



SouthShore Forest Consultants

Arborist Report

For

Westurban Developments Inc.
1-1170 Shoppers Row
Campbell River, BC V9W 2C8

Site
685 Admirals Road
Victoria BC

September 16, 2018

Prepared for:
Frank Limshue
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Prepared by:
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GST # 777095324 RC001

Work Safe BC # 968408

Insurance/ Seafirst Brentwood (CFC Underwriting – 5 Million Dollar Liability- Policy PSG03515712)

Incorporation # BC1069996 Ltd.

RE: Proposed Development Project 685 Admirals Road, Esquimalt B.C. - Demolition & Construction

Executive Summary

ShoreShore Forest Consultants was retained by our client to provide an Arborist assessment and Tree Protection Plan (TPP) for a residential property located at 685/681 Admirals Road in Township of Esquimalt. Our primary duty involves the identification of trees proposed for protection and retention during the projects term. The client's proposal involves the demolition of existing structures and extensive excavation. The client has proposed to develop the site and provide a 60 unit condo structure. The structures footprint will have a limited setback, approximately 1-2m back from the sites property lines. Tree retention cannot occur on site. Soil removal and excavation impacts are expected to significantly impact every tree on site. Tree removal is the client's only option under the current development proposal.

Background/Scope of Work

SouthShore Forest Consultants was contacted by Frank Limshue, a Development Manager with Westurban Developments Ltd. Frank has provided us with information concerning two (2) residential lots proposed for redevelopment in the Township of Esquimalt. Westurban Developments Ltd. has requested that SouthShore Forest Consultants provide an Arborist report and assessment of the site. SouthShore Forest Consultants agreed to provide the client with an Arborist Report and assessment of the site. The sites physical location is 681 & 685 Admirals Road in the Township of Esquimalt B.C.

Methodology

On September 13, 2018 Michael Butcher a consulting arborist with SouthShore Forest Consultants performed the site assessment. The assessment was performed from grade. We considered this type of site inspection to be classified as a “Basic Visual Tree Assessment”. No form of invasive or diagnostic forms of arboricultural measurement tools were used during the assessment.

The weather that day was mild and sunny with temperatures around 18C. No precipitation was detected, landscape was dry. Wind speed was minor, 2-4km per/hour.

A tree inventory was performed during the assessment. The tree inventory is identified as Appendix “A” and is included with the report. Series number tree identification tags #251 to #262 were used on site. Tree tags are attached to tree stems at approximately 2m above grade on tree stems. Trees positioned on private property were not tagged. They are identified as “N/T” (No Tag) within the tree inventory.

The tree inventory and site assessment will allow us to forecast tree retention and protection requirements for the site. We provide sustainable solutions which are accepted by the Tree Care Industry Association and the International Society of Arboriculture. Tree risk assessment was utilized during the assessment.

Observations/Discussion

The first observation of note regarding the site is how the elevation is raised above Admirals Road. Two lots, the site was observed to have an existing residential house located at 685 Admirals Road. We observed the house to be a rental property, on level with a concrete parking pad and patio. The second lot was observed to be vacant of any structure. Demolition appeared to have previously occurred.

Together each lot was assessed as one. Trees were observed around the parameter and middle of the lot. Garry Oak (*Quercus garryana*), big-leaf maple (*Acer macrophyllum*), Western cedar (*Thuja plicata*), Douglas-fir (*Pseudotsuga menziesii*), cypress species (*Cupressaceae ssp.*) and ornamental cherry (*Prunus ssp.*) trees were observed to be on site. In total we observed 65 trees within the site.

We observed 33 dead western cedar trees which were planted up the middle and along the east property line. We observed two Garry oaks and maple positioned in the N/E corner of the site. Gary oak #251 and maple tree #252 were observed to have structural issue, root damage and basal rot. The cherry trees, # 257, #258 & #261 were observed to be declining in health and condition. We observed a the purple leaf plum tree #261 to have a “Ganoderma” conk (mushroom) growing on its lower stem. We observed a large fir tree positioned along the

Eastern property line. This tree appeared to have a damaged top. It appears that the top was lost resulting in codominant stem attachments. A number of smaller diameter sized cedar trees were observed to be in fair condition. Two cypress trees # 259 & #261 were observed to be in fair condition. Each of the cypress trees will be significantly impacted as result of the excavation and grade changes to the site.

During our assessment we observed two (2) trees located on private property. A willow species (*Salix sp.*) and maple tree. Each tree was observed to close to the project, in an area which could be impacted by excavation, blasting and grade changes. The willow tree positioned over the east property line may require pruning. We observed the trees canopy to be hanging over the client's property line.

We have been informed that the proposed new structure and parkade will encroach upon the entire site. Limited setbacks to the existing property lines will be minimal. Our observations indicate that every tree positioned the clients property will require removal to sustain the new construction. The excavation and reduction pose a significant impact to the site. The loss of tree Critical Root Zones (CRZ) will result under the current proposal. Under the current proposal our observations indicate that every tree on site will require removal.




Tree Protection Plan (TTP)

- Provide approve fencing detail approved by the Township of Esquimalt.
- Install Tree Protection Fencing (TPF) at a minimum of 1 meter off the property line to protect tree N/T maple along the North property line.
- Install TPF at a minimum of 1 meter off the property line to protect tree N/T willow along the East property line. Provide tree pruning to elevate the willow trees canopy over the clients property reduce damage which may occur from the excavation and construction process.

Conclusions

- The site will be completely utilized during the construction of the proposed structure.
- The client has indicated that the property line set backs will be minimal for the site.
- The current grade has been proposed for demolition. The grade will be significantly reduced to install a site “Parkade”.
- Every tree positioned on the site will be significantly affected and negative impacts to tree Critical Root Zones will occur.
- A number of trees on site are dead, decayed and exhibiting declining health and structure.
- Tree protection will reduce impacts to the Protected Root Zone (PRZ) of “N/T” private maple and willow tree. Pruning the willow tree will reduce damage to the trees canopy during the construction process.

Recommendations

-  Provide Tree Protection fencing for Tree “N/T” maple and willow.
-  Provide tree pruning to reduce damage to the willow trees canopy.
-  Remove all six five (65) trees within the site. Tree Retention cannot be provided under the current proposal.

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ATTACHMENTS

- Appendix A – Tree Inventory
- Appendix B – Site Photos

Arborist Disclosure Statement:

Arborist are tree specialists who use their education, training and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risks.

Arborist cannot detect every condition that could possibly lead to structural failure of a tree.

Trees are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below the ground.

Arborist cannot guarantee that the tree will be healthy and safe under all circumstances, or for a specific period of time. Trees are dynamic specimens, not static. Changes in conditions including the environment are unknown.

Remedial treatments cannot be guaranteed.

Trees can be managed, but they cannot be controlled. The only way to eliminate all risk is to eliminate all trees

Tree Assessment Condition Rating

- Good - A tree specimen which is exempt defects, branch dieback, moderate insect and fungal identification. This tree has evenly distributed branching, trunk development and flare. The root zone is undisturbed, leaf, bud and flower production and elongation are normal for its distribution.
- Fair - A tree specimen which has minor defects, branch dieback, previous limb failure, identification of cavities and insect, or fungal identification. This tree has multiple (2-3) primary stem attachments; previous utility pruning, callus growth and poor wound wood development. Minor root girdling, soil heave and identifiable mechanical damage to the root flare or root zone.
- Poor- A tree specimen where 30-40% of the canopy is identifiably dead, large dead primary branching, limited leaf production, bud development and stem elongation. Limb loss or failure, and heavy storm damage leading to uneven weight distribution. Large pockets of decay, multiple cavities, heavy insect and fungal infection. Root crown damage or mechanical severing of roots. Root plate shifting, heavy lean and movement of soil.
- Dead- Tree has been observed to be dead with no leaf, foliar and bud development. No stump sprouts and root suckers are present.

Tree Protection Plan

- i. Provide a detailed sign specifying that tree protection measures are in place and will be followed during the project. Fines will be posted for malicious acts and can be placed on individuals who disregard the tree protection plan and its guidelines. Signs will be placed at each entrance of the project detailing what is expected when working in potentially high impact tree protection zones.
- ii. Provide tree protection fencing for all trees identified with protection requirement in this report. This fencing shall be four (4ft) feet in height and made of orange plastic. If required, header and footer boards will be used to secure the protective fencing. Use the Township of Esquimalt tree protection specifications.
- iii. Tree protection and root protection signs will be placed on the fencing. No entry will be allowed, unless specified by the project arborist and in their presents while on site.
- iv. Restrict vehicle traffic to designated access routes and travel lanes to avoid soil compaction and vegetation disturbances.
- v. Make all necessary precautions to prevent the storage of material, equipment, stockpiling of aggregate or excavated soils within tree protection areas. No dumping of fuels, oils or washing of concrete fluids will be allowed in tree protection zones.
- vi. Provide an onsite arborist when a risk of root damage, root cutting or limb removal is required within the tree protection zone.
- vii. Avoid alterations to existing hydrological patterns to minimize vegetation impacts to the site.
- viii. The use of a project arborist is required to provide layout of tree protection zones. The project arborist(s) will provide pre-construction information to all parties involved with the project. The arborist must be notified 24hrs prior to construction activities in sensitive areas. The project arborist should be used to provide root and branch pruning when diameters are greater than 6cm.
- ix. At no time will tree protection zones be removed from the project unless approved by the project arborist.

Appendix “B”

Photo #1 – Fencing Construction



In this photo you can observed a typical Tree Protection Fence. This type of construction is considered to be square with right angles.

Photo #2 – Center of Lot – Dead Cedars

Thirty three (33) cedar trees are dead on the property.



In this photo you can see a number of the dead cedar trees. Positioned approximately in the center of the lot and along the eastern property line these trees will require removal from the site.

Photo # 3 – N/E Corner, Oak trees

The two (2) Garry oaks on the property are located in the North West corner of the property. Native bedrock may have to be blasted, negatively affect tree root zones.



In this photo you can see the largest Garry Oak Tree #251 setback approximately 3 metres from the north property line. Under the current proposal the tree will be located within the buildings footprint.

Photo #4 – South East Corner of Lot

The cedars and cypress trees are positioned along the inside of the southwest property lines.



In this photo you can see the large cypress and row of six (6) cedar trees along the south property line. Reduced grade changes will significantly damage each tree CRZ. Under the current proposal tree removal will be required to stabilize the setback along this side of the project.

APPENDIX A - TREE INVENTORY/HAZARD RATINGS SUMMARY

Location: 685 Admiral Rd - Esquimalt B.C

Date: September 13, 2018 Page #: 1

Comments/Site Conditions: Clear/Partially cloudy Dry Winds 4-7 km 17%. Proposed demolition of existing residential structure and development of 60 unit apartment complex. Proposed building envelope has property setbacks of approximately 1-2 metres. A proposed parkade will require site grades to be reduced by 4 metres. The site is extremely sloped to Admirals Drive.

TAG #	Spec.	DBH (cm)	Ht (m)	PRZ (m)	Cond. G,F,P	Retention	Remarks
251	Gary Oak	48	14	5	F-F/P		Tree is within footprint of proposed building development. Poor structure, root damage.
252	B L Maple	35	13	4	Poor		Advanced root rot and decayed basal stem area. Within proposed building footprint.
253	Gary Oak	31	14	3	F/F		Tree is within footprint of proposed building development. Grade reduction impacts.
254	Doug Fir	67	20	7	F/F		Tree is within footprint of proposed building development. Grade reduction impacts.
N/T	Willow sp.	50	15	5	F/F	X	Private tree, provide tree protection fencing at property line. Elevate canopy over site
255	W Cedar	30	9	3	Poor		Remove 33 dead and 6 alive cedars. All are positioned within proposed building footprint.
256	Holly	21	5	2	F/F		Remove, within building footprint.
257	F Cherry	33	7	3	P/P		1/2 Canopy dead- Remove- Footprint
258	F Cherry	34	7	3	F/P		1/4 Canopy dead -Remove- Footprint
259	L Cypress	67	16	7	F/F		Remove tree, heavy impacts due to excavation/grade change
260	W Cedar	24	12	3	F/F		Remove 6 cedar trees positioned along southern property line. Excavation impacts.
261	PI Plum	40	5	4	F/P		Remove, tree is infected with "ganoderma" pathogen, extensive basal stem decay.
262	B Cypress	70	12	7	F/F		Remove tree, sustancail impacts from reduced grade and development.
N/T	BI Maple	55	17	6	F/F	X	Private tree on north side of property line. Protect tree at fence-line, prune to elevate.

