

STICKLEBACK ENVIRONMENTAL

TREE EVALUATION REPORT
3455 OXFORD STREET, PORT
COQUITLAM, B.C.

PREPARED BY: STICKLEBACK ENVIRONMENTAL MARCH 2019

1.0 Overview

Stickleback Environmental was retained by Navjot Takhar for the purpose of assessing tree resources and making recommendations for tree retention and removal for the proposed rezoning at 3455 Oxford Street in Port Coquitlam, BC.

2.0 Methodology

On November 19 2018 the project area was traversed on foot and a tree inventory was conducted. Trees of permit size in the property boundaries were tagged visually assessed for defects. Tools used during the tree inventory include a diameter tape measure, wooden mallet, binoculars, range finder, clinometer and compass. Approximate tree height, species, diameter at breast height (DBH), live crown ratio (LCR), drip line, general condition and defects were recorded. During the site visit weather conditions were clear with no wind.

3.0 Results / Findings

The site consists of a single family residence with four trees: a multi-stemmed big leaf maple (*Acer macrophyllum*) in the front yard near the south property line; and, three trees, a beaked hazelnut (*Cornus corylus*) and two cherry trees (*Prunus sp.*) in the rear yard. Tree conditions are listed in Table 1, and tree locations are shown in the Tree Preservation and Removal Plan.

4.0 Tree Preservation Summary

Trees were evaluated for their preservation based upon condition, health, location and species factors. Trees which were in conflict with the proposed development footprint, with poor health, or of little long term retention value were recommended for removal. The Tree Preservation and Removal Plan attached visually depicts trees to be retained or removed based on the concept designs. A tree cutting permit must be obtained prior to tree removal and a copy of the Tree Cutting Permit must be posted in a highly visible location onsite throughout the duration of the tree removal process.

5.0 Tree Replacement

As per the City of Port Coquitlam *Tree Bylaw, 2019, No. 4018* (the Bylaw) Section 7 Tree Replacement, one replacement tree is required for each tree proposed to be cut, and two replacement trees are required for each significant tree to be cut, where a significant tree has a stem diameter of 60cm or greater.. Replacement trees are to have a minimum caliper diameter of 5.0 cm if deciduous, or a minimum of 2 m height if coniferous, planted on a lot to replace a tree which has been cut down on the same lot.

In total four (4) permit sized trees are recommended for removal of which three (3) are significant trees, with combined stem diameters greater than 60 cm. Based on the above, seven (7) replacement trees are required.

Recommended replacement trees for the site are:

- Two (2) Kousa dogwood (*Cornus kousa*) of minimum 5 cm caliper

- Two (2) Blood Good Japanese Maple (*Acer palmatum* 'Blood Good') of minimum 5 cm caliper
- Three (3) vine maple (*Acer circinatum*) of minimum 5cm caliper.

Every owner shall maintain in good health in accordance with sound arboricultural practice every replacement tree planted pursuant to a tree replacement plan for a period of 1 year after planting. Where a replacement tree does not survive for 1 year after planting, the owner shall, within 6 months remove the deceased tree and provide a new replacement tree in a location satisfactory to the Parks Section Manager. The owner shall thereafter maintain the new replacement tree in accordance with section 7.7 of the Bylaw.

The City of Port Coquitlam requires a \$500 security deposit for each replacement tree to be planted. For this site, based on seven (7) replacement trees, a security deposit of \$3,500.00 plus applicable taxes is required.

6.0 Limitations

Limitations of this Assessment

This Assessment is based on the circumstances and observations as they existed at the time of the site inspection of the Client's Property and the trees situate thereon by Stickleback Environmental and upon information provided by the Client to Stickleback Environmental. The opinions in this Assessment are given based on observations made and using generally accepted professional judgment, however, because trees and plants are living organisms and subject to change, damage and disease, the results, observations, recommendations, and analysis as set out in this Assessment are valid only as at the date any such testing, observations and analysis took place and no guarantee, warranty, representation or opinion is offered or made by Stickleback Environmental as to the length of the validity of the results, observations, recommendations and analysis contained within this Assessment. As a result the Client shall not rely upon this Assessment, save and except for representing the circumstances and observations, analysis and recommendations that were made as at the date of such inspections. It is recommended that the trees discussed in this Assessment should be re-assessed periodically.

Further Services

Neither Stickleback Environmental, nor any assessor employed or retained by Stickleback Environmental (the "Assessor") for the purpose of preparing or assisting in the preparation of this Assessment shall be required to provide any further consultation or services to the Client, save and except as already carried out in the preparation of this Assessment and including, without limitation, to act as an expert witness or witness in any court in any jurisdiction unless the Client has first made specific arrangements with respect to such further services, including, without limitation, providing the payment of the Assessor's regular hourly billing fees.

Stickleback Environmental accepts no responsibility for the implementation of all or any part of the Assessment, unless specifically request to examine the implementation of such activities recommended herein. In the event that inspection or supervision of all or part of the implementation is request, that request shall be in writing and the details agreed to in writing by both parties.

Assumptions

The Client is hereby notified and does hereby acknowledge and agree that where any of the facts and information set out and referenced in this Assessment are based on assumptions, facts or information provided to Stickleback Environmental by the Client and/or third parties and unless otherwise set out within this Assessment, Stickleback Environmental will in no way be responsible for the veracity or accuracy of any such information. Further, the Client acknowledges and agrees that Stickleback Environmental has, for the purposes of preparing their Assessment, assumed that the Property, which is the subject of this Assessment is in full compliance with all applicable federal, provincial, municipal and local statutes, regulations, by-laws, guidelines and other related laws. Stickleback Environmental explicitly denies any legal liability for any and all issues with respect to non-compliance with any of the above-referenced statutes, regulations, bylaws, guidelines and laws as it may pertain to or affect the Property to which this Assessment applies.

Publication

The Client acknowledges and agrees that all intellectual property rights and title, including without limitation, all copyright in this Assessment shall remain solely with Stickleback Environmental. Possession of this Assessment, or a copy thereof, does not entitle the Client or any third party to the right of publication or reproduction of the Assessment for any purpose save and except where Stickleback Environmental has given its prior written consent. This Assessment may not be used for any other project or any other purpose without the prior written consent of Stickleback Environmental.

Neither all nor any part of the contents of this Assessment shall be disseminated to the public through advertising, public relations, news, sales, the internet or other media (including, without limitation, television, radio, print or electronic media) without the prior written consent of Stickleback Environmental.

Restriction of Assessment

The Assessment carried out was restricted to the Property. No assessment of any other trees or plants has been undertaken by Stickleback Environmental. Stickleback Environmental are not legally liable for any other trees or plants on the Property except those expressly discussed herein. The conclusions of this Assessment do not apply to any areas, trees, plants or any other property not covered or referenced in this Assessment.

Professional Responsibility

In carrying out this Assessment, Stickleback Environmental and any Assessor appointed for and on behalf of Stickleback Environmental to perform and carry out the Assessment has exercised a reasonable standard of care, skill and diligence as would be customarily and normally provided in carrying out this Assessment. The Assessment has been made using accepted arboricultural techniques. These include a visual examination of each tree for structural defects, scars, external indications of decay such as fungal fruiting bodies, evidence of insect attack, discolored foliage, the condition of any visible root structures, the degree and direction of lean (if any), the general condition of the tree(s) and the surrounding site, and the current or planned proximity of property and people. Except where specifically noted in the Assessment, none of the trees examined on the property were dissected, cored, probed, or climbed and detailed root crown examinations involving excavation were not undertaken.

While reasonable efforts have been made to ensure that the trees recommended for retention are healthy, no guarantees are offered, or implied, that these trees, or all parts of them will remain standing. It is professionally impossible to predict with absolute certainty the behaviour of any single tree or group of trees, or all their component parts, in all given circumstances. Inevitably, a standing tree will always pose some risk. Most trees have the potential to fall, lean, or otherwise pose a danger to property and persons in the event of adverse weather conditions, and this risk can only be eliminated if the tree is removed.

Without limiting the foregoing, no liability is assumed by Stickleback Environmental or its directors, officers, employers, contractors, agents or Assessors for:

- a) any legal description provided with respect to the Property;

- b) issues of title and or ownership respect to the Property;
- c) the accuracy of the Property line locations or boundaries with respect to the Property; and
- d) the accuracy of any other information provided to Stickleback Environmental by the Client or third parties;
- e) any consequential loss, injury or damages suffered by the Client or any third parties, including but not limited to replacement costs, loss of use, earnings and business interruption; and
- f) the unauthorized distribution of the Assessment.

The total monetary amount of all claims or causes of action the Client may have as against Stickleback Environmental, including but not limited to claims for negligence, negligent misrepresentation and breach of contract, shall be strictly limited solely to the total amount of fees paid by the Client to Stickleback Environmental for which this Assessment was carried out.

Further, under no circumstance may any claims be initiated or commenced by the Client against Stickleback Environmental or any of its directors, officers, employees, contractors, agents or Assessors, in contract or in tort, more than 12 months after the date of this Assessment.

Third Party Liability

This Assessment was prepared by Stickleback Environmental exclusively for the Client. The contents reflect Stickleback Environmental best assessment of the trees and plants situate on the Property in light of the information available to it at the time of preparation of this Assessment. Any use which a third party makes of this Assessment, or any reliance on or decisions made based upon this Assessment, are made at the sole risk of any such third parties. Stickleback Environmental accepts no responsibility for any damages or loss suffered by any third party or by the Client as a result of decisions made or actions based upon the use or reliance of this Assessment by any such party.

Intellectual Property Ownership

All legal rights and ownership in all drawings, renderings, images, deliverables and work product in any form prepared by Stickleback Environmental and its directors, officers, employees, representatives and agents in the performance of the Services, and all intellectual property in such drawings, renderings, images, deliverables and work product in any form, including without limitation, all copyright and moral rights, are reserved unto and at all times shall remain the property of Stickleback Environmental. Notwithstanding anything to the contrary in this Agreement, Stickleback Environmental shall have the unrestricted right to utilize all its intellectual property in other contexts, including the rights to use its intellectual property for its own purposes. Unauthorized distribution and/or alteration of Stickleback Environmental intellectual property by the Client or third parties or for any other use not expressly permitted herein is strictly prohibited, save and except with the prior written consent of Stickleback Environmental.

General

Any plans and/or illustrations in this Assessment are included only to help the Client visualize the issues in this Assessment and shall not be relied upon for any other purpose. This report is best viewed in colour. Any copies printed in black and white may make some details difficult to properly understand. Stickleback Environmental accepts no liability for misunderstandings due to a black and white copy of the report.

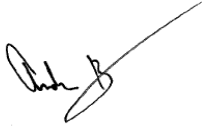
The Assessment has a cover page plus 13 pages. It shall be considered as a whole, no sections are severable, and the Assessment shall be considered incomplete if any pages are missing.

Dated: March 15, 2019

Stickleback Environmental

Per:

Authorized Signatory

A handwritten signature in black ink, appearing to read 'Andrew Booth', with a long, sweeping horizontal line extending to the right.

Andrew Booth, B.Sc., R.P.Bio, QEP,
ISA Certified Arborist (PN6580-A), TRAQ

Attachments: Photographs, Tree Preservation and Removal Plan, Tree Replacement Plan.

Table 1: Tree Assessment.

Tag	Species	DBH (cm)	Ht (m)	LCR	Drip line	Recommendation	Condition Assessment
76	<i>Acer macrophyllum</i>	70	14	75	7	Remove	Multi-stemmed x 3 at 1.4m height. Some moisture at stem union. Healed cracks on stems. Heavy overweight stems with horizontal attachment. In construction footprint.
77	<i>Prunus sp.</i>	31,30,36	8	35	5	Remove	Multi-stemmed x 3. Decay in upper canopy. Decay at stem union and decay column up southeast side of stem. Bark peeling. Poor health and structure. No retention value.
78	<i>Corylus cornuta</i>	6x15	8	45	6	Remove	Multi-stemmed x 13. Moss load in canopy. Sucker growth at base. Fair condition. Unappealing species in landscape, may wish to replace with a more aesthetic species.
79	<i>Prunus sp.</i>	20,40,42	8	55	4	Remove	Triple stemmed, topped at 4 m with epicormic re-growth. Poor form. Low retention value. In construction footprint.

Photographs



Photograph 1: Tree #76 located in the front yard.



Photograph 2: Tree #76 multi-stemmed at 1.4 m height.



Photograph 3: Tree #77 with decaying canopy in the rear yard.



Photograph 4: Decay at the stem union of tree #77.



Photograph 5: Tree #78 was a multi-stemmed beaked hazelnut in the center of the rear yard.



Photograph 6: Tree #79 was an old cherry tree with historical pruning and epicormic growth.



Photograph 7: Resinosis on the stem of tree #79.

