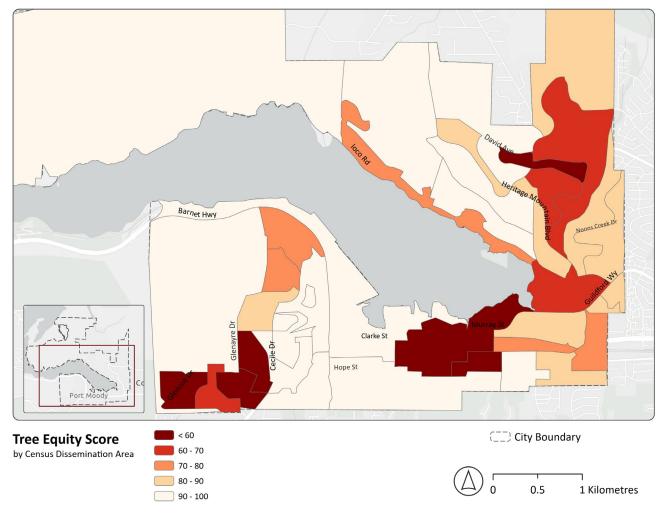
ction Program Focus Areas and Planting Priorities 10 Year Planting Plans Planting Guidance for High-Density Development General Planting Planting Planting Planting Flanting Planting Flanting Planting Guidance for High-Density Development

2.2 TREE PLANTING PRIORITIES

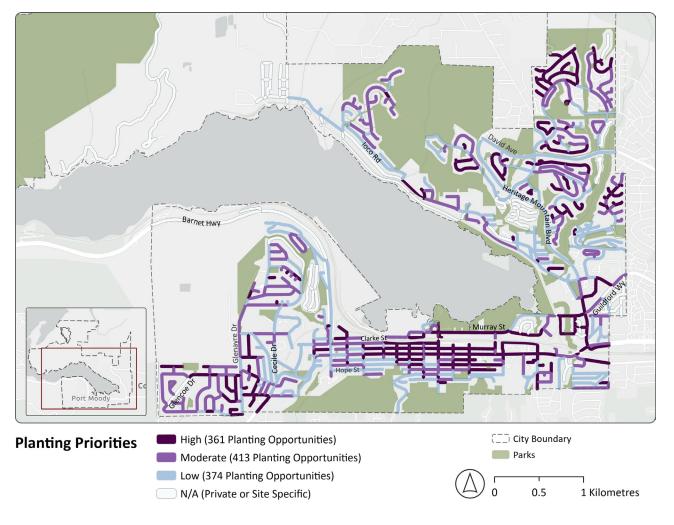
Port Moody's <u>Urban Forest Management Strategy</u> identified several areas of the City with low tree equity, meaning that they were locations with low tree canopy, above-average land surface temperatures and populations of people who may be more vulnerable to heat and climate impacts (**Map 2-2**). Tree equity was calculated at a neighbourhood block scale that was too coarse to prioritize streets. Elements of the Tree Equity Score were used to prioritize street tree planting at the street block scale, along with the presence or absence of existing street trees or tree canopy (**Map 2-3**). Streets were prioritized based on:

- Land surface temperature, with the hottest streets being highest priority;
- Population density, with the most populated streets being highest priority;
- Canopy cover, with the lowest canopy cover streets being highest priority.

Streets that were within the street boulevards and park edges program focus area also factored in street tree density, with the lowest street tree density being highest priority.



Map 2-2. Port Moody's tree equity score (lower score = lower tree equity).



Map 2-3. Planting priorities by street.

11 | City of Port Moody

troduction Program Focus Areas and Planting Priorities 10 Year Planting Plans Planting Guidance for High-Density Development General Planting Plant



10-year planting plans have been prepared for streets that fall into two program focus areas:

- 1. Street boulevards and park edges that will be planted through the City's planting program;
- 2. Neighbourhood boulevards that will be planted through the Adopt a Tree program.

The planting plans address the recommended planting schedule based on priorities and quantify the opportunities, anticipated costs, and canopy gain associated with implementing the plan.

3.1 STREET BOULEVARDS AND PARK EDGES (CITY TREE PLANTING PROGRAM)

Street boulevards and park edges are locations the City will plant, with new or replacement trees, as part of the annual street tree planting program (**Map 3-1**):

Objectives:

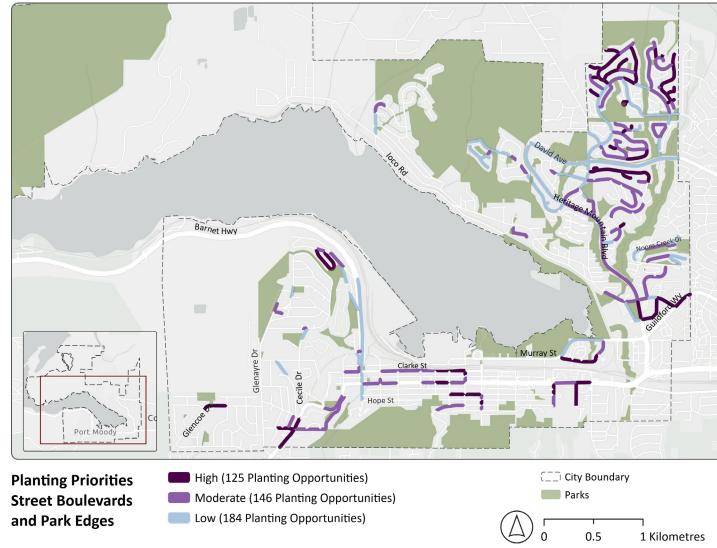
- Plant all available opportunities in street boulevards and along park edges (Figure 3-1);
- Maximize canopy cover potential by planting the largest species suitable for the site conditions;

• Distribute tree canopy cover, and its associated benefits, equitably across the city;



Figure 3-1. Street boulevards and park edges in Port Moody.

3.1.1 Planting priorities and opportunities in street boulevards and park edges



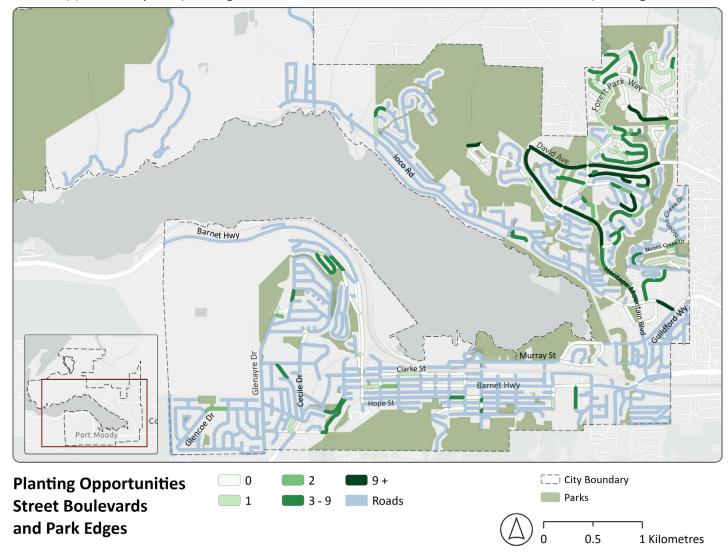
Map 3-1. Street boulevard and park edge tree planting priorities (street boulevards and park edges will be planted and maintained by the City).

Tree Planting Master Plan

Introduction Program Focus Areas and Planting Priorities 10 Year Planting Plans Planting Guidance for High-Density Development General Planting Pla

3.1 STREET BOULEVARDS AND PARK EDGES (CITY TREE PLANTING PROGRAM) (CONTINUED)

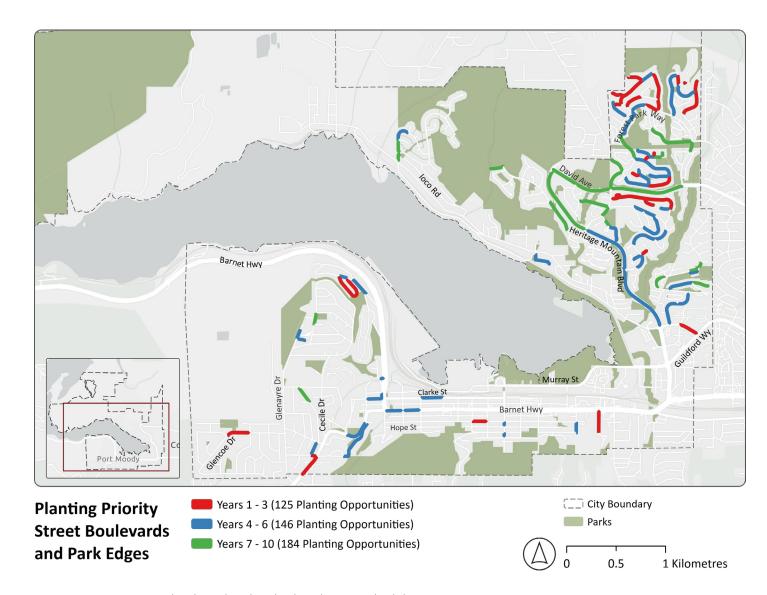
In total, approximately 450 planting locations have been identified in street boulevards and park edges.



Map 3-2. Street boulevard and park edge planting opportunities.

3.1.2 10-year planting schedule

Approximately 50 street trees per year will be planted in accordance with the priorities shown in Map 3-3.



Map 3-3. 10-year street boulevard and park edge planting schedule.

3.2 PLANTING PLAN FOR NEIGHBOURHOOD BOULEVARDS (ADOPT A TREE PROGRAM)

Neighbourhood boulevards are in residential streets where sidewalks are not always present. Often, boulevards are adjacent to front yards and fragmented by driveways. Planting along neighbourhood boulevards is initiated by residential requests through the City's Adopt a Tree program. Residents will help maintain requested trees (e.g. watering).

Objectives:

- Plant all locations in neighbourhood boulevards, starting with low equity neighbourhoods;
- Maximize canopy cover potential by planting the largest species suitable for the site conditions;
- Distribute tree canopy cover, and its associated benefits, equitably across the city;
- Support local biodiversity and connectivity;
- Enhance community character and aesthetics;
- Educate the community about the benefits of trees;
- Engage the community in caring for young trees.



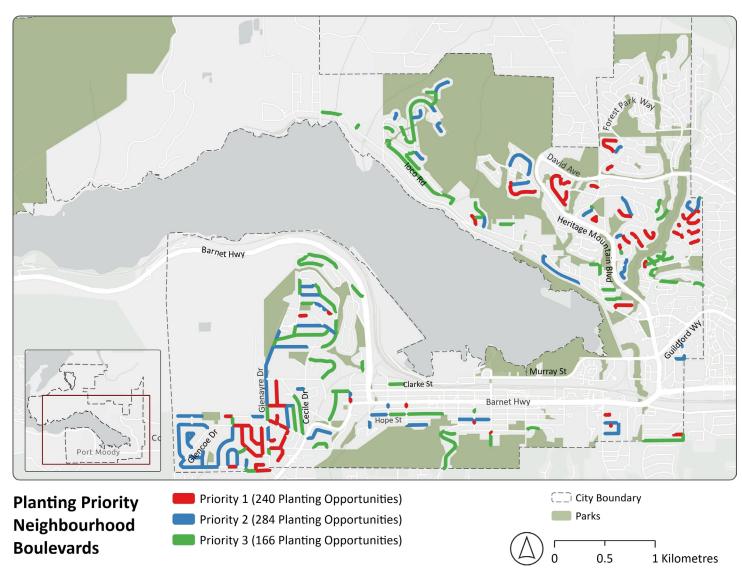


City of Port Moody

ntroduction Program Focus Areas and Planting Priorities **10 Year Planting Plans** Planting Guidance for High-Density Development General Planting Planting Planting Planting Planting Planting Planting Guidance for High-Density Development

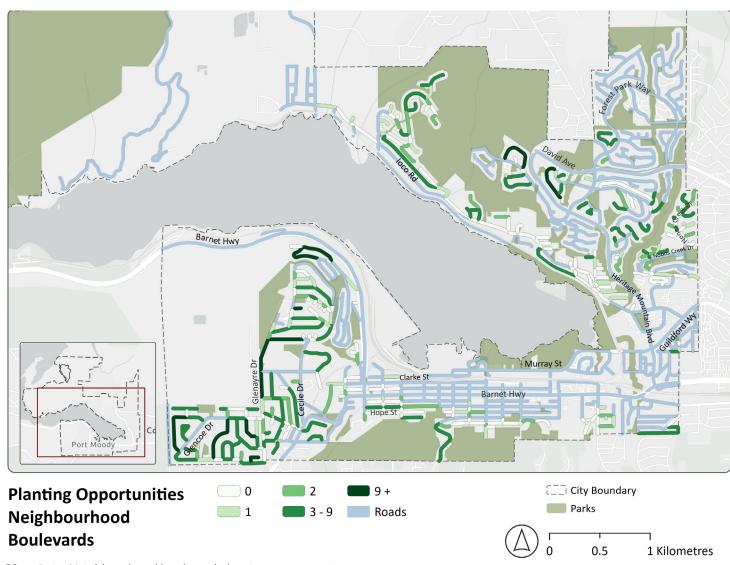
3.2 PLANTING PLAN FOR NEIGHBOURHOOD BOULEVARDS (ADOPT A TREE PROGRAM) (CONTINUED)

3.2.1 Planting priorities and opportunities in neighbourhood boulevards



Map 3-4. Neighbourhood boulevard planting priorities (neighbourhood boulevards will be planted upon request, and trees will be watered by the resident who requested the tree).

In total, approximately 450 planting locations have been identified in neighbourhood boulevards.



Map 3-5. Neighbourhood boulevard planting opportunities.

Program Focus Areas and Planting Priorities 10 Year Planting Plans Planting Guidance for High-Density Development General Planting Guidance for High-Density Development

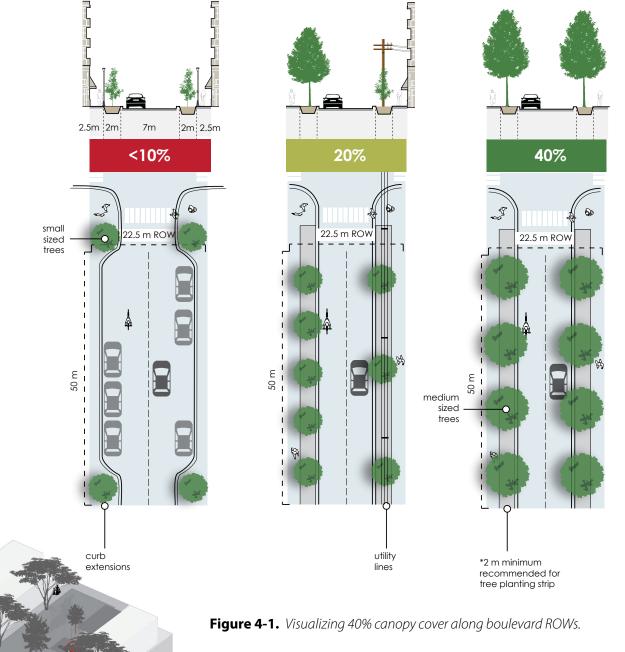


PLANTING GUIDANCE FOR HIGH-DENSITY DEVELOPMENT AREAS

Higher-density development is planned for several locations in Port Moody. Development provides an opportunity to create planting spaces in and adjacent to streetscapes. Typically, street trees in high-density areas are planted into tree pits or planters to maximize the hardscape area for pedestrian traffic, signage and street furniture. Sometimes, there are opportunities to allocate space for trees on the private realm. There are often challenges with planting trees in both boulevards and on High-Density Development sites due to minimal growing space below grade. Therefore, the City is encouraging these spaces to be consolidated into 'urban forest nodes' that will support small groves of trees in high density areas and create connectivity between trees and pervious areas in the public and private realm.

Objectives for planting in high-density development areas:

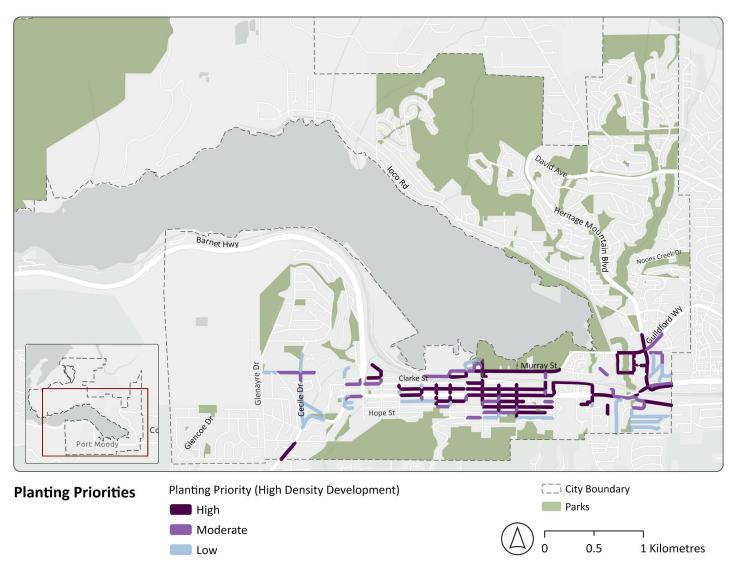
- Maximize tree canopy cover over streetscapes, aiming for at least 40% canopy cover on average (see **Figure 4-1**), while balancing constraints including sightlines, utilities, and soil volume.
- Create opportunities for urban forest nodes and/or unique planting spaces in the ground (i.e., not on structure) that will support 'legacy trees' (trees that could reach their genetic potential and live/be retained beyond the life expectancy of engineered infrastructure; ideally, >100 years).
- Create a network of street and legacy trees throughout highdensity areas that provide various benefits including nativeness of vegetation, structural complexity and biodiversity, bird and pollinator habitat, cooling, rainwater interception, beautification and places for quiet contemplation.



To achieve canopy cover targets in streets, it is more efficient to plant fewer, large tree species than many small tree species. One large tree that reaches maturity provides significantly more canopy cover and ecosystem services than a small tree. **Figure 4-1** shows how a street planted with large trees can achieve higher canopy cover, based on the number of trees that can potentially fit and the resulting canopy cover outcome. In reality, it is rarely possible to achieve continuous street tree planting due to other critical infrastructure, making it more of an imperative to plant fewer trees but larger tree species.

ction Program Focus Areas and Planting Priorities 10 Year Planting Plans **Planting Guidance for High-Density Development** General Planting Plan

4.1 STREET PLANTING PRIORITIES IN HIGH-DENSITY DEVELOPMENT AREAS



Map 4-1. Planting priorities in high-density development areas.

4.2 PLANTING GUIDELINES FOR HIGH-DENSITY DEVELOPMENT

- See the Landscaping on City Lands Specifications and Standards for planting Design Criteria.
- Use the largest species suitable for the site conditions.
- Create the largest open planting area/tree pit size suitable for the site conditions.
- Use species cultivars with a more natural, spreading form where possible, rather than upright or fastigiate cultivars (ensure that branching can be maintained at a suitable clearance height for vehicle traffic and signage).
- Avoid planting trees on structure but, where unavoidable, provide soil depths of 1 metre if trees will be planted on structure.
- In streets:
 - o Use soil cells under sidewalk and hardscape areas to support tree planting (specify installation of pavement markers to indicate where soil cells are installed). Connect soil volume where possible.
 - o Integrate <u>stormwater infiltration features</u> such as bioswales, berms, rain gardens, French drains, bioretention tree pits, permeable hardscapes or infiltration trenches in street designs where possible to redirect stormwater runoff.
 - o Integrating shrubs, grasses and groundcover to enhance biodiversity and discourage soil compaction and mechanical damage to trees.
 - o Minimum planting clearances, soil volume and spacing should be based on the requirements in the Landscaping on City Lands Specifications and Standards.
 - o Install automatic drip irrigation where trees are growing in predominantly hardscape boulevards.
 - o Use planting or permeable materials rather than impermeable paving where practical.
 - o Along street frontages, vary species by block (minimizing Acer/maple due to its current dominance).
 - o Assess soil conditions (i.e., compaction, texture, moisture), test if concerned about contamination or nutrients, and amend when needed.
 - o Maximize the width of tree pit or boulevard openings to increase air and water infiltration. The preferred minimum width is 2 metres.
 - o Where tree pits must be covered, explore alternatives to tree grates, such as bonded gravel or removable panels to reduce costs and future maintenance challenges. Alternatives to tree grates are desirable because they can girdle trees as they grow, damage them as they sway in the wind, and can also be difficult to clean.

ntroduction Program Focus Areas and Planting Priorities 10 Year Planting Plans **Planting Guidance for High-Density Development** General Planting Planting Planting Planting Flanting Planting Planting Guidance for High-Density Development

- In urban forest nodes:
 - o Prioritize the location of nodes around existing mature legacy trees when possible.
 - o Nodes should be in locations with the potential to be retained even if future redevelopment occurs. Pending Engineering review and approval, the placement of the nodes must not interfere with existing or future streetlights, pedestrian lights, sightlines, traffic signal visibility, or future pedestrian or cycling infrastructure construction projects.
 - o Prioritize native trees and conifer species where possible.
 - o Legacy trees should be long-lived and have high biodiversity and cultural value as significant, mature trees (e.g. western redcedar, Douglas-fir, sequoia, scarlet oak, American elm, etc.).
 - o Plant or retain trees in groups of three or more. Retention of legacy trees should be outside of the future pedestrian, cycling, or roadway improvement projects to minimize the need to remove them in the future.
 - o Plant understory shrubs, prioritizing native species that are low maintenance and drought-tolerant; ensure budget considerations include ongoing resources to maintain understory shrubs. Refer to the City of Port Moody's <u>preferred plant list</u> for selecting appropriate native plants for your area.
 - o Integrate green infrastructure where possible (e.g. rain gardens, bioswales).
 - o Install water service access for hand watering.
 - o Provide sufficient in-ground soils to sustain large trees, allowing them to reach their full genetic potential and persist for 100 years or more.
 - o Provide at least 0.6 m³ of soil volume per 1 m² of canopy cover.
 - o Soils should be connected wherever possible to enable below ground connections between roots, air and water percolation and soil microbes.
 - o In plaza areas, consider the use of raised planters to provide seating, minimize compaction, and increase soil volume for trees.
 - o Consider proximity to infrastructure and the limitations that the mature canopy of long lived trees will have on future maintenance activities, particularly adjacent to road, paving and sidewalk replacements.
 - o Incorporate passive rainwater management by directing roof runoff into planting areas and shaping the site to guide flow, using optional cisterns, rain gardens or rock-lined swales, and curb cuts that channel street runoff into the boulevard to increase rainwater retention.

The following pages provide conceptual design guidance for visualizing small, medium, and large urban forest nodes.

Summary of expected canopy cover gains, benefits and costs

Towards the urban canopy cover target of 31% (from 28%).

Planting plan class	Trees planted by 2035	Estimated canopy gain by 2080 (ha)	Benefits calculated from i-Tree canopy by 2080	Estimated cost per tree (planting and establishment)	Estimated total cost
Street boulevards and park edges	450	3.4	\$0.9 million	\$1,400	\$630,000
Neighbourhood boulevards	700	5.3	\$1.5 million	\$800	\$560,000
High-density development		9.8	\$2.6 million	Cost borne by developer	Cost borne by developer
Totals		18.5			

Assumptions:

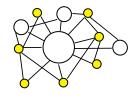
- Average canopy area per street tree by 2080 (55 years): 75 m² (~10 m spread)
- Streetscape area of high-density development: 67.5 ha;
- Current canopy area of high-density development streetscapes: 10.5 ha (15.5% cover).

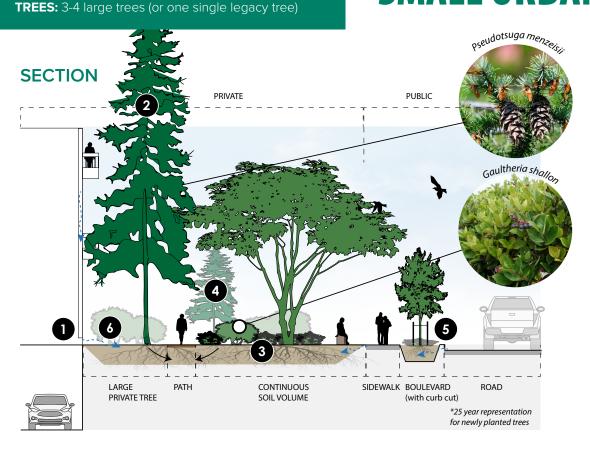


The planned canopy gain by 2080 is 18.5 ha, or an increase of 2% towards the canopy cover target.



SMALL URBAN FOREST NODE





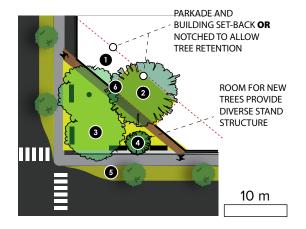
RECOMMENDATIONS

- Push back or notch parkade/building to enable retention of existing large tree(s).
- Prioritize nodes around established mature trees so that younger stock can benefit from the shelter, improved soil conditions, and stability they provide for healthy development.
- Provide water service and light irrigation for drought-conditions and for young-tree and understory plant establishment only.
- Pilot diverse genetic stock of native conifers to maintain biodiversity in a changing climate.
- 5 Install monolithic boulevard if additional space needed for node.

6 PASSIVE RAINWATER MANAGEMENT (ALL)

Maximize rainwater retention from roof and direct into planting. Slope site where indicated by arrows in each section. Optional cistern, raingarden, and/or rock-lined swale to increase capacity. Curb cuts in boulevard allow for rainwater flow from street into boulevard.

PLAN



PRECEDENTS

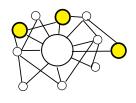


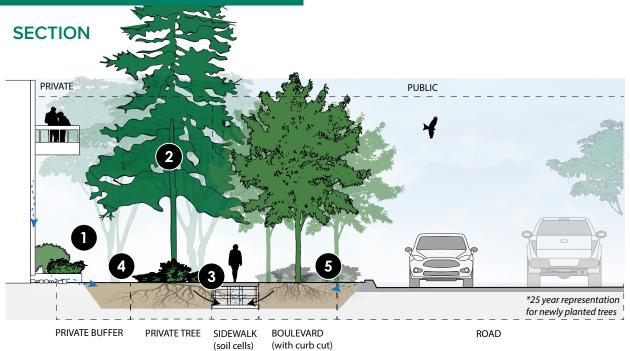
8+ storey private single specimen conifer tree retained (Google, 2024)



6 storey development with small conifer node on corner lot (Google, 2024)

MEDIUM URBAN FOREST NODE

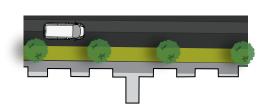


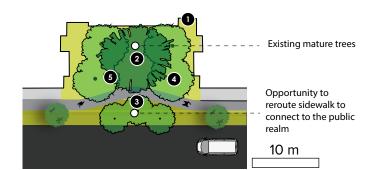


RECOMMENDATIONS

- Incorporate planters into private patio with irrigation for establishment only.
- Prioritize nodes around existing 'hub' trees in groups of 3 or more and with opportunities to establish younger stock around the mature 'mother' tree.
- For new trees, connect soil volumes under public sidewalks using engineered soil cells. Maximize the public boulevard width to extend the node character to the street.
- Provide water service and light irrigation for droughtconditions and for young-tree and understory plant establishment only.
- Plant understory plants that are low maintenance and drought tolerant, minimizing compaction and providing habitat. See callout below for recommended plants with minimal bear attractiveness.

PLAN





PRECEDENTS



3 storey private building setback with mature conifers (Google, 2024)



20+ storey development with corner setback grove and understory vegetation (Google, 2024)

What understory plants for shade are recommended?

- Arctostaphylos uva-ursiO. ◆ •
 - Hellebore sp.
- Achillea millefolium* •
- Oemleria cerasiformis*○ .

- Cornus sericea* •• Epimedium sp. O
- Polystichum munitum*
- Rosa nutkana* ❖

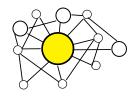
- Symphoricarpos albus*O
- Tolmiea menziesii*
- Vancouveria chrysantha 🔾
- Pachistima myrsinites*○ .

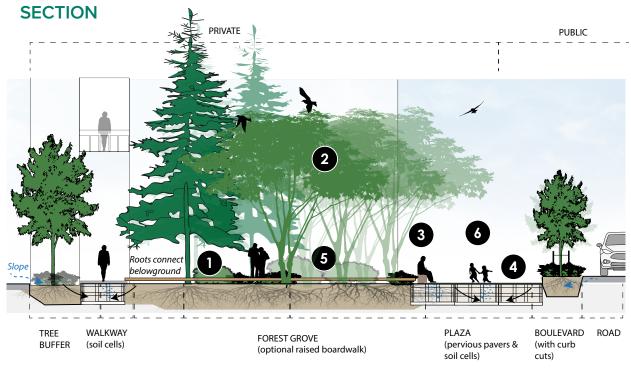
*Native

O Drought tolerant once established • Requires partial sun

TREES: 10-15 medium/large trees

LARGE URBAN FOREST NODE



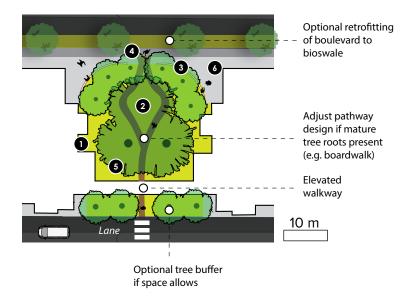


*25 year representation for newly planted trees

RECOMMENDATIONS

- Incorporate planting into private patio with irrigation for establishment only.
- Select coniferous and/or deciduous trees to complement space use, providing recommended 9-11 meter spacing.
- Provide benches to limit compaction. Decking could provide increased protection from root compaction.
- Connect soil volume with boulevard using curb cuts to allow plaza filtration; can be modified with soil cells to increase volume of soil, provided that existing trees are not significantly under plaza.
- Plant understory using low maintenance planting to minimize compaction and provide habitat. Install irrigation for initial understory plant establishment only with supplemental water for drought conditions.
- Install permeable pavers to allow water filtration from plaza to trees.

PLAN



PRECEDENTS



Cutouts with shrubs and benching in Seattle, Washington (Google, 2024)



Curb cut street tree row in Jim Deva Plaza, Vancouver, British Columbia (Google, 2024)

Introduction Program Focus Areas and Planting Priorities 10 Year Planting Plans Planting Guidance for High-Density Development General Planting Plan



GENERAL PLANTING PLAN FOR STREET AND NEIGHBOURHOOD BOULEVARDS

The following guidance summarizes best practices for tree planting on public land in Port Moody, including streets, park edges, and neighbourhood boulevards. For approved high-density development, the City's Specifications and Standards for Landscaping on City Lands (2020) for tree planting techniques should be followed to meet landscaping requirements. The planting plan for street boulevards provides best practices guidance for:

- **5.1** Site selection;
- **5.2** Species selection;
- **5.3** Stock selection;
- 5.4 Planting design;
- **5.5** Site preparation;
- **5.6** Planting techniques;
- **5.7** Maintenance, monitoring and replacement plan;
- **5.8** Engaging the community in planting.

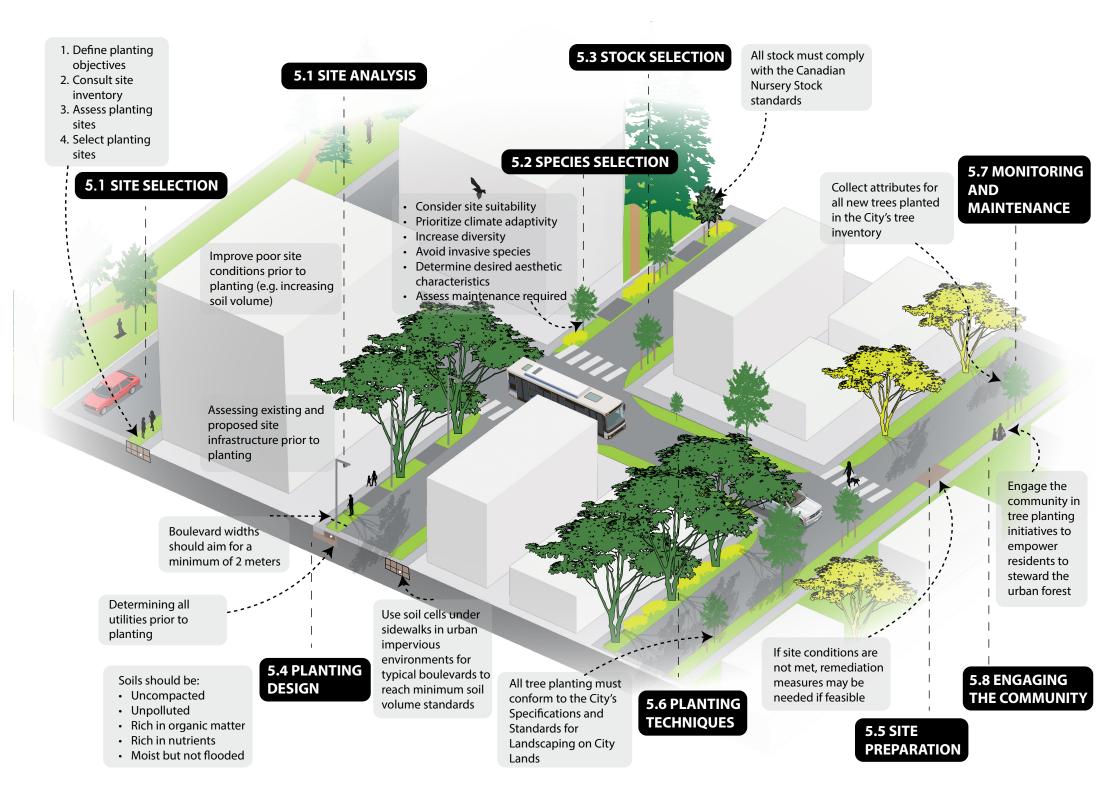


Figure 5-1. Best practices for planning tree planting.

Introduction Program Focus Areas and Planting Priorities 10 Year Planting Plans Planting Guidance for High-Density Development General Planting Plan

5.1 SITE SELECTION

Section 2 provides the approximate locations for planting in streetscapes. This section describes the specific criteria that were used to select planting sites. Site selection will be reviewed to ensure compatibility with City objectives. Once confirmed, Engineering and Operations staff will conduct ground-based surveys and BC 1 call inquiries to determine site suitability and identify below-ground conflicts. Sites will then be refined based on the site analysis criteria described below.

5.1.1 Site analysis criteria

City objectives for the Planting Plan include:

- Planting in low tree equity streets and in neighbourhood boulevards where residents request trees;
- Maximizing canopy cover potential by planting the largest species suitable for site conditions;
- Distributing tree canopy cover and its associated benefits equitably across the city;
- Prioritizing hot, densely populated streets with low canopy cover;
- Supporting local biodiversity and connectivity;
- Enhancing community character and aesthetics;
- Educating the community about the benefits of trees;
- Engaging the community in caring for young trees.

Where sites meet one or more of these objectives, they are assessed using the criteria described in **Table 5-1.**

Table 5-1. *Site analysis criteria.*

Criteria	Description	How it will be incorporated
Conflicts Height and space requirements	Above and belowground utility conflicts, hardscape surfaced, and clearance and sightline requirements.	The size, location and depth of all existing site services and sub-surface utilities will be identified prior to commencement of the work. Trees will not be planted where their long-term growth would significantly conflict with existing or future above- and below-ground utilities, or clearance and sightline requirements. Sites with insufficient room due to the size of the boulevard or the presence of hardscape, softscape, or other site services will be selected if they meet, or can be modified to meet, the conditions for long-term tree survival. Trees will be planted with the proper protections to ensure no uplifting of sidewalk panels.
		Trees will be sited according to the Landscaping on City Lands Specifications and Standards, and clearance distances will be reviewed and determined by Engineering. In addition, street trees should not be planted within 10m of existing and future signalized intersections as this may damage underground electrical conduits for streetlighting and traffic signals.
Soil conditions	Adequate soil volume, assessment of soil quality, texture and drainage.	Trees will not be planted where there are rock barriers or soil conditions that will not sustain a healthy tree (tree in at least good condition using the CTLA Condition Rating System). Following the procedures identified in the Landscaping on City Lands Specifications and Standards.

Maintenance access	Site accessibility for maintenance.	Selected sites can be easily or reasonably accessed for proposed watering, pruning, and other maintenance activities.
Pests & pathogens	Existing and expected pest and disease issues.	The existing and expected presence of significant pests and disease issues precluded the use of species susceptible to those pests and pathogens. Specifically, <i>Fraxinus</i> (ash) is not being planted presently due to the detection of Emerald Ash Borer in Vancouver.
Site microclimate	Variations in microclimate that could impact the success of the species (e.g. wind, shade, etc.).	Whenever possible, sites were selected with favourable sun, wind, and other environmental conditions that would support the growth of most tree species selected for planting.
City goals and objectives	Alignment with municipal goals and objectives identified across plans and policies.	The policy context for the current planting is identified in the Introduction.
Urban forest benefits	Placement in the landscape to maximize potential planting sites and tree benefits.	Boulevard plantings are to be prioritized near streets in low canopy locations with high land surface temperature and high population density to equitably increase access to the urban forest's benefits where they are most needed.
Streetscape aesthetics and function	Tree spacing and positioning.	Trees will be spaced at regular intervals based on their projected size at maturity. They will provide safe refuge from vehicles for pedestrians passing along the road, address driver visibility and avoid blocking sightlines, and meet the minimum clearance and sightline requirements per Landscaping on City Lands Specifications and Standards.

5.1.2 Soil analysis

On-site growing medium will be used when feasible and if it meets the requirements in Landscaping on City Lands Specifications and Standards. Imported growing media must be tested from the supply source prior to installation and must meet the specifications in the Landscaping on City Lands Specifications and Standards. Inspection and testing will follow the standards described in the Topsoil and Finish Grading Section of the Landscaping on City Lands Specifications and Standards.

5.1.3 Internal engagement process

Site selection will need to consider the transportation, infrastructure, development and operational goals and safety of multiple City Departments, including Engineering and Planning. All planting locations will be reviewed in collaboration with these departments and will be determined by Engineering.



Tree Planting Master Plar

ion Program Focus Areas and Planting Priorities 10 Year Planting Plans Planting Guidance for High-Density Development **General Planting Plan**

5.2 SPECIES SELECTION

Selected species have been chosen for their resilience to urban conditions and compatibility with the site's characteristics (See **Appendix 1. Species Palette** for full species list). Factors such as soil type, sunlight availability, and space constraints were considered to ensure the trees can thrive. Many species are well-suited to tolerate heat, drought, or fluctuating soil moisture, which helps the urban canopy adapt to changing climate conditions. The selection also adheres to local regulations, avoiding invasive species and prioritizing native or well-adapted non-native species.

The final species selection will be determined based on input from interested parties, stock availability, and the selection criteria identified in **Table 5-2**. It must also meet the Landscaping on City Lands Specifications and Standards and require approval by the City's Urban Forestry Department.

5.2.1 General guidance for species selection

Use species selection to:

- Maximize benefits for climate adaptation and biodiversity and minimize risks of wind breakage, pests and disease, and infrastructure conflict;
- Provide year-round interest and visual cues for moving between different land uses (e.g., residential, commercial, park, or school);
- Strengthen the character of different locations by creating features of seasonal interest, visual diversity or uniformity as appropriate;
- Vary species by block or, where planting character is already mixed, continue to mix species;
- Favour deciduous species except when boulevards are as wide as mature canopy width and avoid planting conifers where they will shade buildings or streets in winter;
- When winter shading and planting space is not limiting, plant evergreens for habitat, stormwater interception, screens and on the northern and eastern streets bordering parks as windbreaks;
- Provide occasional fruiting trees where the community requests them, provided that the boulevard width is adequate to prevent fruit from falling on sidewalks or parking lots and that wildlife attractant risk is mitigated.

Table 5-2. *Site analyses used to inform species selection.*

Criteria	Description	How it will be incorporated
Site suitability	Ability of the species to grow with good vigour and maintain good health in the proposed planting site.	Species tolerant of each site's microclimate are selected based on an assessment of whether existing site conditions and proposed site preparation will enable the species to grow to maturity with good health and vigour. This includes consideration of whether the species has a natural form suitable for the site and nearby buildings or infrastructure. Suitable sun, wind, and moisture conditions must be verified to ensure they align with species requirements. Wherever possible, the largest canopy tree species suitable for the site is prioritized.
Climate suitability	Suitability of the species for Port Moody's climate and streetscape planting.	Selected species are expected to tolerate the region's projected climate, including extreme heat events and extended drought. Guidance on tree species selection under changing climate conditions is drawn from the Urban Forest Climate Adaptation Framework for Metro Vancouver (Diamond Head Consulting Ltd., 2017).
Invasiveness	The invasive potential of the tree species selected.	Only species that are non-invasive in the region are selected.
Pests & pathogens	The ability of the species to tolerate pests and pathogens.	Species must also demonstrate high resistance to current and anticipated pests and pathogens. Ash trees, for example, are excluded due to their vulnerability to emerald ash borer, which has recently been introduced to Vancouver.
Maintenance requirements	The expected maintenance requirements of the species.	The expected frequency of pruning and cleanup associated with fruit, seed, or leaf litter is taken into account during species selection, as is the anticipated need for pruning to maintain sight lines.
Species diversity	The contribution of the planting palette to local or regional species diversity.	The City's tree inventory informs choices that promote species diversity at the neighbourhood scale. Existing street tree planting schemes on current frontages are continued where appropriate, and species may be adjusted at road intersections to enhance diversity. The Urban Forest Management Strategy sets a diversity target of no more than 5% of any one species, 10% of any one genus, and 15% of any one family across the street tree population. Use of the <i>Acer</i> genus (maple) is minimized due to its current overrepresentation.
Ecological Value	The habitat value of a species for native fauna.	Where feasible, species that provide food or shelter for native fauna are encouraged.
Availability	The availability of the desired species or stock.	Species availability in nurseries—with respect to height and caliper specifications—is also considered during selection.

troduction Program Focus Areas and Planting Priorities 10 Year Planting Plans Planting Guidance for High-Density Development General Planting Plan

5.3 STOCK SELECTION

5.3.1 Procurement options

Trees will primarily be sourced locally from a nursery that adheres to Canadian Standards for Nursery Stock. These nurseries have been selected for their adherence to quality standards and reliability in providing plant material suitable for the City's needs. The City's Urban Forestry Department will contact nurseries to arrange for a nursery visit to inspect and tag selected trees.

5.3.2 Stock quality

All plant material shall be of good health and vigour with no visible signs of disease, insect pests, damage, or other disfigurements and shall conform to the latest edition of the following standards or as otherwise specified:

- CNLA (Landscape Canada) Canadian Standards for Nursery Stock Current Edition;
- BCLNA Standard for Container Grown Plants Current Edition;
- Landscaping on City Lands Specifications and Standards.

5.3.3 Stock quality

• The minimum caliper sizes for deciduous and coniferous trees are referred to in **Section 1.2.2** of the Landscaping on City Lands Specifications and Standards.

5.3.4 Stock selection criteria

Plant material must meet the standards described in **Section 2.1** of the Landscaping on City Lands Specifications and Standards.

5.3.5 Stock acceptance and storage

5.3.5.1 Source quality control

Trees will be procured only from nurseries that meet the Canadian Standards for Nursery Stock, ensuring uniform grading and health. Prior to shipment, the City's certified arborist will inspect the trees at the nursery to verify that they meet the program's health and size requirements. Trees will be tagged at the nursery for quality assurance and will undergo a final inspection upon delivery.

The trees will be delivered to the City's works yard. This secure facility is equipped with the appropriate infrastructure to care for the trees, ensuring they are properly maintained and monitored until they are ready to be planted.

5.3.5.2 Plant material review at the source nursery

Plant material will not be shipped to the City until it has been reviewed at the source nursery. All plants are subject to review and may be rejected if they do not comply with the previously listed specifications at any time until acceptance at no cost to the City. The trees will be hand-selected by a certified arborist staff member, and selected trees will be tagged at the nursery before being dug out. However, this will not preclude the right to reject these trees at or after delivery to the site.

5.3.5.3 Plant material review at project site

Precautions will be taken during the digging, handling, and shipping of plant material to avoid injury to plants and root systems. All plants will be reviewed upon delivery prior to planting and off-loading. Plant material that does not meet the specifications identified in the Landscaping on City Lands Specifications and Standards will be removed and replaced.



General Planting Plan Introduction

5.4 PLANTING DESIGN

The design and location of boulevard street trees must conform to the Landscaping on City Lands Specifications and Standards.

5.4.1 General guidance for planting in streets

- Maintain significant views by planting trees between properties and selecting sparser canopy trees on east-west streets;
- Select and place trees according to setbacks and clearance needed for underground and overhead utilities, lighting and constraints, and the soil volume available;
- Where overhead powerlines limit space, prioritize planting:
 - 1) large canopy trees on 1 side of the street then,
 - 2) medium canopy trees on 1 side of the street then,
 - 3) small canopy trees on the powerline side;
- Where sidewalks are adjacent to parks, plant a double row of tall, spreading canopy trees when space allows;
- Planting style should be linear and uniform where there are opportunities to create a tree avenue. Elsewhere, planting style should echo the character of the adjacent landscaping;
- Where building setbacks are close to the property line or boulevards are narrow, move tree planting into the parking lane bumpouts if feasible or select small or upright trees;
- Where planting strips are absent, plant trees on the public boulevard adjacent to private land if present;
- Where there are unique planting locations, plant single or small groups of interesting trees as landmarks;
- Where there are views or heritage values, ensure tree placement is sensitive to maintaining view corridors and sight lines to heritage features.

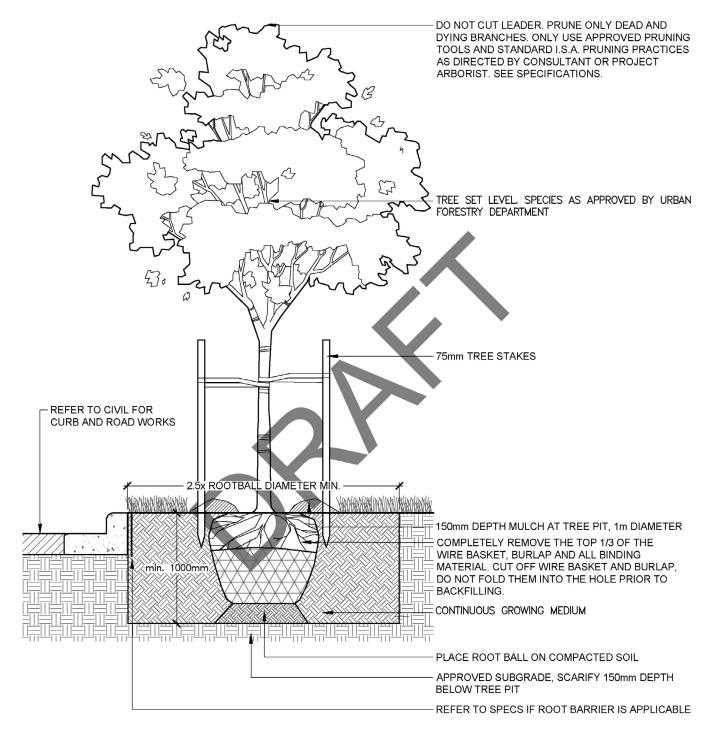
5.4.2 Planting details

5.4.2.1 Soils

Soil quality, volume and amendments must conform to the Landscaping on City Lands Specifications and Standards. Boulevard strips are expected to have continuous soil volumes to the specified depth.

5.4.2.2 Planting detail

All planting will be in continuous softscape areas and in accordance with the tree planting specification in Figure 5-2. The planting detail will be finalized before this work is implemented.



NOTE:

- ALL PLANTING TO MEET OR EXCEED THE CURRENT EDITION OF CANADIAN LANDSCAPE STANDARD (CLS) SCARIFY BOTTOM OF PLANTING PIT PLANTING PIT MUST BE FREE DRAINING REQUIRED SOIL VOLUME DEPENDENT ON TREE SIZE, REFER TO SPECIFICATIONS

Figure 5-2. *Tree planting specification for continuous softscape.*

Introduction Program Focus Areas and Planting Priorities 10 Year Planting Plans Planting Guidance for High-Density Development General Planting Plan

5.5 SITE PREPARATION

Given the proposed planting locations in City boulevards, which are primarily grassy areas adjacent to residential properties, minimal site preparation is expected. The City will supply the growing medium, and all trees will be planted according to City specifications, ensuring proper depth, spacing, and support. This includes applying mulch around the base of trees at the time of planting.

To prevent soil compaction during the planting process, a mini-excavator will be used. To mitigate any potential compaction, plywood sheets will be laid down to distribute the weight of the equipment, and the movement of machinery will be carefully managed to avoid unnecessary disturbance to the soil.

If additional measures, such as soil amendments, subsoil loosening, or Soil Profile Rebuilding, are necessary to enhance conditions for tree growth, the City will implement them accordingly.

5.5.1 Utility infrastructure

Tree planting must conform to the regulations and requirements of all utility authorities having jurisdiction.

5.5.2 Soil rehabilitation

Soil rehabilitation will be undertaken to support tree establishment and longevity where poor growing conditions exist, and it is determined to be feasible and cost-effective.

5.5.3 Execution of top soil and finish grading

See Landscaping on City Lands Specifications and Standards – Top Soil and Finish Grading.

5.6 PLANTING TECHNIQUES

See Landscaping on City Lands Specifications and Standards – Planting of Trees, Shrubs and Ground Covers.

5.6.1 Planting season

Plant only during the season or seasons that are normal for such work, as determined by weather conditions. Tree planting is not recommended between June 30th and September 30th. Do not plant during freezing, abnormally hot, dry or wet weather or when damaging climatic conditions can be anticipated. Parks tree planting operations generally take place from November 1st until the end of February. With most of the trees in the ground prior to the end of January.

Planting operations shall not be carried out when the growing medium is frozen, mixed with ice and/or snow, saturated or compacted to levels that exceed specifications in the Landscaping on City Lands Specifications and Standards.

5.6.2 Plant layout

Trees are to be located in accordance with the Landscaping on City Lands Specifications and Standards. Location of all trees will be staked for positioning prior to planting. All trees must be approved by the Urban Forestry Department before installation. Site conditions (i.e. soil depths) must be approved by the Urban Forestry Department before installation. Adjustments in plant location and orientation may be made prior to planting as needed and approved by the Urban Forestry Department.



ntroduction Program Focus Areas and Planting Priorities 10 Year Planting Plans Planting Guidance for High-Density Development **General Planting Plan**

5.7 MAINTENANCE, MONITORING AND REPLACEMENT PLAN

5.7.1 Maintenance

The City will conduct monitoring, maintenance, and replacement of trees in accordance with the Landscaping on City Lands Standards (refer to the Landscaping on City Lands Specifications and Standards – Landscape Establishment Maintenance Services). The first three years following planting are key for the successful establishment of trees. The City's maintenance plan includes the following scheduled activities to ensure tree health and growth:

- **Watering**: As part of the neighbourhood boulevard tree program, participating residents will be asked to commit to watering the tree regularly, helping to ensure its successful establishment. The City will send regular reminders to residents about their watering responsibilities, with additional reminders during extreme heat events or periods of drought. Adjustments to the watering schedule will be made based on weather conditions and site-specific needs. Through the regular monitoring program, additional watering by City crews may be provided if needed to support tree health. Watering for street boulevard and park edges will be conducted by City crews throughout the summer. In high-density developments, watering is the responsibility of the developer. Irrigation is encouraged in high density, multi-family, mixed use development.
- **Weeding and Mulching:** As part of the neighbourhood boulevard tree program, residents will be encouraged to care for the tree by weeding. City staff will apply mulch around the base of each tree during planting and replenish it annually to help retain soil moisture and suppress weed growth. If necessary, city staff will weed when mulching or watering.
- **Pruning**: A certified arborist will prune young trees during the dormant season to maintain proper structure, remove damaged branches, and encourage healthy growth. Additional pruning may be carried out if issues are identified during routine inspections.
- **Tree Support Removal:** Once the tree is established and stable, any tree supports, such as stakes and ties, will be removed within one to two years after planting.
- **Pest and Disease Management**: A certified arborist will conduct routine inspections to detect signs of pests or disease. Preventative measures and treatment will be applied as needed, following best management practices.
- **Tree Protection**: Tree guards will prevent mower and weed whacker damage to young trees.

5.7.2 Monitoring and Tree Replacement

5.7.2.1 Monitoring Schedule and Procedures:

- **Year 1-2:** A certified arborist will conduct monthly inspections from May to September during the critical establishment phase, assessing soil moisture, pests, diseases, structural integrity, and overall tree health. Inspections will be supplemented following extreme weather events to ensure timely responses.
- **Resident Reporting:** Residents participating in the neighbourhood tree planting program will be requested to report any concerns about trees, such as signs of stress, pest issues, or damage. This resident input will help staff identify problems early and prioritize maintenance actions. Problems can be reported on the <u>City of Port Moody website</u> or by calling the 24/7 service line at 604.469.4574.
- **Tree Inventory:** After planting, all new trees will be inventoried and added to the City's GIS database and asset management system. This integration ensures a comprehensive digital record that tracks each tree's location, species, planting date, and maintenance activities, providing important data for monitoring and reporting.

5.7.2.2 Tracking and Reporting Tree Health:

- **Data Collection:** Monitoring data will include information from inspections, resident reports, and any maintenance performed. The City database will store detailed records for each tree, including growth measurements, health status, and any interventions.
- **Annual Progress Reporting:** An annual report summarizing tree health, survival rates, and maintenance efforts will be compiled and shared with relevant City departments and interested parties. This report will also be used to adjust maintenance plans as needed.

5.7.2.3 Addressing Tree Mortality:

- **Replacement Strategy:** The goal is to maintain a minimum tree survival rate of 90% one year after planting. Trees that fail will be replaced in the next planting season, and corrective actions will be taken to address underlying causes.
- **Cause Analysis:** Staff will analyze the reasons behind any tree mortality, such as poor site conditions or unsuitable species. Corrective measures, like soil amendments or selecting a more resilient species, will be applied before replanting.

5.7.2.4 Internal and External Knowledge-Sharing:

- **Internal Sharing:** The monitoring data and annual reports will be distributed to City departments (e.g., Parks, Planning, Engineering) to inform ongoing urban forest management and improve future projects.
- **External Sharing:** The City will share monitoring results and lessons learned with the public through the City's website, social media, and community events. Resident engagement data will be used to promote the benefits of the program and encourage ongoing community participation. Results will also be incorporated into the City's <u>Urban Forest Management Strategy</u> Report Card.

Introduction Program Focus Areas and Planting Priorities 10 Year Planting Plans Planting Guidance for High-Density Development General Planting Plan

5.8 ENGAGING THE COMMUNITY IN PLANTING

Collaboration with the community is a central element of the neighbourhood boulevard tree program.

Residents will opt into the program by requesting a tree. Residents will have input into species selection, the City will plant the tree, and residents will provide supplemental watering to improve tree establishment. Engaging the community in tree planting initiatives, including species selection and limited maintenance, can help empower residents to steward the urban forest and increase the capacity to plant and manage it as a shared duty between public and private entities.

In neighbourhood boulevards, the City will inform adjacent residents about the planting program through a variety of targeted engagement tactics. These efforts will include direct mail-outs to residents, providing detailed information about how they can request trees, give feedback on species selection, and contribute to tree care through supplemental watering. Additionally, a targeted social media campaign will raise awareness and encourage participation. The City will also communicate with neighbourhood associations to ensure the program is widely promoted within the community. In addition, the program will be actively promoted at pop-up events in neighbourhood parks and at well-attended community events, such as the Fingerling Festival and the City's tree giveaways. If necessary, a more hands-on approach, with City staff actively seeking out residents rather than waiting for requests may be explored.

Prior to planting, all selected locations will be reviewed with the City's Engineering and Operations Department to ensure there are no conflicts with other planned or ongoing projects. This collaborative approach will help safeguard the longevity of the trees.

Clear instructions and reminders will be sent via email and/or door hangers. Watering bags will be provided at the time of installation. Supplemental watering by the City may be required as necessary.

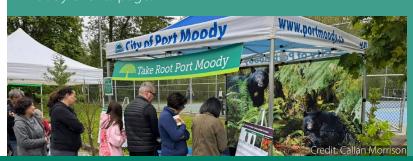
The City will notify residents about the street tree program as appropriate.



Overcoming the Barriers to Tree Planting

Residents may hesitate to plant trees for several reasons, including uncertainty about which species to choose, how to care for young trees, or whether their property has enough suitable space. Concerns about root impacts, as well as the time and cost of maintenance, can also discourage planting. Clear information on how to choose the right species, where to plant it, and how to care for it in the first few years can give residents the confidence they need to get started.

The City is working to make tree planting more accessible by offering simple guidance, sharing resources at community events, and highlighting planting locations that are suitable for different property types. In 2024, the City launched the **Plant a Tree** program, giving away 420 ready-to-plant trees to encourage tree planting on private land. Residents who are not homeowners can look for planting and restoration opportunities on the City of Port Moody events page.



Partnership Tree Program in the District of Saanich

The District of Saanich offers a tree partnership program for planting new trees on property frontage during the late fall and early winter. Residents can select their preferred tree species (final approval by District Parks staff), purchased and planted by District staff, in return for resident commitment to maintain the tree. Prospective residents must consider utility setbacks when assessing potential planting locations'

site conditions, including exposure, soil moisture, soil type, and desired tree characteristics. A list of recommended small, medium, columnar, and large trees is provided, as well as a clear process guide for residents to contact the Saanich Parks Department (**Figure 5-3**).

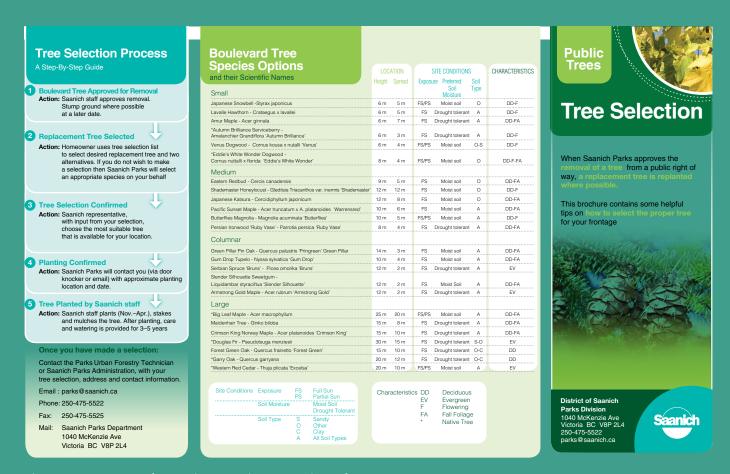


Figure 5-3. District of Saanich's Tree Selection guidance for property owners.

of Port Moody Tree Planting Master Plan

APPENDIX 1. Species Palette

	Species	Tree characteristics						Habitat Tolerances							1		Risks			Present & Future Climate Suitability			
	Shecies],	S	a)	≥	_ =		źο.	75	d) d) W					
Common name	Scientific name	Size class (height)	Nativenes	Evergree	Canopy area (est. m2 at 40 years)	Canopy spread (est. m at ~40 years old)	Growth rate (est. cm height annually)	Bird/wildlife attracting	Insect or animal pollinated	Shade density in Leaf	Under overhead utilitie	Saturated soil toleranc	Shade toleranc	Drought tolerance	Flammability	Wind breakage potential	Root damage potential	VOC rating	Invasive potential	USDA lower hardiness zone	AHS upper heat zon	Distributed in future climate analog cities	Present and future climate suitability
Yellow buckeye	Aesculus flava	Large			177	15 Long	60	•	•	Н			Н	1	М		L	1		USDA 4	AHS 8	Yes	Marginal
Ruby red horsechestnut	Aesculus x carnea	Large			177	15 Medium	60	1	•	M			M	M	M	Н	L	<u> </u>		USDA 5	AHS 8	Yes	Suitable
European beech	Fagus sylvatica	Large			177	15 Long	60		├	M			Н	1	M	1	M	<u> </u>		USDA 4	AHS 8	Yes	Marginal
Scarlet oak	Quercus coccinea	Large			177	15 Long	75			M			i	Н	i	<u> </u>	M	H		USDA 4	AHS 9	Yes	Very suitable
Shingle oak	Quercus imbricaria	Large			177	15	30			H			ı	H	i	l i	L			USDA 5	711100	Yes	Very suitable -Trial
Japanese zelkova	Zelkova serrata	Large			177	15 Medium	75			H	v		ı	M	i	M	M	ı		USDA 5	AHS 9	Yes	Suitable
Katsura	Cercidiphyllum japonicum	Large			113	12 Medium	30			M	1		ı	i	i	L	M	i		USDA 5	AHS 8	Yes	Marginal
Kentucky coffeetree	Gymnocladus dioicus	Large			113	12 Medium	75		•	M			M	H	ī	i i	М	<u> </u>		USDA 4	AHS 9	Yes	Very suitable
Hungarian oak	Quercus frainetto	Large			113	12 Long	90		1	Н			L	M	ī	M	M	H		USDA 6	-	Yes	Suitable
Pin oak	Quercus palustris	Large			113	12 Long	75	1		H		•	ı	i	ī	 ;;	M	Н.	•*	USDA 4	AHS 7	Yes	Marginal
Silver linden	Tilia tomentosa	Large			113	12 Medium	50	1	•	Н		+ -	M	M	ī	M	M	i		USDA 5	AHS 9	Yes	Suitable
Caucasian maple	Acer cappadocicum	Medium			113	12 Medium	60		•	Н			М	М	Ī	М	L	L		USDA 6	AHS 7	Yes	Suitable
Persian ironwood	Parrotia persica	Medium			113	12 Medium	50			Н	v		L	М	M		_	L		USDA 5	AHS 8	Yes	Suitable
Amur cork tree	Phellodendron amurense	Medium			113	12 Medium	50			Н			L	Н	М	М	М	L	•*	USDA 3	AHS 8	Yes	Very suitable
Chinese pistacio	Pistacia chinensis	Medium			113	12 Long	60	1		Н	V		L	Н	L	L	L	L		USDA 6	AHS 9	Yes	Very suitable
Japanese elm	Ulmus davidiana	Medium			113	12 Long	-	•		Н	V	•	М	L	L			L		USDA 4	-	Yes	Marginal
Sitka spruce	Picea sitchensis	Large	•	•	113	12 Long	60	•		Н			Н	L	Н	Н	М	М		USDA 6	AHS 8	Yes	Marginal
Japanese white pine	Pinus parviflora	Medium		•	95	11 Long	50	•		М			L	М	Н	М	М	L		USDA 5	AHS 9	Yes	Suitable
Field Maple	Acer campestre	Medium			79	10 Medium	30	•	•	Н			М	М	М	М	L	L	•*	USDA 5	AHS 8	Yes	Suitable
Miyabe's maple	Acer miyabei	Medium			79	10	0		•				М	М	L		М			USDA 4		Yes	Suitable
Shantung maple	Acer truncatum	Medium			79	10 Long	75		•	М			М	L	L	М	L	L		USDA 4	AHS 8	Yes	Marginal
European hornbeam	Carpinus betulus	Medium			79	10 Long	50	•		Н	V		Н	М	L	L	L	L		USDA 4	AHS 8	Yes	Suitable
Western catalpa	Catalpa speciosa	Medium			79	10 Medium	75	•	•	М			L	Н	L	М	М	L	•*	USDA 5	AHS 8	Yes	Very suitable
Kobus magnolia	Magnolia kobus	Medium			79	10 Medium	50	•	•	Н		•	М	L	L		L	L		USDA 5	-	Yes	Marginal
Sargents cherry	Prunus sargentii	Medium			79	10 Medium	60	•	•	М			L	М	L	М	L	L		USDA 4	AHS 9	Yes	Suitable
Yoshino cherry	Prunus x yedoensis	Medium			79	10 Short	90	•	•	М			L	М	L	М	М	L		USDA 5	AHS 8	Yes	Suitable
Sawtooth oak	Quercus acutissima	Medium			79	10 Long	75	•		Н			L	Н	L	М	М	L	•*	USDA 6	AHS 8	Yes	Very suitable
Southern magnolia	Magnolia grandiflora	Medium		•	79	10 Long	60	•	•	Н			Н	М	Н	М	Н	L		USDA 7	AHS 11	Yes	Suitable
Norway spruce	Picea abies	Large		•	79	10 Medium	90	•		Н			Н	L	Н	М	Н	М	•*	USDA 3	AHS 8	Yes	Marginal
Scotch pine	Pinus sylvestris	Medium		•	79	10 Long	60	•		Н		•	L	Н	Н	М	М	М	•*	USDA 2	AHS 7	Yes	Very suitable
Holly oak	Quercus ilex	Medium		•	79	10 Long	60	•		Н			М	Н	М	L	L	Н		USDA 7	AHS 9	Yes	Very suitable -Trial
California redwood	Sequoia sempervirens	Large		•	79	10 Long	90			Н			Н	L	Н	L	L	L		USDA 7	AHS 9	Yes	Marginal
Sourwood	Oxydendrum arboreum	Large			64	9 Medium	30		•	М			М	М	L	М	М			USDA 5		Yes	Suitable
Chinese tupelo	Nyssa sinensis	Medium			64	9	60		•	М		•	М	Н	L	М	L			USDA 7		Yes	Very suitable
Austrian pine	Pinus nigra	Large		•	64	9 Long	50		ļ	Н			L	Н	Н	М	М	L		USDA 4	AHS 8	Yes	Very suitable
Ponderosa pine	Pinus ponderosa	Large	0	•	64	9 Long	75	•		Н	<u> </u>		L	Н	Н	L	М	L		USDA 3	AHS 8	Yes	Very suitable
Portuguese laurel	Prunus lusitanica	Small		•	64	9 Medium	6		•				М	Н	L			L	•	USDA 6		Yes	Very suitable
Giant dogwood	Cornus controversa	Large			50	8 Medium	90	_	•	М			L	М	L	L	М	L		USDA 6	AHS 8	Yes	Suitable
Ginkgo	Ginkgo biloba	Large			50	8 Long	50			М	<u> </u>		L	Н	L	L	М	L		USDA 3	AHS 9	Yes	Very suitable
Eddies' white wonder	Cornus nuttallii	Medium	•		50	8 Medium	60	•	•	M			М	L	L	L	L			USDA 7	AHS 8	Yes	Marginal

APPENDIX 1. Species Palette (continued)

Common name	S	pecies	Tree characteristics					Hal	bitat	Tolerances					Risks						Presen	Present & Future Climate Suitability			
Common name						ing ed				ice ce ce				ial		ng	ial	ne			•				
Common name			Size class (height)	Nativeness	Evergreen	area (est. m2 at	spread (est. m at ~40 years		. cm height	Bird/wildlife attracting	Insect or animal pollinated	ade density in	overhead	soil toler	Shade tolerance	Drought tolerance	Flammability	breakage	damage		Invasive potentia	lower hardiness	upper heat	future climate analog	and future climate
Medium Sp. Medium Sp. Medium Sp. Medium Sp. Shitable Medium Sp. Medium	Common name	Scientific name																							
Second S			Medium			50	8 Med	lium	50		•	L	V*		L	Н	L	М	L	Н	•*	USDA 5	AHS 9	Yes	Very suitable
Several systems Several systems Medium So So So So So So So S		•	Medium			50				1		М			Н	М	М	М	L	L		USDA 3			·
Dates mountain ash Sorbus x thuringiaca Medium So 8 Sorbus x thuringiaca Medium Sonat Sonat	Willow oak	Quercus phellos	Medium			50	8 Long	g	75	•		М		•	L	L	L	L	М	Н		USDA 6	AHS 9	Yes	Marginal
Findert maple	Swedish whitebeam	Sorbus intermedia	Medium			50	8		0	•	•				М	L	L					USDA 4		Yes	Marginal - Trial
Digiton maple Acer grandidentatum Small 50 8 Medium 50 9 M 9 M M L L L USDA 6 AHS 8 Yes Sultable Fragrant snowthet Styrax obassis Small 50 8 Medium 50 9 M 9 M M M L L USDA 6 AHS 8 Yes Sultable Fragrant snowthet Styrax obassis Small 50 8 Medium 50 9 M 9 M M L L USDA 6 AHS 8 Yes Marginal Marg	Oakleaf mountain ash	Sorbus x thuringiaca	Medium			50	8		0		•				L	М	L					USDA 4		Yes	Suitable
	Trident maple	Acer buergerianum	Small			50	8 Med	lium	90	•	•	М	V		М	М	L	М	L			USDA 5		Yes	Suitable - Trial
Fragant snowbell Styrax obassis Small So 8 Medium 60 M M L L M L L USDA 6 AHS 8 Yes Marginal M	Bigtooth maple	Acer grandidentatum	Small			50	8 Med	lium	60	•	•	Н	•		Μ	М	L	L	L			USDA 4		Yes	Suitable - Trial
Nootka cypress Cugressus nootkatensis Medium 0	Japanese stewartia	Stewartia pseudocamellia	Small			50	8 Med	lium	50		•	М	•		М	М	М		L			USDA 6	AHS 8	Yes	Suitable
Hardy rubbertree Eucominia ulmoides Medium Medium	Fragrant snowbell	Styrax obassia	Small			50	8 Med	lium			•	М	•		М	L	L	М	L	L		USDA 6		Yes	Marginal
Tupelo	Nootka cypress	Cupressus nootkatensis	Medium	0	•	50	8 Long	g	50	•		Н			Н	L	Н	М	М	L		USDA 5	AHS 7	Yes	Marginal
Mylitebam Sorbus aria Medium Sala 7 Medium 60	Hardy rubber tree	Eucommia ulmoides	Medium			38	7 Med	lium	60	•		М			L	Н	L	L	М	М		USDA 6	-	Yes	Very suitable
Amurmaple Acer tataricum Small 38 7 Medium 45	Tupelo	Nyssa sylvatica	Medium			38	7 Long	g	50	•	•	М			Н	L	L	L	L	Н		USDA 4	AHS 9	Yes	Marginal
Lavallei hybrid hawthom Crataegus x lavalleei Small 38 7 Medium 60 €	Whitebeam	Sorbus aria	Medium			38			60	•	•	Н			М	Н	L			L				Yes	Very suitable
Japanese snowbell Styrax japonicus Small 38 7 Long 50	Amur maple	Acer tataricum	Small			38	7 Med	lium			•	М	•		М	М	L	М	L	L	●*			Yes	Suitable
Hinoki false cypress Chamaecyparis obtusa Medium	Lavallei hybrid hawthorn	Crataegus x lavalleei	Small			38	7 Med	lium			•	М	•		М	Н	L	L	L	L		USDA 5	AHS 7	Yes	Very suitable
Sawara false cypress Chamaecyparis pisitera Medium ● 38 7 Long 30 M M M H L M L USDA 5 AHS 8 Yes Suitable	Japanese snowbell	Styrax japonicus	Small			38	7 Long	g			•	М	•	•	М	М	L	М	L	L		1		Yes	
Serbian spruce Picea omorika Medium ● 38 7 Long 50 ● H H M H M M M M USDA 4 AHS 8 Yes Suitable	Hinoki false cypress				•		· · · ·	_												L					
English yew Taxus baccata Medium			-				 					_								L					
Vine maple Acer circinatum Small ■ 28 6 Medium 60 ■ M H L L M L L USDA 6 AHS 9 Yes Marginal Paperbark maple Acer griseum Small 28 6 Medium 45 ■ M ■ M	·				_		 					+						М		М				-	
Paperbark maple Acer griseum Small 28 6 Medium 45			_	_	•		`			1	_					M	Н	L	М	L			1		
Eastern redbud	-			•								_	_			L	L		L	L _.			!		
Kousa dogwood Cornus kousa Small 28 6 Medium 60 • M • M • M L L L L L L L L USDA 5 AHS 8 Yes Marginal Amur maackia Maackia amurensis Small 28 6 Medium 50 • H • M • L L H L L L L USDA 5 Yes Very suitable -Trial Mugo pine Pinus mugo Small • 28 6 Short 30 • H • M • L H H L M M M USDA 5 Yes Very suitable -Trial Mugo pine Pinus mugo Small • 28 6 Short 30 • H • M • L H H L M L L USDA 3 AHS 7 Yes Very suitable Hollyleaf cherry Prunus ilicifolia Small • 28 6 Medium 60 • H • H • L H L M L L USDA 9 Yes Marginal -Trial Mountain hemlock Tsuga mertensiana Medium • 28 6 Long 50 • H H H L H L M M M USDA 4 Yes Marginal Crimson spire oak Quercus alba x robur Medium 20 5 5 0 • H H H L M M M USDA 5 Yes Suitable Japanese red cedar Cryptomeria japonica Large • 20 5 Long 90 H H M M M H M M L • VISDA 6 AHS 8 Yes Very suitable California incense cedar Calocedrus decurrens Medium • 13 4 Long 50 • H H M H H M M M L • VISDA 6 AHS 8 Yes Very suitable		_										M .							L	L					
Amur maackia Maackia amurensis Small 28 6 Medium 50										_		L				H	M .		L	L					
Mugo pine Pinus mugo Small												+				L	L .		L	L					
Hollyleaf cherry Prunus ilicifolia Small											•	H					L								
Mountain hemlock Tsuga mertensiana Medium • • 28 6 Long 50 • H L H L H L M M M USDA 4 Yes Marginal Crimson spire oak Quercus alba x robur Medium 20 5 0 • H H L H L H L M M M USDA 5 Yes Suitable Japanese red cedar Cryptomeria japonica Large • 20 5 Long 90 H M M M H M M L • USDA 6 Yes Suitable California incense cedar Calocedrus decurrens Medium • 13 4 Long 50 • H M M H H M M L • USDA 6 AHS 8 Yes Very suitable		1										H 					Н .			L			AHS 7		
Crimson spire oak Quercus alba x robur Medium 20 5 0 0 0 1 L M M M USDA 5 Yes Suitable Japanese red cedar Cryptomeria japonica Large 20 5 Long 90 H M M H M M L •* USDA 6 Yes Suitable California incense cedar Calocedrus decurrens Medium 13 4 Long 50 0 H M H H M M L •* USDA 6 AHS 8 Yes Very suitable											•		-			H	L			L					
Japanese red cedar Cryptomeria japonica Large • 20 5 Long 90 H M M H M M L • USDA 6 Yes Suitable California incense cedar Calocedrus decurrens Medium • 13 4 Long 50 • H M H H M M L • USDA 6 AHS 8 Yes Very suitable				•	_		6 Long	8				П				L N4		L L	IΥI		1				
California incense cedar Calocedrus decurrens Medium • 13 4 Long 50 • H M H H M M L • USDA 6 AHS 8 Yes Very suitable		-					5	ď		_		ш						N4	N4	H	•				
	·	* * * * * * * * * * * * * * * * * * * *					 					+								L					
	Oriental arborvitae	Platycladus orientalis	Small		•	7		_				Н	•		1*1	М	Н	M M	M M	l L	-	USDA 6		Yes	Suitable - Trial