



## POLICY REPORT URBAN STRUCTURE

Report Date:November 5, 2009Contact:Heike RothContact No.:604.871.6115RTS No.:05739VanRIMS No.:08-2000-20Meeting Date:November 19, 2009

- TO: Standing Committee on City Services and Budgets
- FROM: Director of Planning and the Director of Development Services, in consultation with the Director of Legal Services
- SUBJECT: Protection of Trees By-law

#### RECOMMENDATION

- A. THAT Council repeal By-law No. 7347, the Private Property Tree By-law, and the accompanying Tree Retention, Relocation and Replacement Guidelines;
- B. THAT Council adopt the new Protection of Trees By-law, generally as set out in Appendix A;

FURTHER THAT the Director of Legal Services be instructed to bring forward the new by-law for enactment.

#### GENERAL MANAGER'S COMMENTS

The General Manager of Community Services RECOMMENDS approval of the foregoing.

#### CITY MANAGER'S COMMENTS

The City Manager RECOMMENDS approval of the foregoing.

#### COUNCIL POLICY

Council policy with respect to trees on private property is set out in the Private Property Tree By-law No. 7347, enacted November 1, 1994. The intent of the By-law is to provide for the retention, replacement and maintenance of trees on private property. In addition, the Tree Retention, Relocation and Replacement Guidelines provide further direction to both staff and individuals seeking to remove trees on private property. On May 5, 2009 Council received the Greenest City Quickstart Recommendations which include policies and actions to support and enhance the natural environment and green spaces.

On January 20, 2009 Council adopted the Urban Agriculture Guidelines for the Private Realm which contain provisions to encourage urban agriculture, and include a list of food producing trees.

#### PURPOSE AND SUMMARY

This report seeks Council approval to repeal the existing Private Property Tree By-law and Tree Retention, Relocation and Replacement Guidelines, and to replace them with a single document, the Protection of Trees By-law, which is attached as Appendix A. The new by-law updates the existing By-law by including relevant provisions from the guidelines, improving clarity of processes and requirements, and thus improving the City's powers of enforcement. Although these changes are administrative in nature they will better reflect and enforce the intent of the by-law. Additionally, the list of suitable replacement trees has been amended to incorporate food producing trees, in keeping with the Urban Agriculture Guidelines adopted by Council earlier this year.

Further amendments to the By-law may be necessary to address initiatives from the Greenest City Action Team and other issues, such as food security. However, the current amendments to the Private Property Tree By-law are critical to ensuring the basic intent of the by-law is strengthened and can be enforced. It is important to go forward with these amendments as soon as possible to avoid further unnecessary loss of trees from the urban canopy, and the ongoing significant expense to the City of difficult prosecutions of illegal removals.

#### BACKGROUND

The Vancouver Charter gives the City authority to create regulations for the purpose of protecting trees on private property. Provisions for the replacement of removed trees were first included in the Zoning and Development By-law in 1991. These regulations became the basis of the Private Property Tree By-law (No. 7347) which was adopted by Council in 1994, and amended in 1996 and 1997. The existing By-law is complemented by the Tree Retention, Relocation and Replacement Guidelines, as well as information available on the City's website.

Council has identified the environment and sustainability as key priorities. By creating more certainty and improving the City's enforcement powers, the recommended amendments to the private property tree regulations will enable the City to better protect trees on private property and support the environment. These amendments are in keeping with the evolving commitments from the Greenest City Action Team to protect and enhance nature and greenspace, particularly as they relate to the important role trees play in creating and maintaining a healthy ecosystem, cooling the city, and enriching neighbourhoods. Further, the proposed amendments support the City's initiatives to develop a local sustainable food system and foster urban agriculture.

#### DISCUSSION

The Private Property Tree By-law has enabled staff to increase tree retention and improve relocation and replacement, thereby enhancing the physical environment and increasing urban sustainability.

Some key features of the current by-law include:

- requirement for a tree permit for the removal of any tree over a certain size;
- description of conditions under which trees may be removed;
- requirements for replacement trees (including type of tree, size, number and siting);
- requirement for tree protection in cases of site development;
- requirement for the replacement of damaged trees, and emergency removal; and
- description of offences and penalties.

In addition, the Director of Planning has authority to relax regulations pertaining to the siting of a building to protect an existing tree and discretion to consider tree species not listed in the by-law as acceptable replacement trees based on site specific conditions.

Nevertheless, as a result of new house construction in recent years, many trees on private property have been removed without a permit and without replacement. Staff have encountered difficulties in administering certain aspects of the By-law, particularly those related to prohibiting the damaging and/or removal of trees, ensuring that removed trees are replaced, powers of entry to inspect and assess existing trees (and/or stumps), and the ability to fine individual property owners for non-compliance. Staff have found that the current By-law does not adequately address these areas: the required clauses are either missing or not adequately clear.

To address these shortcomings, staff in Planning, Development Services and Legal Services have reviewed the existing By-law, and have developed a new by-law. The proposed new by-law has an updated format and improved organization. The key portions of the Tree Retention, Relocation and Replacement Guidelines have also been added into the body of the By-law so that all information is in one place. The net effect is a more clear, consistent, and enforceable by-law. Further, the proposed new by-law makes a link to the recently adopted Urban Agriculture Guidelines for the Private Realm.

Three key types of by-law amendments are proposed. The first two are related to clarity and enforcement, and the third is related to incorporating food trees.

#### 1. Amendments to Improve Clarity and Staff's Ability to Enforce the By-law

The following proposed amendments will improve the clarity of the by-law and the ability of the public and industry to ascertain the requirements. It will also improve consistency in administration of the By-law and staff's ability to enforce it. The proposed amendments include:

- clarification that a tree permit is required in all cases of tree removal, not just when site development occurs;
- clarification that a tree permit is required following an emergency removal;
- clarification of the requirements for a replacement tree when a tree is removed;

- addition and/or revision of a number of definitions to clarify roles and authority, including certification requirements for arborists, tree risk assessors, engineers, surveyors and plumbers;
- a new requirement to post a tree permit in a visible spot during tree removal;
- addition of an expiry date to a tree permit (valid for 6 months); and
- relocation of specific requirements from the Guidelines to the By-law, for example, regarding the care of retained trees during construction and the submission requirements for a tree permit.

There are no changes proposed to the number of trees that can be removed or must be replaced.

## 2. Amendments that Improve Enforcement Measures Directly

The following proposed changes improve the enforcement measures of the by-law:

- clarification of the right to enter onto a property to inspect;
- an enhanced provision for inspectors to order any person to discontinue work or to carry out work needed; and
- new provisions clarifying that breach of the by-law may result in a separate charge for each tree and provide a fine for continuing offence.

Staff note that the Province recently amended the Vancouver Charter to impose a maximum penalty of \$10,000 for by-law offences. Accordingly, that will be the maximum penalty under the new Protection of Trees By-law.

# *3. Amendments to Incorporate Trees from the Urban Agriculture Guidelines for the Private Realm*

The Tree By-law includes a list of suitable replacement trees. The list of food producing trees in the recently adopted Urban Agriculture Guidelines for the Private Realm has now been incorporated into the list of replacement trees in the proposed new by-law. The replacement tree list is comprised of tree species that are suitably hardy for the Vancouver area, locally available and reasonably priced. Many trees on the list are native species. Although the replacement tree list is extensive, it is not exhaustive and, as a result, both the existing and the proposed new by-law provide flexibility to consider species not included on the list.

#### PUBLIC NOTIFICATION

Given that the proposed amendments increase clarity rather than change substantive features of the by-law, public notification will primarily involve informing applicants and the public about the changes if they are approved by Council. This will involve new signage and pamphlets to explain the key changes; these will be available in the Development Services Department. The City's website will also be updated. Further, staff also intend to place a bulletin (with a link to the updated information on the website) in the Vancouver Matters section of the Vancouver Courier.

#### FINANCIAL IMPLICATIONS

There are no financial implications.

#### PERSONNEL IMPLICATIONS

There are no personnel implications.

#### ENVIRONMENTAL IMPLICATIONS

Provisions that limit tree removal and ensure the planting and maintenance of an adequate number of replacement trees will help to retain and enhance Vancouver's urban forest and comply with Council policies to protect and enrich the natural environment and greenspace. As well, amending the Tree By-law to include food trees listed in the new Urban Agriculture Guidelines will improve the link between tree planting and urban agriculture.

#### SOCIAL IMPLICATIONS

The Social Policy Department supports the proposed updates to the Private Property Tree Bylaw and the addition of fruit and nut trees to the list of replacement trees. Future policy work should include consideration of strategies to encourage the planting of food trees as replacement trees.

#### IMPLEMENTATION PLAN

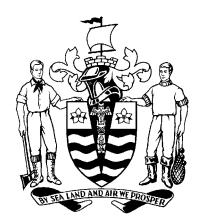
Should Council approve the recommended amendments, the Director of Legal Services will prepare the By-law for enactment.

#### CONCLUSION

The proposed changes, by improving clarity and ease of administration, will help to preserve, protect and strengthen Vancouver's urban forest while continuing to provide flexibility for tree removal in certain instances. In addition, they will assist both staff administering the by-law, and the public and the industry with understanding the City's expectations and requirements. Finally, incorporating fruit and nut trees into the By-law will also support City initiatives to encourage urban agriculture.

\* \* \* \* \*

## CITY OF VANCOUVER BRITISH COLUMBIA



## PROTECTION OF TREES BY-LAW NO.

#### PROTECTION OF TREES BY-LAW

#### TABLE OF CONTENTS

#### SECTION 1 INTERPRETATION

- 1.1 Name of By-law
- 1.2 Definitions
- 1.3 Table of contents
- 1.4 Schedules
- 1.5 Severability

#### SECTION 2 APPLICATION OF BY-LAW AND EXEMPTIONS

- 2.1 Application of By-law to hedges
- 2.2 Exemption for small trees
- 2.3 Exemption for public utility
- 2.4 Exemption for Park Board

#### SECTION 3 CERTIFICATES

- 3.1 Qualifications of certifier
- 3.2 Requirements for certificate
- 3.3 Need for second certificate

#### SECTION 4 TREE PERMITS

- 4.1 Requirement for tree permit
- 4.2 Application for tree permit
- 4.3 Submissions with tree permit application
- 4.4 Issuance of tree permit
- 4.5 Issuance of one additional tree permit
- 4.6 Prerequisites for issuance of tree permit
- 4.7 Conditions of tree permit
- 4.8 Posting of tree permit
- 4.9 Duration of tree permit

#### SECTION 5 TREE COUNTING AND MEASUREMENTS

- 5.1 Inclusions in counting
- 5.2 Exclusions from counting
- 5.3 Counting a group of trees
- 5.4 Measurement of distance
- 5.5 Relaxation of distance requirement

#### SECTION 6

## RELOCATION TREES AND REPLACEMENT TREES

- 6.1 Requirement for replacement tree
- 6.2 Exemption from requirement for replacement tree
- 6.3 Type of replacement tree and number
- 6.4 Size of replacement tree
- 6.5 Siting of relocation tree or replacement tree
- 6.6 Timing for planting of relocation tree or replacement tree

## SECTION 7

## PROTECTION OF TREES DURING CONSTRUCTION

- 7.1 Submission of survey
- 7.2 Submission of arborist's report
- 7.3 Exception for interior alterations
- 7.4 Demolition, excavation, or construction
- 7.5 Protection barrier
- 7.6 Location of protection barrier
- 7.7 Requirements for trees on boulevards
- 7.8 Issuance of building permit
- 7.9 Condition of protection barriers and retention trees
- 7.10 No encroachment

#### SECTION 8 CARE AND MAINTENANCE OF TREES

- 8.1 Care of a tree
- 8.2 Treatment of a tree
- 8.3 Root pruning

#### SECTION 9 EMERGENCY REMOVAL

- 9.1 Emergency removal
- 9.2 Issuance of tree permit after emergency

#### SECTION 10 ASSESSMENTS AND INSPECTIONS

10. Entry on property

#### SECTION 11 ENFORCEMENT

- 11.1 Revocation of tree permit
- 11.2 Unlawful damage to or removal of a tree
- 11.3 Replacement of unlawfully damaged or removed tree
- 11.4 Requirement to discontinue or carry out work
- 11.5 Service of notice
- 11.6 Offence under By-law
- 11.7 Separate offence
- 11.8 Fine for offence
- 11.9 Fine for continuing offence

#### **SECTION 12**

### REPEAL, TRANSITION, AND ENACTMENT

- 12.1 Repeal
- 12.2 Transition
- 12.3 Force and effect

#### SCHEDULES

- SCHEDULE A PROTECTION BARRIER DISTANCE FROM TREE
- SCHEDULE B EXCLUSIONS FROM TREE COUNTING DISTANCES FROM BUILDINGS
- SCHEDULE C NUMBER OF TREES REQUIRED ON A SITE
- SCHEDULE D TYPES OF REPLACEMENT TREES

#### BY-LAW NO. \_\_\_\_\_

#### A By-law to provide for the protection of trees

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

#### SECTION 1 INTERPRETATION

#### Name of By-law

1.1 The name of this By-law, for citation, is the "Protection of Trees By-law".

#### Definitions

1.2 In this By-law:

"arborist" means an arborist certified by the International Society of Arboriculture;

"building permit" means a building permit issued under the Building By-law in connection with a development;

"Chief Building Official" means the individual appointed by Council to be the city building inspector or a person duly authorized to carry out the powers and duties of the city building inspector;

"City Engineer" means the individual appointed by Council to be the General Manager of Engineering Services or a person duly authorized to carry out the powers and duties of the General Manager of Engineering Services;

"development" means a change in the use of any land or building, or the carrying out of any construction, engineering, or other operations in, on, over, or under land or land covered by water, or an existing building or group of buildings;

"development permit" means a development permit issued under the Zoning and Development By-law in connection with a development;

"Director of Planning" means the individual appointed by Council to be the director of planning or a person duly authorized to carry out the powers and duties of the director of planning;

"drip line" means a circle drawn on the ground around a tree directly under the tips of the outermost branches of the canopy of the tree;

"hazardous tree" means a tree that is in imminent danger of falling and causing injury to a person or damage to property;

"hedge" means five or more trees or shrubs less than five metres high, and planted less than 1.25 metres apart;

"owner" includes a registered owner, an owner under agreement, an occupier of Crown lands, an owner of a strata lot if the subject tree is within the boundaries of the strata lot, a strata corporation if the subject tree is within the boundaries of the common property, and a cooperative association;

"protection barrier" means a barrier erected to protect a tree and its roots that:

- (a) is at least 1.2 metres high measured from the ground,
- (b) meets the distance requirements, measured 1.4 m above the existing grade of the ground adjoining the base of the tree, set out in Schedule A,
- (c) with respect to its construction, consists of snow fencing fastened securely to metal or wood stakes spaced no more than one metre apart, or other fencing acceptable to the Chief Building Official or City Engineer, and
- (d) in the case of a barrier:
  - (i) on the site or on adjacent property, is acceptable to the Chief Building Official, or
  - (ii) in the case of a barrier on a street, is acceptable to the City Engineer;

"relocation tree" means a living tree that, according to a tree plan, an owner intends to relocate or has relocated or that, according to this By-law, an owner must relocate on a site;

"replacement tree" means a living tree that, according to a tree plan, an owner intends to plant or has planted or that, according to this By-law, an owner must plant to replace a tree on a site;

"retention tree" means a living tree that, according to a tree plan, an owner intends to retain or has retained, or that, according to this By-law, an owner must retain, in its original or existing location on a site; "site" means one or more parcels of land that adjoin one another or which only a street or body of water separates and that is common to a development, and includes a strata lot, the common property of a strata corporation, and a leasehold parcel created under section 99(1)(k) of the Land Title Act;

"sloping site" means a site where any portion of the rear boundary is more than 3.7 metres higher or lower than any portion of the front boundary;

"tree" means a self-supporting, perennial, woody plant that has a trunk or stem and a root system;

"tree permit" means a permit issued by the Director of Planning under section 4.4 or 4.5;

"tree plan" means a plan required under section 4.3(a); and

"tree protection area" means the land between a tree and a protection barrier.

#### Table of contents

1.3 The table of contents for this By-law is for convenient reference only, and is not for use in interpreting or enforcing this By-law.

#### Schedules

1.4 Schedules attached to this By-law form part of this By-law.

#### Severability

1.5 A decision by a court that any part of this By-law is illegal, void, or unenforceable severs that part from this By-law, and is not to affect the balance of this By-law.

#### SECTION 2 APPLICATION OF BY-LAW AND EXEMPTIONS

#### Application of By-law to hedges

2.1 All provisions of this By-law apply to individual trees in a hedge, except only to the extent that any such provision specifically excepts, excludes, or exempts a hedge.

#### Exemption for small trees

2.2 This By-law does not apply to a tree that has a trunk or stem the diameter of which, or two or more trunks or stems the combined diameter of the two or three largest trunks or stems of which, measured 1.4 m above the existing grade of the ground adjoining its base, is less than 20 cm, except for a replacement tree or a tree that is part of a hedge.

#### Exemption for public utility

2.3 This By-law does not apply to the removal, relocation, or replacement of a tree in connection with the construction or maintenance of a public utility in a public utility easement or statutory right of way.

#### Exemption for Park Board

2.4 This By-law does not apply to the removal, relocation, or replacement of a tree in connection with any site or development under the jurisdiction of the Park Board.

#### SECTION 3 CERTIFICATES

#### Qualifications of certifier

3.1 A person who issues a certificate under this By-law must:

- (a) possess a certification or accreditation from an organization or under a statute, or membership in an organization, referred to in this By-law; and
- (b) possess a license under the License By-law;

that is current at the time the certifier signs the certificate.

#### Requirements for certificate

3.2 Each certificate required under this By-law must be in writing, signed by the certifier, and dated no more than 30 days before the date of submission of an application for a tree permit, development permit, or building permit.

#### Need for second certificate

3.3 Despite anything to the contrary in this By-law, if a report, opinion, survey, or other instrument that is the subject of a certificate is not satisfactory to the Director of Planning, the applicant or owner who submitted the certificate must submit a second certificate concerning the same subject matter, and signed by a person who is at arm's length from the person who signed the first certificate.

#### SECTION 4 TREE PERMITS

#### Requirement for tree permit

4.1 A person must not cut down or kill a tree on a site, remove a tree from a site, relocate a tree on a site, or plant a replacement tree on a site, except in compliance with this By-law and the tree permit issued for such removal, relocation, or replacement.

#### Application for tree permit

4.2 An owner of a site may apply for a tree permit to remove a tree from a site, to relocate a tree on a site, or to plant a replacement tree on a site, which application must be in the form prescribed by the Director of Planning.

#### Submissions with tree permit application

4.3 With the tree permit application, the applicant must submit all information, certificates, and fees required under this By-law for issuance of the tree permit including:

- (a) a tree plan with respect to the site that complies with section 4.1.4 of the Zoning and Development By-law, and that identifies the:
  - (i) location and trunk diameter of each retention tree, relocation tree, or replacement tree,
  - (ii) location and trunk diameter of each such tree the owner intends to remove,
  - (iii) location and trunk diameter of each tree located on adjacent property within two metres of any boundary of the site,
  - (iv) location and trunk diameter of each tree located on a street that is adjacent to the site, and
  - (v) location of the proposed protection barrier for each tree referred to in subsection (i), (iii), or (iv);
- (b) each certificate required under section 4.4, 4.5, or 4.6;
- (c) a non-refundable application fee of:

(i) \$59.00 for a tree permit to remove the first tree in a 12 month period, and

- (ii) \$168.00 to remove each subsequent tree during that same 12 month period; and
- (d) if the applicant is the owner of a strata lot, written confirmation from the strata council that the applicant has the right to apply for a tree permit regarding the tree that is the subject of the application, whether or not the strata council or strata corporation has imposed any requirements on the applicant regarding the tree, and, if it has imposed requirements, a description of them.

#### Issuance of tree permit

4.4 The Director of Planning may issue a permit to remove a tree from, or to relocate or replace a tree on, a site only if:

- the location of the tree is within a building envelope defined or described under a development permit or building permit, and changing the siting of an accessory building within that envelope to allow retention of the tree is not possible;
- (b) a plumber, accredited under the Industry Training Authority Act of British Columbia, certifies that the roots of the tree are interfering with, blocking, or damaging a drainage or sewage system;
- (c) an arborist certifies that:
  - (i) the tree is interfering with, or is in such close proximity to, utility wires as to be a danger, and
  - (ii) topping or pruning the tree to avoid such interference, or lessening the proximity, would result in the tree being unlikely ever to regain its health or characteristic appearance;
- (d) an arborist certifies that the tree is causing damage to property, including damage to roofs, retaining walls and sidewalks, that standard arboriculture practices cannot rectify;
- (e) an arborist who is a tree risk assessor certified by the International Society of Arboriculture certifies that the tree is a hazardous tree;
- (f) an arborist certifies that damage to the tree has occurred to the extent that the tree is likely to suffer from disease or die prematurely; or
- (g) an arborist certifies that the tree is dying and is likely to be dead within six months or is dead.

Issuance of one additional tree permit

4.5 Despite section 4.4, the Director of Planning may issue one additional tree permit to remove a tree from a site if:

- (a) during the 12 months immediately preceding the date of the application to remove the tree, a person has not removed a tree from the site, except under:
  - (i) one of subsections (a) to (g) of section 4.4, or
  - (ii) section 9.1 so long as the person who removed the tree has obtained a tree permit under section 9.2;
- (b) removal of the tree under one of subsections (a) to (g) of section 4.4 or under section 9.1 would not be a consequence of the applicant having committed an offence against the By-law; and
- (c) retention of the tree was not a condition of the Director of Planning granting a relaxation for the siting of a building under section 3.2.7 of the Zoning and Development By-law.

Prerequisites for issuance of tree permit

4.6 In addition to the requirements of sections 4.4 and 4.5, the Director of Planning may issue a tree permit only if:

- (a) the Director of Planning approves the tree plan referred to in section 4.3(a) with respect to the tree that is the subject of the application;
- (b) an engineer, who is a member of The Association of Professional Engineers and Geoscientists of the Province of British Columbia, certifies that removing the tree will not destabilize any soil on a sloping site; and
- (c) the applicant has complied with all other applicable by-laws.

#### Conditions of tree permit

4.7 The Director of Planning may include conditions regarding the removal, relocation, or replacement of a tree in a tree permit, and the tree permit holder must comply with those conditions.

#### Posting of tree permit

4.8 During the removal, relocation, or replacement of a tree, the tree permit holder must post the tree permit, and keep it posted, in a conspicuous location on the site that is visible from an adjacent street.

#### Duration of tree permit

4.9 If a tree permit holder has not removed a tree within six months after the date of issuance of the tree permit:

- (a) the tree permit expires, and has no further force or effect; and
- (b) the tree permit holder must obtain a new tree permit before removing or relocating the tree.

#### SECTION 5 TREE COUNTING AND MEASUREMENTS

#### Inclusions in counting

5.1 Subject to section 5.2, for the purpose only of determining the number of trees required on a site, as described in Schedule C, counting the number of trees on a site is to include each retention tree, relocation tree, and replacement tree.

#### Exclusions from counting

5.2 For the purpose only of determining the number of trees required on a site, as described in Schedule C, counting the number of trees on a site is to exclude each tree:

- (a) that a person, under a tree permit, intends to remove or has removed from the site;
- (b) that meets the criteria set out in section 4.4(a).
- (c) in respect of which a person has issued a certificate under section 4.4(b), (c), (d), (e), (f), or (g);
- (d) that forms part of a hedge;
- (e) that is closer to a proposed principal building under a development permit or building permit than the distance indicated in Part 1 of Schedule B;

(f) that is closer to a proposed accessory building under a development permit or building permit than the distance indicated in Part 2 of Schedule B.

### Counting a group of trees

5.3 Despite sections 5.1 and 5.2, if the Director of Planning is of the opinion that a tree is part of a group of trees in such close proximity to one another that removal of one tree is likely to damage it or other trees in the group, the Director of Planning may allow or require counting of the group of trees as one tree.

#### Measurement of distance

5.4 Measurement of the distance between a tree and a proposed or existing building under this By-law is to occur at 1.4 metres above grade, and is to be the shortest distance from a point on the main trunk of the tree to a point on the exterior wall of the proposed or existing principal or accessory building.

#### Relaxation of distance requirement

5.5 Under subsections (e) and (f) of section 5.2, if the Director of Planning is satisfied that a tree warrants retention and can survive with standard arboricultural care and appropriate construction techniques, the Director of Planning may relax the minimum distance referred to in section 5.4.

#### SECTION 6 RELOCATION TREES AND REPLACEMENT TREES

#### Requirement for replacement tree

6.1 The owner of the site must plant a replacement tree in compliance with this By-law and the tree permit issued for the tree removal.

#### Exemption from requirement for replacement tree

6.2 Despite section 6.1, if a site, immediately after removal of a tree, includes at least the number of trees set out in Schedule C, the owner of the site does not need to plant a replacement tree.

### Type of replacement tree and number

- 6.3 For each tree a person removes from a site, the owner of the site must plant:
  - (a) one replacement tree described in Part 1 of Schedule D;
  - (b) two replacement trees described in Part 2 of Schedule D; or
  - (c) a tree or trees acceptable to the Director of Planning;

except that in the case of a sloping site, the owner may plant one replacement tree set out in either Part 1 or Part 3 of Schedule D.

#### Size of replacement tree

6.4 Each replacement tree an owner plants on a site must meet the size requirements that apply to it as set out in Schedule D.

#### Siting of relocation tree or replacement tree

- 6.5 An owner must plant a relocation tree or replacement tree:
  - (a) on the same site as the tree the owner is replacing or relocating;
  - (b) at least one metre from:
    - (i) any side boundary of the site,
    - (ii) any accessory building on or adjacent to the site, or
    - (iii) any other structure or thing on or adjacent to the site that, in the opinion of the Director of Planning, the tree may adversely affect or that may adversely affect the tree;
  - (c) at least 1.5 metres from any principal building on or adjacent to the site;
  - (d) at least 2.5 metres from any other tree on or adjacent to the site; and
  - (e) in accordance with any approved tree plan.

#### Timing for planting of relocation tree or replacement tree

- 6.6 An owner must plant a relocation tree or replacement tree:
  - (a) in the case of development of an outright use under the Zoning and Development By-law, before issuance of the occupancy permit;
  - (b) in the case of development of a conditional use under the Zoning and Development By-law, within one year after the date of issuance of the occupancy permit or within such other period of time as the development permit or other condition of development may specify;
  - (c) in any other case, within six months after the date of issuance of the tree permit for such relocation tree or replacement tree;

except if the Director of Planning specifies, as a condition of such tree permit, another deadline for such relocation or replacement.

#### SECTION 7 PROTECTION OF TREES DURING CONSTRUCTION

#### Submission of survey

7.1 With an application for issuance of a development permit or building permit, the applicant must submit a survey, certified correct by a BC land surveyor who is a member of the Association of British Columbia Land Surveyors that shows:

- (a) each tree located on the site, on adjacent property within two metres of any boundary of the site, and on any street adjacent to the site;
- (b) the tree grade or tree elevation for each tree referred to in subsection (a);
- (c) the drip line for each such tree; and
- (d) the location, height, and diameter of each stump on the site.

#### Submission of arborist's report

7.2 With an application for issuance of a development permit or building permit, the applicant must also submit a report, certified correct by an arborist, that sets out:

(a) the condition, size, and species of proposed retention trees on the site;

- (b) the impact of the proposed development on the health of trees on the site, and potential hazards to them during or after construction;
- (c) development limitations;
- (d) recommended construction practices to protect trees during and after construction; and
- (e) an undertaking from the arborist to the city that the arborist will perform or supervise performance of:
  - (i) pre-construction treatment of trees including root and branch pruning,
  - (ii) regular on-site inspections during construction, and will report any offence against this By-law on the site to the Director of Planning or on a street adjacent to the site to the City Engineer,
  - (iii) restorative landscape treatment including soil renovation,
  - (iv) selection and planting of any replacement trees required under this Bylaw, and
  - (v) a post construction inspection of the site, and will prepare a report, certified correct by the arborist, for submission, in a timely manner, to the Director of Planning.

#### Exception for interior alterations

7.3 If a development permit or building permit is for alterations only to the interior of a building, and, in the opinion of the Director of Planning, none of the work, or storage, transport, or removal of materials, will affect any tree located on the site, sections 7.1 and 7.2 do not apply.

#### Demolition, excavation, or construction

7.4 A person must not commence or carry on demolition, excavation, or construction on a site, except in accordance with the requirements of this By-law, and any applicable tree permit.

#### Protection barrier

7.5 Before a person commences demolition, excavation, or construction on a site, the owner of the site must install a protection barrier:

(a) for each retention tree located on the site, on adjacent property within two metres of any boundary of the site, and on any street adjacent to the site; and

(b) that meets the requirements set out in the definition of "protection barrier" under section 1.2.

## Location of protection barrier

7.6 Each protection barrier referred to in section 7.5 must, if the tree is on adjacent property within two metres of any boundary of the site, extend into the site from the nearest boundary of the adjacent site by the lesser of 50% of the distance between such boundary and the boundary of the exterior wall of any building adjacent to such site boundary, and one metre.

#### Requirements for trees on boulevards

7.7 In addition to the requirements of section 7.5, before and during demolition, excavation, or construction on a site, the owner of the site must:

- (a) comply with the requirements of the City Engineer with respect to any tree on a boulevard in a street adjacent to the site;
- (b) not prune, move, or otherwise disturb such tree unless the Park Board has given its prior written permission;
- (c) ensure that each protection barrier:
  - (i) allows for free and clear passage of pedestrians on the surrounding portion of the boulevard and on the sidewalk adjacent to the boulevard,
  - (ii) allows for clear visibility of fire hydrants, driveway accesses, and crosswalks,
  - (iii) is 0.6 m or more from the curb to allow for the opening of car doors, and
  - (iv) is 0.3 m or more from the edge of any sidewalk located within a grass boulevard.

#### Issuance of building permit

7.8 Despite the Zoning and Development By-law and Building By-law, a person is not entitled to a permit for demolition, excavation, or construction on a site, except if:

(a) the Chief Building Official has inspected and approved each protection barrier on the site or on adjacent property; and

(b) the City Engineer has inspected and approved each protection barrier on a street.

#### Condition of protection barriers and retention trees

- 7.9 A person who installs a protection barrier under this Section 7 must:
  - (a) care for the retention tree within the tree protection area, during the construction process, including sufficient watering, particularly if excavation has disturbed the tree root system;
  - (b) attend to proper root pruning and care for the remaining root system;
  - (c) to minimize root damage, soil erosion and tree disturbance, wrap a temporary root curtain around the root zone to retain and protect the exposed area, which root curtain is to consist of heavy wire mesh or similar material lined with burlap and supported by posts;
  - (d) use backfill to ensure that none of the roots remain exposed;
  - (e) if required by the Director of Planning, tunnel rather than trench when installing underground utilities and drainage lines, which technique includes boring a hole under or through the root system with minimum disturbance, and carry out any excavation within the tree protection area to accommodate underground installations, including services and footings, by hand; and
  - (f) maintain such protection barrier, repair any damage to it, and not alter or remove it until construction is complete.

#### No encroachment

7.10 A person must not encroach into a tree protection area, with or without vehicles, and must not store anything in such area until construction is complete.

#### SECTION 8 CARE AND MAINTENANCE OF TREES

#### Care of a tree

8.1 The owner of a site must care for each tree on the site in accordance with the requirements of this By-law and any applicable tree permit.

#### Treatment of a tree

- 8.2 A person must not:
  - (a) remove bark from, or cause any damage to, a tree;

(b) alter the existing grade around a tree, except to raise the grade by no more than:

(i) five centimeters within a one metre circumference around the trunk, and

- (ii) a further five centimetres between the one metre circumference and the circumference of the drip line of the tree;
- (c) do anything that would cause a tree to become a hazardous tree;
- (d) do anything that would cause a tree to die;
- (e) top or prune a tree to the extent that it is unlikely ever to regain its health or characteristic appearance; or
- (f) climb a retention tree using climbing gaffs, spurs, or spikes.

#### Root pruning

8.3 A person must not prune the roots of a tree unless that person is an arborist.

#### SECTION 9 EMERGENCY REMOVAL

#### Emergency removal

9.1 If a tree on a site becomes a hazardous tree as a result of damage from a natural cause, the owner or occupier of the site may remove the tree before obtaining a tree permit.

#### Issuance of tree permit after emergency

9.2 A person who has removed a tree under section 9.1 must, within 14 days after the date of removal, apply for a tree permit for such removal, and take all action necessary to obtain issuance of such tree permit.

#### SECTION 10 ASSESSMENTS AND INSPECTIONS

#### Entry on property

10. The Director of Planning or Chief Building Official, or any representative of either of them, may enter a site to assess or inspect the site, and trees or stumps on the site, to determine:

- (a) whether or not a person is in compliance with the requirements of the Vancouver Charter, this By-law, a tree permit, or any condition attached to such tree permit;
- (b) whether or not to issue a tree permit, and whether or not to include conditions in such tree permit; and
- (c) the state of any tree on the site.

#### SECTION 11 ENFORCEMENT

#### Revocation of tree permit

- 11.1 If:
  - (a) the Director of Planning has issued a tree permit in error;
  - (b) the Director of Planning has issued a tree permit on the basis of false, misleading, or incorrect information; or
  - (c) a tree permit holder has failed to comply with the tree permit;

the Director of Planning, upon giving notice to a tree permit holder, may revoke the tree permit.

#### Unlawful damage to or removal of a tree

11.2 In addition to a fine under this Section 11, a person who, in contravention of this Bylaw or a tree permit:

- (a) cuts or damages a tree on a site to the extent that, in the opinion, of the Director of Planning, it is or will become a hazardous tree, it has lost its characteristic appearance, it is or will become diseased, or it is dead or will die prematurely; or
- (b) removes a tree from a site;

promptly upon receipt of an order from the Director of Planning must comply with section 11.3.

#### Replacement of unlawfully damaged or removed tree

11.3 A person referred to in section 11.2 must:

(a) within 14 days after receipt of an order from the Director of Planning under section 11.2, apply for a tree permit to replace any tree referred to in such order, and take all action necessary to obtain issuance of such tree permit; and

(b) upon issuance of such tree permit, replace such tree.

#### Requirement to discontinue or carry out work

11.4 Council empowers any inspector or other employee of the city to order or direct any person to:

- (a) discontinue or refrain from proceeding with any work or doing anything that is in contravention of this By-law; and
- (b) carry out any work or do anything required by this By-law or any tree permit;

and failure on the part of such person to comply with such order or direction within the time specified in such order or direction is a violation of this By-law.

#### Service of notice

11.5 An inspector or official of the city, or a by-law enforcement officer, may serve an order, direction, or notice under this By-law:

(a) by mailing it by registered post to the owner of the applicable site at the address shown on the real property tax assessment roll;

(b) by mailing it by registered post to the person who is the addressee of the notice;

- (c) by handing it to the person who is the addressee of the notice; or
- (d) if the notice refers to real property, by posting it on the real property.

#### Offence under By-law

- 11.6 A person who:
  - (a) contravenes any provision of this By-law, or does any act or thing which contravenes any provision of this By-law, or suffers or allows any other person to do any act or thing which contravenes any provision of this By-law;
  - (b) neglects to do or refrains from doing anything required to be done by any provision of this By-law; or

(c) fails to comply with an order, direction, or notice given under any provision of this Bylaw, or suffers or allows any other person to fail to comply with an order, is guilty of an offence against this By-law, and liable to the penalties imposed under this Section 11.

#### Separate offence

11.7 A person who breaches this By-law in a manner or to an extent that affects more than one tree, is guilty of an offence against this By-law in respect of each tree.

Fine for offence

11.8 Every person who commits an offence against this By-law is punishable on conviction by a fine of not less than \$500.00 and not more than \$10,000.00 for each offence.

#### Fine for continuing offence

11.9 Every person who commits an offence of a continuing nature against this By-law is punishable on conviction by a fine of of not less than \$250.00 and not more than \$10,000.00 for each day such offence continues.

#### SECTION 12 REPEAL, TRANSITION, AND ENACTMENT

#### Repeal

12.1 This By-law repeals By-law No. 7347.

#### Transition

12.2 Council deems any plan showing trees affected by development or replacement trees being provided as part of a development and submitted pursuant to section 4.1.4 of the Zoning and Development By-law as it existed immediately before the coming into force of this By-law to be a tree plan for the purpose of this By-law.

#### Force and effect

12.3 This By-law is to come into force and take effect on the date of its enactment except that the fees referred to in clauses (i) and (ii) of section 4.3(c) are to come into force and take effect on January 1, 2010.

ENACTED by Council this day of

, 2009.

Mayor

## SCHEDULE A

#### PROTECTION BARRIER DISTANCE FROM TREE Section 1.2

TRUNK DIAMETER Trunk diameter	MINIMUM PROTECTION REQUIRED AROUND TREE Distance from trunk
20 cm	1.2 m
25	1.5
30	1.8
35	2.1
40	2.4
45	2.7
50	3.0
55	3.3
60	3.6
75	4.5
90	5.0
100	6.0

## SCHEDULE B

## EXCLUSIONS FROM TREE COUNTING DISTANCES FROM BUILDINGS Section 5.2(e) and (f)

## PART 1

DISTANCES FROM PRINCIPAL BUILDINGS			
Tree diameter	Distance	Tree diameter	Distance
cm	m	cm	m
20 - 30 31 - 32 33 34 - 35 36 37 - 38	2.0 2.1 2.2 2.3 2.4 2.5	39 40 - 44 45 - 49 50 - 54 55 - 59 60 and above	2.6 2.7 3.0 3.3 3.7 4.0

## PART 2

DISTANCES FROM ACCESSORY BUILDINGS			
Tree diameter	Distance	Tree diameter	Distance
cm	m	cm	m
20 - 24 25 - 29 30 - 34 35 - 39 40 - 44 45 - 49	1.0 1.3 1.5 1.8 2.0 2.3	50 - 54 55 - 59 60 - 64 65 - 69 70 and above	2.5 2.8 3.0 3.3 3.5

## SCHEDULE C

#### NUMBER OF TREES REQUIRED ON A SITE Section 5.2

TREE DETERMINATION SCHEDULE		
Site area (m²)	Number of trees required	
0 - 365 365 - 450 451 - 565 566 - 750 from 751 - 1000 from 1001 - 1250 from 1251 - 1600 from 1601 - 1850 from 1851 - 2200 from 251 - 2550 from 2551 - 2900 from 2901 - 3250 over 3250	2 3 4 5 6 7 8 9 12 16 20 25 30	

	SCHEDULE D		
	TYPES OF REPLACEMENT TREES Section 6.3		
PART 1 In the third column of this Schedule D, reference to a figure in centimetres means that measurement of trunk diameter must occur 15 cm above the ground, and reference to a figure in metres means that measurement of height must occur from the ground.			
Common name	Botanical name	Minimum size	
AMUR CORK TREE	PHELLODENDRON AMURENSE	6 cm	
ASH AUTUMN PURPLE EUROPEAN ASH EUROPEAN MOUNTAIN ASH FLOWERING ASH GREEN ASH RAYWOOD ASH WHITE ASH	FRAXINUS AMERICANA AUTUMN PURPLE FRAXINUS EXCELSIOR SORBUS AUCUPARIA FRAXINUS ORNUS FRAXINUS PENNSYLVANICA FRAXINUS OXYCARPA RAYWOODII FRAXINUS AMERICANA	6 cm 6 cm 6 cm 6 cm 6 cm 6 cm 6 cm 6 cm	
BASSWOOD	TILIA AMERICANA	6 cm	
BEECH AMERICAN BEECH EUROPEAN BEECH COPPER BEECH	FAGUS GRANDIFOLIA FAGUS SYLVATICA FAGUS SYLVATICA 'ATROPURPUREA'	6 cm 6 cm 6 cm	
BIRCH ASIAN WHITE BIRCH EUROPEAN WHITE BIRCH JACQUEMONTII BIRCH PAPER BIRCH RIVER BIRCH	BETULA PLATYPHYLLA BETULA PENDULA BETULA JACQUEMONTII BETULA PAPYRIFERA BETULA NIGRA	6 cm 6 cm 6 cm 6 cm 6 cm	
CATALPA COMMON CATALPA	CATALPA BIGNONIOIDES	6 cm	
CEDAR ATLAS CEDAR GOLDEN CEDAR BLUE ATLAS CEDAR CALIFORNIA INCENSE CEDAR DEODAR CEDAR WESTERN RED CEDAR	CEDRUS ATLANTICA THUJA PLICATA AUREA CEDRUS ATLANTICA GLAUCA CALOCEDRUS DECURRENS CEDRUS DEODARA THUJA PLICATA EXCELSA	3.5 m 3.5 m 3.5 m 3.5 m 3.5 m 3.5 m	

CEDAR OF LEBANON	CEDRUS LIBANI	3.5 m
CHESTNUT COMMON HORSECHESTNUT RED HORSECHESTNUT RUBY RED HORSECHESTNUT SWEET CHESTNUT	AESCULUS HIPPOCASTANUM AESCULUS X CARNEA AESCULUS X CARNEA BRIOTTI CASTANEA SATIVA	6 cm 6 cm 6 cm 6 cm
Cypress Nootka cypress	chamaecyparis nootkatensis	3.5 m
DOGWOOD CHINESE DOGWOOD EDDIE'S WHITE WONDER GIANT DOGWOOD KOUSA DOGWOOD PACIFIC DOGWOOD	CORNUS CHINENSIS CORNUS EDDIE'S WHITE WONDER CORNUS CONTROVERSA CORNUS KOUSA CORNUS NUTTALLII	5 cm 5 cm 5 cm 3.5 m 5 cm
DOVE TREE	DAVIDIA INVOLUCRATA	5 cm
ELM AMERICAN ELM SCOTCH ELM SIBERIAN ELM	ULMUS AMERICANA ULMUS GLABRA ULUMS PUMILA	6 cm 6 cm 6 cm
EMPRESS TREE	PAULOWNIA TOMENTOSA	6 cm
FIR ALPINE FIR BALSAM FIR DOUGLAS FIR FRASER'S FIR GRAND FIR NOBLE FIR WHITE FIR	ABIES LASIOCARPA ABIES BALSAMEA PSEUDOTSUGA MENZIESII ABIES FRASERI ABIES GRANDIS ABIES PROCERA ABIES CONCOLOR	3.5 m 3 m 3.5 m 3.5 m 3.5 m 3.5 m 3.5 m
GINKGO	GINKGO BILOBA	6 cm
COMMON HACKBERRY	CELTIS OCCIDENTALIS	6 cm
HEMLOCK MOUNTAIN HEMLOCK WESTERN HEMLOCK	TSUGA MERTENSIANA TSUGA HETEROPHYLLA	3 m 3.5 m
HORNBEAM EUROPEAN HORNBEAM	CARPINUS BETULUS	6 cm
Japanese Zelkova	ZELKOVA SERRATA	6 cm
KATSURA TREE KATSURA TREE	CERCIDIPHYLLUM JAPONICUM CERCIDIPHYLLUM JAPONICUM	3.5 m 6 cm

EUROPEAN LARCH	LARIX DECIDUA	3.5 m
LINDEN		
CRIMEAN LINDEN	TILIA EUCHLORA	6 cm
LITTLE LEAF LINDEN	TILIA CORDATA	6 cm
LOCUST		
BLACK LOCUST	ROBINIA PSEUDOACACIA	6 cm
HONEY LOCUST	GLEDITSIA TRIACANTHOS	6 cm
PINK LOCUST	ROBINIA AMBIGUA IDAHOENSIS	6 cm
SUNBURST HONEY LOCUST	GLEDITSIA TRIACANTHOS SUNBURST	6 cm
THORNLESS HONEY LOCUST	GLEDITSIA TRIACANTHOS INERMIS	6 cm
YELLOW LEAFED BLACK LOCUST	ROBINIA PSEUDOACACIA FRISIA	6 cm
MAPLE		
ARMSTRONG RED MAPLE	ACER RUBRUM ARMSTRONG	6 cm
BIGLEAF MAPLE	ACER MACROPHYLLUM	3.5 m
CRIMSON KING NORWAY	ACER PLATANOIDES CRIMSON KING	6 cm
CRIMSON SENTRY NORWAY	ACER PLATANOIDES CRIMSON SENTRY	6 cm
DAVID MAPLE	ACER DAVIDII	6 cm
HEDGE MAPLE	ACER CAMPESTRE	6 cm
MORGAN RED MAPLE	ACER RUBRUM MORGAN	6 cm
NORWAY MAPLE	ACER PLATANOIDES	6 cm
DEBORAH'S NORWAY MAPLE	ACER PLATANOIDES DEBORAH	6 cm
PACIFIC SUNSET MAPLE	ACER TRUNCATUM WARREN RED	6 cm
PAPERBARK MAPLE	ACER GRISEUM	5 cm
RED MAPLE	ACER RUBRUM	6 cm
RED SUNSET MAPLE	ACER RUBRUM RED SUNSET	6 cm
SCANLON RED MAPLE	ACER RUBRUM SCANLON	6 cm
SCARLET SENTINEL MAPLE	ACER RUBRUM SCARLET SENTINEL	6 cm
SCHWEDLER NORWAY MAPLE	ACER PLATANOIDES SCHWEDLERI	6 cm
SILVER VAR NORWAY MAPLE	ACER PLATANOIDES DRUMMONDI	6 cm
SUGAR MAPLE	ACER SACCHARUM	6 cm
SILVER MAPLE	ACER SACCHARINUM	6 cm
SYCAMORE MAPLE	ACER PSEUDOPLATANUS	6 cm
MONKEY PUZZLE TREE	ARAUCARIA ARAUCANA	3 m
ОАК		
English oak	QUERCUS ROBUR	6 cm
PIN OAK	QUERCUS PALUSTRIS	6 cm
RED OAK	QUERCUS RUBRA	6 cm
SCARLET OAK	QUERCUS COCCINEA	6 cm
Shumard Oak	QUERCUS SHUMARDII	6 cm
MADRONE		
PACIFIC MADRONE	ARBUTUS MENZIESII	3 m

Dur		
PINE AUSTRIAN PINE EASTERN WHITE PINE HIMALAYAN WHITE PINE JAPANESE BLACK PINE MONTEREY PINE PONDEROSA PINE RED PINE SCOTCH PINE UMBRELLA PINE WESTERN WHITE PINE	PINUS NIGRA PINUS STROBUS PINUS AGRIFFITHII WALLICHIANA PINUS THUNBERGII PINUS RADIATA PINUS PONDEROSA PINUS RESINOSA PINUS SYLVESTRIS SCIADOPITYS VERTICILLATA PINUS MONTICOLA	3.5 m 3.5 m 3.5 m 3.5 m 3.5 m 3.5 m 3.5 m 3.5 m 3.5 m 3.5 m
PLANE TREE LONDON PLANE TREE ORIENTAL PLANE TREE	PLATANUS ACERIFOLIA PLATANUS ORIENTALIS	6 cm 6 cm
DAWN REDWOOD	METASEQUOIA GLYPTOSTROBOIDES	3 m
SEQUOIA GIANT SEQUOIA REDWOOD	SEQUOIADENDRON GIGANTEUM SEQUOIA SEMPERVIRENS	3 m 3 m
SNOWBELL FRAGRANT SNOWBELL JAPANESE SNOWBELL	STYRAX OBASSIA STYRAX JAPONIC	6 cm 6 cm
SOURWOOD	OXYDENDRUM ARBOREUM	3.5 m
SPRUCE NORWAY SPRUCE SERBIAN SPRUCE SITKA SPRUCE WHITE SPRUCE	PICEA ABIES PICEA OMORIKA PICEA SITCHENSIS PICEA GLAUCA	3.5 m 3.5 m 3.5 m 3.5 m
SWEETGUM	LIQUIDAMBAR STYRACIFLUA	6 cm
AMERICAN SYCAMORE	PLATANUS OCCIDENTALIS	6 cm
TREE-OF-HEAVEN	AILANTHUS ALTISSIMA	3.5 m
TULIP TREE PERSIAN WALNUT	LIRIODENDRON TULIPIFERA JUGLANS REGIA	6 cm 6 cm
WILLOW CORKSCREW WILLOW GOLDEN WEEPING WILLOW WEEPING WILLOW WHITE WILLOW	SALIX MATSUDANA TORTUOSA SALIX ALBA TRISTIS SALIX BABYLONICA SALIX ALBA	6 cm 8 cm 8 cm 6 cm

NOTE: All fruit tree species should be standard specimens (not dwarfing root stock or espaliered) and selected for disease resistance and hardiness for the Vancouver region.

#### SCHEDULE D TYPES OF REPLACEMENT TREES Section 6.3 PART 2 In the third column of this Schedule D, reference to a figure in centimetres means that measurement of trunk diameter must occur 15 cm above the ground, and reference to a figure in metres means that measurement of height must occur from the ground. **Botanical name** Common name Minimum size APPLE MALUS SPECIES 6 cm WEEPING BIRCH **BETULA LANCINIATA** 6 cm BOXELDER ACER NEGUNDO 6 cm CHERRY SOUR CHERRY PRUNUS CERASUS 6 cm SWEET CHERRY PRUNUS AVIUM 6 cm **ORNAMENTAL CHERRY BLACK CHERRY** PRUNUS SEROTINA 6 cm CORNELIAN CHERRY CORNUS MAS 3 m HIGAN CHERRY PRUNUS SUBHIRTELLA 6 cm JAPANESE FLOWERING CHERRY PRUNUS SERRULATA 6 cm SARGENT FLOWERING CHERRY PRUNUS SARGENTII 6 cm **YOSHINO CHERRY** PRUNUS YEDOENSIS 6 cm COMMON CHOKECHERRY PRUNUS VIRGINIANA 6 cm CRAB APPLE PRAIRIFIRE CRAB APPLE MALUS PRAIRIFIRE 6 cm WILD CRAB APPLE MALUS FUSCA 6 cm CUCUMBER TREE CUCUMBER TREE MAGNOLIA ACUMINATA 3 m YELLOW CUCUMBER TREE MAGNOLIA CORDATA 3 m CYPRESS DROOPING NOOTKA CYPRESS CHAMAECYPARIS NOOTKATENSIS 3 m CHAMAECYPARIS OBTUSA HINOKI FALSE CYPRESS 3 m SAWARA FALSE CYPRESS CHAMAECYPARIS PISIFERA 3 m FLOWERING DOGWOOD **CORNUS FLORIDA** 5 cm

FIG	FICUS CARICA	6 cm
FILBERT EUROPEAN FILBERT GIANT FILBERT PURPLE GIANT FILBERT	CORYLUS AVELLANA CORYLUS MAXIMA CORYLUS MAXIMA PURPUREA	3 m 3 m 3 m
GOLDENCHAIN TREE	LABURNUM WATERERI 'VOSSII'	6 cm
GOLDENRAIN TREE	KOELREUTERIA PANICULATA	3 m
LAVALLE HAWTHORNE	CRATAEGUS LAVALLEI	6 cm
Hemlock Canadian Hemlock	TSUGA CANADENSIS	3.5 m
HOLLY ENGLISH HOLLY	ILEX AQUIFOLIUM	3.5 m
JAPANESE ANGELICA TREE	ARALIA ELATA	3 m
JAPANESE PAGODA TREE	SOPHORA JAPONICA	3 m
PORTUGAL LAUREL	PRUNUS LUSITANICA	3 m
MAGNOLIA DAWSON MAGNOLIA KOBUS MAGNOLIA SAUCER MAGNOLIA SOUTHERN MAGNOLIA SOUTHERN MAGNOLIA	MAGNOLIA DAWSONIANA MAGNOLIA KOBUS MAGNOLIA SOULANGIANA MAGNOLIA GRANDIFLORA MAGNOLIA GRANDIFLORA	3 m 3 m 3 m 3 m 5 cm
MAPLE AMUR MAPLE JAPANESE MAPLE MANITOBA MAPLE ROCKY MOUNTAIN MAPLE VINE MAPLE	ACER GINNALA ACER PALMATUM ACER NEGUNDO ACER GLABRUM ACER CIRCINATUM	4 cm 3 m 6 cm 3 m 3.5 m
MULBERRY MULBERRY WHITE MULBERRY	MORUS NIGRA MORUS ALBA	5 cm 5 cm
PALM WINDMILL PALM	TRACHYCARPUS FORTUNEI	3 m
PEAR	PYRUS COMMUNIS	6 cm
PERSIAN PARROTIA	PARROTIA PERSICA	6 cm
PINE SHORE PINE WEEPING RED PINE	PINUS CONTORTA PINUS DENSIFLORA PENDULA	3.5 m 3.5 m
PLUM ITALIAN PRUNE PLUM JAPANESE PLUM	PRUNUS 'ITALIAN PRUNE' PRUNUS SALICINA	6 cm 6 cm

ORNAMENTAL PLUM FLOWERING PLUM JAPANESE FLOWERING PLUM PURPLE LEAF PLUM	PRUNUS TRILOBA PRUNUS BLIREANA PRUNUS CERASIFERA PISSARDI	6 cm 6 cm 6 cm
QUINCE	CYDONIA OBLONGA	6 cm
REDBUD EASTERN REDBUD	CERCIS CANADENSIS	5 cm
SILK TREE	ALBIZIA JULIBRISSIN	3 m
SILVERBELL MOUNTAIN SILVERBELL	HALSESIA MONTICOLA	3 m
SPRUCE COLORADO SPRUCE COLORADO BLUE SPRUCE HOOP'S BLUE SPRUCE KOSTER BLUE SPRUCE	PICEA PUNGENS PICEA PUNGENS GLAUCA PICEA PUNGENS HOOPSII PICEA PUNGENS KOSTER	3 m 3 m 3 m 3 m
STRAWBERRY TREE	ARBUTUS UNEDO	3 m
STAGHORN SUMAC	RHUS TYPHINA	3 m

NOTE: All fruit tree species should be standard specimens (not dwarfing root stock or espaliered) and selected for disease resistance and hardiness for the Vancouver region.

	SCHEDULE D	
ТҮРЕ	S OF REPLACEMENT TREES Section 6.3	
	PART 3	
	eference to a figure in centimetres means the the ground, and reference to a figure in the ground.	
Common name	Botanical name	Minimum size
MOUNTAIN ASH EUROPEAN MOUNTAIN ASH	SORBUS AUCUPARIA	6 cm
ORNAMENTAL CHERRY BLACK CHERRY CORNELIAN CHERRY HIGAN CHERRY JAPANESE FLOWERING CHERRY SARGENT FLOWERING CHERRY YOSHINO CHERRY	PRUNUS SEROTINA CORNUS MAS PRUNUS SUBHIRTELLA PRUNUS SERRULATA PRUNUS SARGENTII PRUNUS YEDOENSIS	6 cm 3 m 6 cm 6 cm 6 cm 6 cm
COMMON CHOKECHERRY	PRUNUS VIRGINIANA	6 cm
CRAB APPLE PRAIRIFIRE CRAB APPLE	MALUS PRAIRIFIRE	6 cm
CUCUMBER TREE CUCUMBER TREE YELLOW CUCUMBER TREE	MAGNOLIA ACUMINATA MAGNOLIA CORDATA	3 m 3 m
DOGWOOD FLOWERING DOGWOOD	CORNUS FLORIDA	3.5 m
CYPRESS HINOKI FALSE CYPRESS SAWARA FALSE CYPRESS	CHAMAECYPARIS OBTUSA CHAMAECYPARIS PISIFERA	3 m 3 m
FILBERT GIANT FILBERT PURPLE GIANT FILBERT	CORYLUS MAXIMA CORYLUS MAXIMA PURPUREA	3 m 3 m
FRINGE TREE	CHIONANTHUS VIRGINICUS	3 m
HEMLOCK CANADIAN HEMLOCK	TSUGA CANADENSIS	3.5 m

EX AQUIFOLIUM	3.5 m
	5.5 III
ALIA ELATA	3 m
UNUS LUSITANICA	3 m
GNOLIA SOULANGIANA	3 m
ER PALMATUM	6 cm 5 cm 3.5 m
DRUS ALBA	5 cm
ACHYCARPUS FORTUNEI	3 m
RROTIA PERSICA	3 m
IADOPITYS VERTICILLATA	3 m
UNUS BLIREANA	6 cm 6 cm 6 cm
RCIS CANADENSIS	5 cm
BIZIA JULIBRISSIN	3 m
	6 cm 6 cm
BUTUS UNEDO	3 m
US TYPHINA	3 m
	UNUS LUSITANICA GNOLIA SOULANGIANA ER CAMPESTRE ER PALMATUM ER CIRCINATUM ORUS ALBA ACHYCARPUS FORTUNEI RROTIA PERSICA IADOPITYS VERTICILLATA UNUS TRILOBA UNUS TRILOBA UNUS SELIREANA UNUS CERASIFERA PISSARDI RCIS CANADENSIS BIZIA JULIBRISSIN YRAX OBASSIA YRAX JAPONICA BUTUS UNEDO