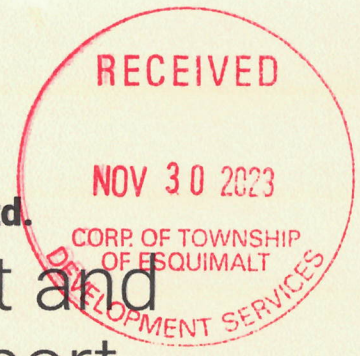




Scotty Tree & Arborist Service Ltd.

Tree Assessment and Development Report



Prepared for 1005 Tillicum Rd, Esquimalt BC
SUBMITTED
10 November, 2023



Scott Mitchell
ISA Arborist PN-6138-A
Hazard Tree Assessor CTRA 309
TRAQ certified
250-220-9298

To whom it may concern,

By request, Scotty Tree & Arborist Service Ltd has assessed the trees on the property of 1005 Tillicum Ave, Esquimalt BC for a predevelopment proposal.

Executive Summary:

The proposal removes a single-family residence and replace sit with a multi-use building. A section of the property will be re purposed for a community trail. Twenty bylaw protected trees are on or near this property that warrant consideration for this project. In addition, there are twenty-two non-bylaw protected trees considered for due diligence. The re purposing of the south of the lot will require removal of most of the trees on this lot. Generally, the trees on the site are decedent and not in good health. With appropriate protective measures, the remainder of the trees should not be negatively affected long-term. To ensure this, arborist direction is required for parking lot installation in protected root zones (PRZ).

Tree impact summary table

Tree status	Total	retained	removed	planted
On site bylaw protected	17	7	10	5 medium 2 small
On site non-bylaw protected	41	6	33	0
Municipal trees	0	0	0	0
Neighboring bylaw protected	3	3	0	0
Neighboring non-bylaw protected	0	0	0	0
total	61	16	43	As directed

See tree inventory table for complete tree summary of trees requiring management.

Introduction: Scotty tree was contracted to assess the trees on this property to determine the impact of developing a multi-use property. The entire property was assessed, including neighboring and municipal trees. Joining

Methodology:

Detailed analysis of the proposed development plan was used to inform analysis of the trees, particularly in terms of the underground service excavation locations. Scotty Tree used standard arboricultural observation and physical examinations to determine tree health and confirm rooting areas. Soil analysis was conducted by physical exploration. Consultation with the leading reference book (*Trees and Development*, Nelda Matheny and James R. Clark) was used to determine protected root zones and tree impacts when developing this property.

Observations and Discussion:

1. The lot dimensions require removal of the aging trees on the south property line:

The long and narrow lot and corresponding building design will result in the removal of the the trees on the south property line. Most of these trees are not in good health.



Picture 1: Decadent, mainly plum trees, are in poor health.

2. Two locations have been identified for planting:

An area adjacent the curb will be suitable for two small plantings. The preserved green space at the rear of the lot can accommodate up to 6 medium sized tree plantings. *See tree management site plan.*

3. Root zone protection for bylaw protected trees:

Root zones that are found in the proposed parking areas outside of protection fences require anti compaction (2 X19mm plywood or 20cm wood chips) until the final surface is placed. These areas should be a permeable surface such as pavers to allow water and air exchange to the roots. *See tree management site plan.*



Fig 2. Neighbouring pine tree OS3 extends into the parking area more than other retained trees.

4. Hawthorn tree #79 and plum tree #32:

These retained trees will be close to excavations for the municipal trail. Arborist direction should be engaged to direct root pruning. *See tree management site plan.*

Conclusions and Recommendations:

This proposal is viable from a tree management perspective. The project poses little threat to the retained bylaw protected trees on this property if due diligence measures are adhered to. The preserved green space can accommodate new tree plantings to compensate for the loss of the bylaw protected trees. Permeable surfaces for the parking areas non protected root zones and near proposed planting areas will benefit the viability of the retained and proposed trees.

Protective fencing:

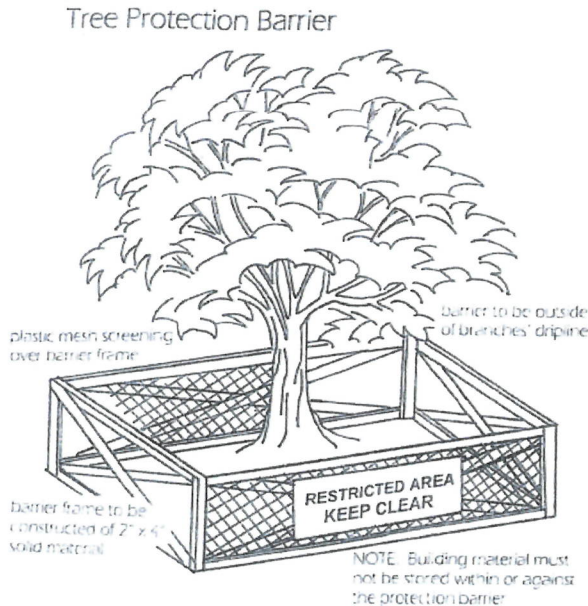
Protective fencing should follow the edge of the proposed parking areas and stay in place until construction is completed. In the absence of a permanent property line fence a temporary protection fence should protect the green space from the public trail. This fence should also connect to the parking area *See tree management site plan.*

Note: This is the Esquimalt protective fence document guide for installation and signage.

**SCHEDULE "B"
TREE PROTECTION BARRIER REQUIREMENTS**

SCHEDULE "B"

Figure 2 - Tree Protection Barrier



For further clarifications feel free to text @ 250 220 9298 or leave an electronic message at scottytreet@me.com. Scotty tree is insured through AVIVA insurance Company of Canada, policy # LPP-10722.

For further clarifications feel free to text 250-220-9298.

Sincerely,

Scott Mitchell

Scott Mitchell
Submitted
10 November, 2023

ISA Arborist, PN-6138-A, PNW CTRA 309, TRAQ certified
Pacific Northwest Hazard Tree Assessor, CTA 309

Scotty Tree & Arborist Service
#7 10075 Fifth St, Sidney BC, V8L-2X8

Tree Inventory Table:

Tree ID	Species	Status	DBH (cm)	PRZ * Factor	PRZ * (m) Radius	Canopy Spread (m) Dia	Health	Structural Condition	Site specific Construction Tolerance	Retain or: removal - Reason	Remarks / Recommendations
#72	Cherry	Bylaw	79/ *48	12:1	9.5/ *5.7	4	poor	Good	Poor	Parking	Three stems 26, 26, 27cm Die back
#73	Apple	Bylaw	51/ *30	18:1	6.1/ *3.6	4	Good	Good	Good	Parking	Three stems 14, 18, 19cm
#74	Plum	Bylaw	32/ *15	18:1	3.7/ 1.8	3	Poor	Poor	Poor	Buidling	Three stems 6, 13, 13cm Mostly dead
#75	Maple	Bylaw	80/ *30	18:1	9.6/ *3.6	5	Poor	Poor	Poor	Buidling	Extensive die back
#76	Plum	Bylaw	68/ *40	12:1	8.2/ *4.8	5	Poor	Poor	Poor	Buidling	Three stems 18, 23, 27cm Mostly dead
#77	Plum	Bylaw	65/ *40	18:1	7.8/ *4.8	5	Poor	Poor	Poor	Buidling	Three stems 17, 18, 28cm Mostly Dead
#78	Plum	Bylaw	53/ *40	12:1	6.4/ *4.8	6	Moderate	Moderate	Moderate	Buidling	Three stems 18, 22, 31cm Mostly Dead
#79	Hawthorn	Bylaw	47/ *30	12:1	5.6/ *3.6	4	Good	Moderate	Good	Retain	Three stems 12, 15, 20cm Close to trail excavations
#80	Hawthorn	Bylaw	35	12:1	4.2	4	Good	Good	Good	Retain	Two stems 17, 18cm
#81	Doug Fir	Bylaw	85	12:1	102	10	Good	Good	Good	Retain	
#82	Plum	Bylaw	31	12:1	3.7	6	Moderate	Good	Good	Retain	
#83	Plum	Bylaw	30	12:1	3.6	4	Moderate	Moderate	Moderate	Retain	Leaning
#84	Plum	Bylaw	45/ *20	12:1	5.2/ *2.4	4	Poor	Poor	Moderate	Retain	Two stems 14, 31cm Die back
#85	Maple	Bylaw	91/ 30	12:1	10.9/ *3.6	5	Moderate	Good	Moderate	Retain	Three stems 18, 36, 37cm Die back
#86	Apple	Bylaw	30	12:1	3.6	6	Moderate	Moderate	Moderate	Parking	Die back
#87	Plum	Bylaw	44/ *30	12:1	5.3/ *3.6	3	Moderate	Moderate	Moderate	Retain	Three stems 9, 14, 21cm Die back
OS1	Hawthorn	Bylaw	40/ *30	12:1	4.8/ *3.6	5	Good	Good	Good	Retain	Two stems 15, 25cm
OS2	Pine	Bylaw	50	12:1	6.0	6	Good	Moderate	Good	Retain	Co dominant

Tree ID	Species	Status	DBH (cm)	PRZ * Factor	PRZ* (m) Radius	Canopy Spread (m) Dia	Health	Structural Condition	Site specific Construction Tolerance	Retain or: removal - Reason	Remarks / Recommendations
OS3	Pine	Bylaw	45	12:1	5.4	6	Good	Good	Good	Retain	
NT1	Emerald Cedar	NBL	20	12:1	2.4	2	Good	Good	Good	Building	
NT2	Emerald Cedar	NBL	20	12:1	2.4	2	Good	Good	Good	Building	
NT3	Emerald Cedar X 20	NBL	20	12:1	2.4	2	Good	Good	Good	Trail	Hedge row 20 trees
NT4	Apple	NBL	21/10	12:1	2.5/ *1.2	2	Poor	Poor	Poor	Building	Three stems 6, 7, 8cm Die back
NT5	Plum	NBL	10	12:1	1.2	2	Poor	Good	Poor	Trail	Die back
NT6	Plum	NBL	15/ *10	12:1	1.8/ *1.2	2	Moderate	Moderate	Moderate	Building	Three stems 5, 5, 5cm Die back
NT7	Douglas Fir	NBL	6	12:1	1	1	Good	Good	Good	Building	
NT8	Douglas Fir	NBL	19	12:1	2.3	3	Good	Good	Good	Building	
NT9	Plum	NBL	5	12:1	1	1	Poor	Poor	Poor	Building	Die back
NT10	Douglas Fir	NBL	21	12:1	2.5	3	Good	Good	Good	Building	
NT11	Plum	NBL	28	12:1	3.7	4	Poor	Poor	Poor	Building	Two stems 10, 18cm
NT12	Plum	NBL	14	12:1	1.7	2	Good	Good	Good	Building	
NT13	Plum	NBL	5	12:1	1	1	Poor	Poor	Poor	Building	Die back
NT14	Plum	NBL	10	12:1	1.3	2	Poor	Poor	Poor	Building	Two stems 4, 6cm
NT15	Plum	NBL	19/ 10	12:1	2.3/ 1.2	2	Poor	Poor	Poor	Building	Two stems 7, 12cm
NT16	Douglas Fir	NBL	4	12:1	1	1	Good	Good	Good	Retain	
NT17	Plum	NBL	7	12:1	1	1	Moderate	Moderate	Moderate	Retain	
NT18	Plum	NBL	26/ *12	12:1	3.1/ *1.4	3	Moderate	Moderate	Moderate	Retain	Two stems 12, 14cm

Tree ID	Species	Status	DBH (cm)	PRZ * Factor	PRZ* (m) Radius	Canopy Spread (m) Dia	Health	Structural Condition	Site specific Construction Tolerance	Retain or: removal - Reason	Remarks / Recommendations
NT19	Maple	NBL	25	12:1	3.2	3	Moderate	Good	Good	Retain	Suppressed
NT20	Plum	NBL	20	12:1	2.4	3	Poor	Poor	Moderate	Retain	Advanced Decline
NT21	Plum	NBL	28	12:1	3.4	3	Moderate	Moderate	Good	Retain	
NT22	Spruce	NBL	10	12:1	1.2	12	Good	Good	Good	Parking	

*PRZ - Protected Root Zone (12 to 1 for Good-Moderate construction tolerance & healthy trees / 18 to 1 for Poor construction tolerance or poor health)
NBL = Non-Bylaw protected tree. ** - adjusted root zone for multi stem and or reduced canopy trees.

